

Bureau de la coordination des politiques Bureau of Policy Coordination

MEASURING

REGULATORY COMPLIANCE

FINAL REPORT



Consommation et Corporations Canada

Consumer and Corporate Affairs Canada

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Program Evaluation Division Bureau of Policy Coordination Consumer and Corporate Affairs Canada

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EXECUTIVE SUMMARY

In a previous report, Departmental Compliance Systems, the study team examined a representative sample of the compliance systems of Consumer and Corporate Affairs Canada. In that examination, emphasis was placed on compliance objectives, approaches, techniques, priorities, indicators and performance.

The previous report served as background at the workshop on the "Compliance Strategy" at the CCAC Annual Meeting. As a result thereof, and in accordance with the departmental Compliance Strategy priority, which calls for the determination of "the best level of private sector compliance to be achieved", it was decided that the indicators presently used would be reviewed in order to ascertain whether the priority's requirement can be met.

This study is the next stage in the development of departmental "Compliance Strategies". The purpose of the study is to examine present compliance and effectiveness indicators; to determine their usefulness, strengths and weaknesses; to suggest possible alternative compliance and effectiveness indicators as appropriate; and to examine the feasibility of determining "the best level of private sector compliance to be achieved". The scope of the study includes the compliance and effectiveness indicators used by the Consumer Products, Weights and Measures, Corporations, Bankruptcy and Marketing Practices sub-activities.

In order to prepare this study, it was necessary to develop a good understanding of the present compliance and effectiveness indicators; determine how these indicators are used by sub-activity managers and staff; identify the strengths and weaknesses of the indicators; and suggest possible improvements to existing indicators as well as new or alternative indicators. The main sources of information for the study were program documents, program evaluation studies, relevant academic literature and interviews with the managers of the sub-activities.

The main conclusions of the study are as follows.

1. Four of the five sub-activities examined have welldefined compliance standards which are made available
to client groups through such means as consolidated
Acts and Regulations, manuals and information
bulletins. Marketing Practices does not have comprehensive compliance standards, but it does have a
variety of means for communicating with its clients
about the nature of the law and its interpretation.

- 2. Consumer Products, Weights and Measures and Corporations have compliance indicators which cover most key aspects of their activities. Bankruptcy and Marketing Practices have indicators based on internal activities but do not have quantitative indicators of compliance with their respective Acts.
- 3. Compliance and effectiveness indicators are used by the five sub-activities in a wide variety of ways: to monitor marketplace compliance; to identify potential problem areas; to target inspections and other enforcement activities; to deploy resources efficiently; and to measure sub-activity impact and effectiveness.
- 4. The compliance and effectiveness indicators currently employed have a number of limitations, including (in specific cases): no indicators for key dimensions of program compliance; indicators which are biased and do not accurately measure compliance in the marketplace; and indicators which fail to measure the economic impacts of program activities.
- 5. For each sub-activity, a number of possible improvements to existing indicators or alternative or new indicators were identified for consideration by program management. In many cases, development of these suggested improvements or additions to present indicators can be based on existing sources and methods of data collection. In other cases, it would be necessary to develop new sources and methods of data collection to implement these ideas.
- 6. In the current state of the art, it does not appear to be feasible to fully implement the Compliance Strategy priority which calls for the determination of "the best level of private sector compliance to be achieved" for all the sub-activities examined, since in some cases it is not possible to measure compliance. It would be useful to modify this priority to reflect the varying legislative bases, compliance strategies and sources of information relevant to the diverse compliance programs in the Department.

1. INTRODUCTION

1.1 Purpose and Scope

In a previous report, Departmental Compliance Systems, the study team examined a representative sample of the compliance systems of Consumer and Corporate Affairs Canada. Five sub-activities were reviewed: Consumer Products, Weights and Measures, Bankruptcy, Corporations and Marketing Practices. In that examination, emphasis was placed on compliance objectives, approaches, techniques, priorities, indicators and performance. For each of the five sub-activities, a detailed description of its compliance system was prepared using a common analytical framework. In order to make the present report as self contained as possible, a small amount of background material is repeated from that study.

The previous report served as background at the workshop on the "Compliance Strategy" at the CCAC Annual Meeting. As a result thereof, and in accordance with the departmental Compliance Strategy priority, which calls for the determination of "the best level of private sector compliance to be achieved", it was decided that the indicators presently used would be reviewed in order to ascertain whether the priority's requirement can be met. This study is a first step in meeting this requirement.

This study is the next stage in the development of a departmental "Compliance Strategy". The purpose of the study is to examine present compliance and effectiveness indicators; to determine their usefulness, strengths and weaknesses; to develop alternative compliance and effectiveness indicators as appropriate; and to examine the feasibility of determining "the best level of private sector compliance to be achieved".

The scope of the study includes the compliance and effectiveness indicators used by the Consumer Products, Weights and Measures, Corporations, Bankruptcy and Marketing Practices sub-activities.

1.2 Outline of the Study

The contents of the study are as follows. Section 2 provides the analytical framework for the study including a discussion of the issues examined and a description of the approach and methodology. Section 3 includes an assessment of current compliance and effectiveness indicators and provides findings with respect to new or improved indicators for each sub-activity. Section 4 provides the overall conclusions of the study.

2. ANALYTICAL FRAMEWORK

2.1 Approach and Methodology

In order to prepare this study, it was necessary to develop a good understanding of the present compliance and effectiveness indicators; determine how these indicators are used by sub-activity managers and staff; identify the strengths and weaknesses of the indicators; and develop possible improvements to existing indicators as well as new or alternative indicators. The main sources of information for the study were program documents, program evaluation studies, relevant academic literature and interviews with the managers of the sub-activities.

The project team undertook the following tasks in preparing the study:

- o reviewed the conclusions of the Cornwall workshop on the "Compliance Strategy";
- o reviewed relevant academic literature on compliance and effectiveness indicators;
- o examined program documents, program evaluation studies and operational audits related to the five sub-activities;
- o held interviews with sub-activity management.

The study team would like to acknowledge the cooperation and support received from each of the five sub-activities examined. Preparation of this report would not have been possible without this cooperation and support.

2.2 Issues

To ensure that the analysis was undertaken in a consistent and comprehensive manner, the project team agreed that the study would examine compliance and effectiveness indicators within an analytical framework covering the following issues:

- o compliance standards what compliance standards are currently used? How are these compliance standards made available to clients?
- o <u>current indicators</u> what compliance and effectiveness indicators are currently used? How are they derived? What are they expected to measure?

- o <u>use</u> how are current compliance and effectiveness indicators used by managers and staff to monitor program performance? To assess sub-activity strengths, weaknesses and impacts? To plan and schedule future work? To allocate resources?
- o <u>limitations</u> how accurate are current compliance and effectiveness indicators? Are they subject to systematic bias?
- o new or improved indicators how can current compliance and effectiveness indicators be improved? Are new indicators needed? If so, what should they be?
- o compliance rate goals given the analysis and conclusions for the above issues, is it feasible to establish compliance rate goals or optimal compliance rates?

These issues form the basis for the analysis in the next section of the report.

3. ASSESSMENT AND IMPROVEMENTS TO CURRENT INDICATORS

3.1 Consumer Products

3.1.1 Legislation Administered and Compliance Standards

The Consumer Products sub-activity encompasses a variety of activities aimed at protecting consumers against product misrepresentation and providing accurate information to consumers. The sub-activity is responsible for the development and administration at all trade levels of the Consumer Packaging and Labelling Act, the Textile Labelling Act, the Precious Metals Marking Act, the National Trade Mark and True Labelling Act and those provisions under the Food and Drug Act that concern economic fraud. It is also responsible for administration, at the retail level, of the Canada Agricultural Products Standards Act and the Fish Inspection In addition, the requirements of 21 Provincial Acts and Regulations respecting the sale and grading of agriculture and fish products at the retail level of trade are included in the program. The Consumer Products sub-activity is further responsible for several voluntary programs such as the Canada Standards Sizing Program and the Care Labelling Program.

Consumer Products has established comprehensive compliance standards which cover all important aspects of their work. These compliance standards are embodied in specific statutory and regulatory requirements which cover:

- product specifications concerning packaging, labelling, quality and quantity;
- . information disclosure requirements;
- . misleading advertising prohibitions;
- voluntary industry guidelines.

These standards are documented in such publications as Acts and regulations, manuals, trader information bulletins and fact sheets, Uniform Enforcement Guidelines, and so on. With the exception of the guidelines, these documents are made available to interested parties on request. In addition, existing and revised compliance standards are made available to client groups through communication initiatives (such as seminars and dissemination of materials) and through consultation with clients on all regulatory proposals.

3.1.2 Approach and Instruments

The approach used by Consumer Products to achieve compliance emphasizes the use of inspections to monitor, detect, deter and ensure correction in situations of non-compliance. a wide variety of enforcement techniques are utilized where non-compliant products are found. The sub-activity is proactive in detecting violations and enforcing standards.

Inspections are undertaken to ensure that a high degree of compliance is maintained at various trade levels. Consumer Products inspectors located in district offices have responsibility for undertaking these inspections and enforcement activities. Inspections at the district level are guided by national and regional priorities. The dollars at risk computation is an indexed measure of the value of noncompliant product in the marketplace and serves as an indicator for planning purposes.

A visit to an establishment, other than one which is scheduled or planned, may be initiated for a number of reasons, including a complaint, a referral from another region or government agency, a follow-up to a previous visit, a sample pick-up or a problem-products blitz. The activities which may form part of an inspection include inspection of products for compliance with quality, quantity and/or labelling regulatory areas and undertaking of enforcement actions such as providing trader correction, giving oral warnings and seizing and detaining products.

3.1.3 Current Indicators and Uses

Two main compliance and effectiveness indicators are used by Consumer Products. These are product compliance rates and establishment compliance rates. In addition, a dollars at risk calculation has been introduced. Several operational indicators of outputs or workload are also used. An MIS system has been recently developed and implemented in all Regions. This system inputs all inspection reports. It can provide information and summary reports on inspection and enforcement activities and may provide a variety of new indicators.

Product compliance rates are generated through a decentralized inspection force capturing data on all products inspected and the results of those inspections. For products, the relevant formula is

At the present time, detailed compliance data is available for 300 products classed into 34 product groups, for three

trade levels (manufacturer, wholesaler/importer, retailer) and three main classes of infractions (quantity, quality and labelling). For planning and reporting purposes, the products are usually aggregated to four broad product groups: food, textiles, precious metal marking and other, prepackaged non-food products. Product compliance rates are used to monitor changes in compliance over time, for priority setting and targetting inspections and for resource deployment.

Establishment compliance rates are intended to be aggregate profiles or summary assessments by inspectors of the performance of establishments visited. They are unweighted averages of the compliance rates for the products examined in a given establishment. They are used mainly at the district level as one factor influencing the targetting of inspections.

Dollars at risk is a weighted measure of the value of non-compliant products in the marketplace. The Consumer Products sub-activity currently uses the dollars at risk measure to track the profile of the weighted value of non-complaint products over time and as a mechanism for planning and priority setting. It is intended to provide an index of the value of non-compliant goods in the marketplace. It is calculated as follows:

dollars at risk =

(% of non-compliance for each product) X (\$ consumption for each product) X (seriousness factor).

The percentage of non-compliant goods is obtained from the MIS data which is compiled through field inspections. The value of the product consumed is obtained from Statistics Canada expenditure surveys. The seriousness factor is intended to reflect the relative seriousness to consumers of a particular type of violation (e.g. quantity, quality, labelling). These weightings were derived from a consumer survey conducted in 1982.

The dollars at risk formula is used by the sub-activity to provide an indexed ranking and for indicating the changes in value of the dollars at risk over time. For purposes of allocating resources to specific compliance activities such as inspections, this ranking is then used along with information on concentration of industry by level, complaints and inquiries, and knowledge of the local marketplace.

3.1.4 Assessment

In_general terms, Consumer Products has a comprehensive and useful system for the collection and utilization of compliance and effectiveness indicators. One of the main strengths of the current system is that considerable data is produced in a routine manner, i.e. without the need for special, expensive data collection exercises. The data is comprehensive, covering all main compliance standards enforced in the sub-activity. The data is extremely detailed - covering 300 products in 34 product groups, three trade levels and three types of infractions - and could, if desired, be produced at an even finer level of product detail.

Notwithstanding these strengths, the compliance and effectiveness indicators used by Consumer Products have some weaknesses and limitations. Most importantly, product compliance rates derived from sub-activity MIS data may be statistically biased, ie. systematically different from the true or real level of compliance. There are a number of sources of this bias: directed inspections, concentration of inspections, recording bias, quality of inspections and differences in monitoring of inspections.

Directed Inspections. The key source of potential bias is that most inspections carried out by the sub-activity are "directed" in that the choice of products or establishments for inspection may be based on referrals from other regions, complaints, repeat inspections of noncompliant establishments, or priorization of products through use of the dollars at risk formula. Because of this targetting of inspection activities to identified problem areas, noncompliance rates obtained through MIS data may tend to be higher than actual non-compliance rates.

Concentration of Inspections. The concentration of inspection activities in certain areas may also lead to inaccurate compliance data. Travel budgets do not permit an equal concentration of inspections in all areas according to industry or population concentration. Inspection activities are often more concentrated in areas near a Consumer Products office. This may result in a stronger presence in the marketplace in these areas and greater deterrence of noncompliance. Since areas where inspection activities are concentrated may be overrepresented in the compliance data, the overall rate may be biased.

Recording Bias. Differences in the recording of compliance by inspectors may affect the reliability and validity of the compliance rate. With the recent implementation of the MIS system, the sub-activity adopted a positive reporting system in which all products examined, regardless of whether they

are compliant, are to be recorded. Previous to this, inspectors only recorded those products inspected which were found to be noncompliant. The conversion to a positive reporting system has increased the amount of recording and paperwork required of inspectors. Some inspectors still may tend not to record products in complete compliance, while others may report every product inspected.

Quality of the Inspection. The compliance rate is affected by the accuracy, knowledge and diligence of the inspector conducting the inspection and his interpretation of the regulations. Noncompliance rates found during commodity concentration inspections are usually higher than those obtained during regular directed inspections. One explanation of this difference is that the inspector is more familiar with the regulations during a commodity concentration inspection and is particularly motivated to identify violations. This suggests that the compliance rates obtained during the normal directed inspections may underestimate noncompliance.

Monitoring. The accuracy of inspections and of recording of compliance are usually monitored through the review of inspection reports. In reviewing inspection reports, the District Manager notes the complexity of violations found, the consistency of violations found by different inspectors in different outlets of the same chain store and the completeness of the information recorded. In some districts, either the District Manager or Supervisor periodically accompanies an inspector on his rounds, but there are no requirements for this. Shadow re-inspections in which an establishment is reinspected to monitor the accuracy of the inspector and the recording of inspection results, are not conducted.

Establishment compliance rates may also be subject to substantial bias. One reason for this is that establishment compliance rates are based on potentially biased inspection data as just explained above. Another reason is that establishment compliance rates are simple arithmetic rather than weighted (i.e. by product value) averages of the underlying compliance rate data.

The validity of the dollars at risk measure depends on the integrity of each of the three factors on which it is based: noncompliance rates, consumption data and seriousness weightings. We have already extensively discussed potential difficulties with the compliance data.

Data for the second factor, consumption value, is based on Statistics Canada survey data which is sometimes several years out of date, does not necessarily reflect current levels of product consumption, and is susceptible to

"shocks". This is especially true of products that may have shown large recent changes in consumption (eg. entertainment articles, such as VCRs). Furthermore, the arbitrary classification and size of product categories, which are based on classes defined by Statistics Canada, have a major impact on the ranking within the 34 product group list.

Finally, there are problems with the seriousness factor. These weightings are based on a 1982 survey of consumers which has not been updated. Perhaps more importantly, because of the methodology employed in the 1982 study, there is very limited variation between weightings for different products and types of violations (ie. quality, quantity, and labelling). As a consequence, the seriousness factor contributes little to the differentiation of areas for priority allocation of program resources.

3.1.5 <u>Improvements to Indicators</u>

A variety of approaches to improving the accuracy of compliance rates and avoiding potential sources of bias are possible. These include increased monitoring, improved monitoring methods, increased training and review of test equipment and procedures. Increased monitoring of the inspection process may contribute to more accurate measurement and recording of compliance. Improved monitoring approaches or more consistent application of current monitoring approaches may be useful. Increased training of inspectors may be of benefit in reducing possible variations in the quality of inspections. A review of the availability of appropriate testing equipment and resources can be used to identify products and geographic areas where compliance cannot currently be adequately measured.

The most important potential source of bias for compliance data stems from the fact that inspections are directed to areas of suspected violations. The best way to overcome this bias is to implement a separate selection and inspection procedure for monitoring compliance in the market-place. Enforcement focussed inspection activities would still be priorized and directed at high risk establishments, but a separate series of inspections would be conducted to measure compliance in the marketplace. These measurement focussed inspections would be based on a probability sample of establishments. Using this approach a certain percentage of the inspections conducted would be randomly selected and identified as such in the MIS.

This approach avoids bias in the selection of the sample and ensures that compliance rates are based on a more representative group of establishments. However, the use of a separate set of inspections for measuring compliance in the marketplace may be costly and divert resources away from

enforcement activities which are central to the objectives of the program. The costs involved in this approach are dependent to a large degree on the effectiveness of current methods of directing inspections. Further work to determine the effectiveness of current methods of directing inspections would be useful.

The dollars at risk measure combines the noncompliance rate with dollars of consumption and the seriousness of violations to rank product classes. The measurement of seriousness is vital to this approach to priorization.

Alternative approaches to measuring seriousness include:

- Scaling of Seriousness Through Consumer Survey. improved survey approach which uses multidimensional scaling techniques, conjoint measurement or multiattribute choice-making should produce improved weightings. The approach used should employ a breakdown of violation categories relevant to consumers judgement of seriousness. Rating quality violations in general may not be as meaningful to consumers as specific types of quality violations. The scaling approach should also attempt to value different types of violations. While it is difficult to establish a market price for the value of protection against violations, the scaling techniques employed should address the economic value of avoiding different types of violation, i.e. the price a consumer would be willing to pay to obtain the product without the violation.
- Expert Opinion Panel. Prior to conducting the consumer survey in 1978, seriousness weightings were determined by a panel of personnel at Consumer Products headquarters. A similar panel including representatives from consumer organizations could again be used to establish seriousness weightings. Again, the point would be to measure the economic impact or value of the violation.
- Inspector Opinion. An alternative approach is to have inspectors code violation seriousness on the inspection report forms entered into the MIS system. Specific criteria for rating violations could be employed. These criteria may be similar to those developed in some product areas as part of the enforcement guidelines, and involve consideration of factors such as danger to health, number of people affected, and the ability of the consumer to inspect, detect and avoid the product in violation. Trader knowledge and intention which are considered in most enforcement guidelines would not be a factor

in rating the seriousness of the violation to consumers. The criteria used could be developed __from a consumer survey or by an expert panel.

The use-of a consumer survey is costly but would have the advantage of involving consumers, who are the primary constituency of the program, in ranking seriousness of violations. This approach does assume that consumers are knowledgeable of the potential impacts on them of product violations. The majority view of consumers may, however, obscure important minority concerns. The expert panel approach is less costly and may ensure consideration of concerns of minority groups of consumers for whom seriousness weightings may vary from those of the general population of consumers (e.g., individuals with serious allergies for whom violations involving ingredient or composition labelling may be life threatening). The use of inspectors to code seriousness would ensure that seriousness is rated at the level at which it actually impacts on consumers specific violations. The time required for inspectors to enter a code for seriousness should be minimal.

Finally the utility of the dollars at risk approach could be simply improved by calculating the relative dollars at risk. This would involve using the percentage of total consumption dollars at risk as an effectiveness measure as opposed to the absolute amount of dollars at risk.

The relative dollars at risk would be calculated as:

(% of non-compliance for each product) x

\$ consumption for each product) x (seriousness factor)
(total \$ consumption)

The above would allow the importance of a small change in compliance for a serious violation involving a product of high consumption value, as opposed to a larger change in compliance for a minor violation involving a product with low consumption value, to be readily identifiable.

The advantages of this indicator over the absolute dollars at risk include the reflection of relative importance of market inequities and their change over time, given changing consumption, compliance rates and seriousness of infractions and its greater utility in the resource allocation process in ensuring more balanced reaction to overall market inequities.

As a final thought, one additional indicator might also be considered. This indicator is an establishment risk index which could be used at the district office level to target inspections. This new index would include such factors on relative establishment size, the seriousness of the violation, and the historical compliance rate for the establishment. As an initial step, a simple indicator based on existing data on firm size (small, medium, large) and compliance performance (good, indifferent, poor) could be readily developed. This indicator would then be used to assist in determining the frequency of inspection for establishments within a district.

A summary of compliance and effectiveness indicators for Consumer Products is shown in Exhibit 4.1. Note that new or proposed indicators (i.e. those proposed for consideration and not currently used by the sub-activity) are indicated by an asterisk.

EXHIBIT 4.1 COMPLIANCE AND EFFECTIVENESS INDICATORS CONSUMER PRODUCTS

Indicator	Operational Definition	Uses	Limitations	Possible Improvements
Product Compliance Rates	# of products found to be in compliance total # of products inspected	* to target inspections toward product classes with low compliance * to monitor changes in compliance over time * to deploy resources effectively	* rates are biased because most inspections are problem directed * some operational problems re "positive reporting", i.e. indications that not all data is reported when products are found to be in compliance * collecting large amount of data appears to create response burden on inspectors which is partial reason for inconsistent reporting	gather unbiased data on compliance from discrete program of randomized inspections improve monitoring of compliance through such means as inspector training, review of reports, rotation of inspectors, accompaniment inspections, shadow reinspections and inspection simulation reduce routine reporting requirements for inspections while collecting unbiased data through randomized inspections
Establishment Compliance Rates	Unweighted average of the compliance rates for the products examined in a given establishment	* to target inspections towards establishments with low compliance	* rates are biased because most inspections are problem directed * simple arithmetic averages of underlying compliance rates are used	 gather unbiased data on compliance from discrete program of randomized inspections use averages weighted by value of product inspected develop a new quantitative measure, i.e. an establishment risk index, as the primary method for resource planning and allocation in the field. This new index would include such factors as relative establishment size, the seriousness of the violation and the historical compliance rate for the establishment*
Dollars at Risk	(% of non-compliance for each product) % (\$ consumption for each product) % (seriousness weighting)	* to track the profile of the weighted value of noncompliant products * for planning and priority setting	* ranking of product classes is determined in large part by arbitrary definition of those product classes * consumption data is sometimes several years old * seriousness weightings do not appear to be very meaningful * indicator reflects biases in underlying compliance rates	 use unbiased compliance information . develop improved seriousness weights through consumer survey expert opinion panel inspector opinion
Relative Dollars at Risk*	\$ at risk total \$ consumption	 proposed indicator, not currently being used could be used to set priorities for inspections among commodity classes 	 consumption data is sometimes several years old seriousness weightings do not appear to be very meaningful indicator reflects biases in underlying compliance rates 	 use unbiased compliance information this measure uses the proportion rather than the absolute value of dollars at risk for each commodity group thus avoiding one of the main problems with dollars at risk as a priority setting tool

^{*} Proposed Indicator

3.2 Weights and Measures

3.2.1 Legislation Administered and Compliance Standards

The Weights and Measures sub-activity is responsible for accurate measurement and equity in trade transactions based on measurement. The sub-activity is responsible for administering the Weights and Measures Act and some quantity provisions of the Consumer Packaging and Labelling Act and the Feeds, Seeds, Pest Control Products and Fertilizers Acts.

Like Consumer Products, Weights and Measures has established comprehensive compliance standards which cover all important aspects of their work. Again, these standards (including allowable tolerances) are embodied in specific statutory and regulatory requirements which cover all significant aspects of the work including:

- calibration and certification of standards of mass, volume and length;
- examination and testing of new and prototype devices;
- initial inspection of devices before their use in trade;
- periodic inspection of in-service devices;
- . inspection of commodities and services traded on the basis of measure.

These standards are documented in the Acts and regulations. A consolidated version of the Acts and regulations is made available to client groups on request. Trader education and consultations with industry groups are also used to ensure that clients are made aware of relevant compliance standards.

3.2.2 Approach and Instruments

Weights and Measures uses a proactive approach to the prevention, detection and correction of non-compliant devices and inaccurately measured commodities. Compliance is predicated on ensuring that only approved and certified devices are used in trade and on maintaining a vigorous level of enforcement. A basic premise of the compliance strategy is that the higher the proportion of the device population inspected, the higher the level of compliance that can be achieved.

Field inspections often involve the use of complex equipment and certified standards of mass, volume, or length. The inspection work is planned using two distinct approaches.

One approach is general and is usually planned by geographic zone, or device or trade group (zone inspections). This approach is intended to detect non-compliance, to improve compliance by maintaining a presence in the marketplace, to act as a deterrent to careless and fraudulent practice, and to identify specific problem areas for subsequent resolution.

The other approach is selective and concentrates on real and significant problem areas which have been previously identified (control inspections).

Enforcement action is always taken where the error is beyond allowable limits and in favour of the trader. This action involves increasingly severe enforcement measures to achieve compliance.

3.2.3 Current Indicators and Uses

At the present time, Weights and Measures employs five compliance and effectiveness indicators. These include: device compliance rates, establishment class compliance rates, commodity compliance rates, the reinspection rate, and control vs. zone compliance rates.

Device compliance rates are prepared using data collected by the inspection force during zone inspections. For devices, the relevant formula is:

device compliance rate =

of devices found in compliance, total # of devices inspected

where the devices involved are all the devices contained in a given device class which are inspected in a given period.

Compliance information is available for 36 classes of devices. Information is collected not just on compliance rates but also on whether the error is in favour of the buyer or seller and on the magnitude of the error. Information on device compliance rates is used to monitor compliance, to measure effectiveness of the sub-activity efforts and to plan and target future work, especially control inspections.

Establishment class compliance rates are based on the same underlying compliance data as device compliance rates. They merely involve calculating average compliance for a class of

establishments which is based on the performance of all the devices used in trade located within those establishments. The formula, then, is similar to the above:

establishment class compliance rate =

of devices found in compliance,
total # of devices inspected

where the devices involved are now all the devices in a specific class of establishment. This information can be used to monitor compliance at the establishment level, to measure effectiveness and to plan and target future work.

Commodity compliance rates are based on weighing of prepackaged commodities or products. In order to maximize effectiveness, Weights and Measures focuses on industrial and institutional trade levels while Consumer Products focuses on compliance of products packaged at the retail level with each maintaining its own data and reports thereon.

In the case of Weights and Measures, a sample based on a statistical sampling plan is weighed in a given establishment to ensure that the data is representative. The formula is:

commodity compliance rate =

of samples (packages) found in compliance.
total # of packages inspected

The compliance data collected, which are also available by class of establishment, are used to monitor commodity compliance, to plan and target future inspections and to measure effectiveness.

The reinspection rate is used to determine the adequacy of follow-up in those cases where non-compliant devices are found through an inspection, and where the error is against the buyer. The definition of the reinspection rate is:

reinspection rate =

of reinspections
of devices originally found out of compliance

Reinspections are done within 160 calendar days of the initial inspection (if the device is inspected again after a lapse of more than 160 days it is not counted as a reinspection).

In comparing district office performance, the reinspection rate provides information on the extent to which district offices are paying adequate attention to correction of identified infractions.

The final indicator is a comparison of control vs. zone inspection rates. Zone inspections are broadly based inspections covering a given geographic zone, device or trade group while control inspections are selective and cover real and significant problem areas which have been previously identified. If control inspections are being appropriately targetted, there is a presumption that the zone compliance rate for a given device class should be higher than for control inspections for that class. Making allowances for statistical considerations pertaining to sample sizes, if the control inspection rates are not lower, this may be evidence of poor targetting of control inspections.

3.2.4 Assessment

Weights and Measures has put in place a comprehensive system for the collection and utilization of compliance information. The system has a considerable number of strengths:

- a large share of the devices in each category are inspected each year. With a high level of penetration, there is reason to believe that the data collected is generally representative;
- information is collected at a quite disaggregated level in terms of types of devices. This contributes to the meaningfulness and utility of the data;
- there is every reason to expect that the data collected by the inspectors is valid, i.e. the compliance standards are clear cut allowing relatively little room for discretion on the part of inspectors, who, in any event, are generally well trained and knowledgeable.

Only two limitations of the system need to be noted:

there is some possibility that the use of systematic but non-randomized zone inspections may lead to under estimates of the true rate of compliance. The reason for this is that with devices being inspected perhaps every two to three years, there is a tendency for many devices to have gone out of compliance with use. A random sample of devices would include a mix of devices which had been serviced and recalibrated recently and not so recently thus leading to a true compliance rate higher than that measured through periodic zone inspections;

. perhaps more important in the view of program management is the fact that the current system collects information on device compliance whereas the real objective is to detect, correct and deter inequity in measurement. Focusing on device compliance information is only a first step in identifying the dollar value of inequity in measurement. The latter would also consider the value of product weighed by the device over a standard time frame.

3.2.5 Improvements to Indicators

The two limitations of the compliance data collection system for Weights and Measures have relatively simple and practical solutions.

The first limitation, the possibility that the present system of systematic but non-randomized zone inspections may lead to under estimates of the true rate of compliance, can be overcome through the use of randomized zone inspections. Using this concept, each district would be divided into a number of relatively small sub-districts. Selection of sub-districts for inspection would then proceed in a randomized manner, i.e. in each time period there would be equal probabilities of a given sub-district being chosen for inspection. This approach would have two main advantages:

- it would yield accurate, unbiased data on compliance which could be used for the targetting of future control inspections; and
- it would reduce the likelihood that a recently visited establishment would grow lax on the assumption that it likely would not be revisited for two or three years.

One drawback of this approach is that the number of noncompliant devices found would be reduced somewhat since some zone inspections would now be used to inspect devices in relatively recently visited establishments. However, the impact of this factor would be minimized if the use of randomized zone inspections was combined with a shift in resources from zone to control inspections. In this revised inspection strategy, zone inspections would be used primarily to identify potential areas of noncompliance with control inspections serving as the main means of identifying and correcting noncompliance and maintaining marketplace presence. However, program management argue that this approach would also have a downside. One problem is that some noncomplying devices would remain in service longer. Another problem, in the view of program management, is that over time there could be poorer quality data since the data base would be less comprehensive.

The second limitation, the fact that the current system collects information on compliance whereas the real objective is concerned with inequity in measurement, is being comprehensively examined in a current study being done jointly by the Branch and Program Evaluation. That work has found that it is feasible to combine information on noncompliance of devices together with information on value of product going over those devices to develop various alternative measures of risk.

The simplest such index is given by the expression

$$R_1 = \sum_{i,j} P_{ij} V_{ij}$$

where ij is a summation taken over all devices in all establishments and

 R_1 = overall risk

 P_{ij} = probability of noncompliance on the jth device in the ith establishment

V_{ij} = total value weighed on the jth device in the ith establishment.

This measure captures the essence of the problem in that it is an index of the value of product being incorrectly weighed on in-service devices. It is thus a useful first step in moving towards a planning and monitoring system based on inequity in trade rather than noncompliance rates. In particular, it could be used to set priorities for inspection among establishments or among device classes.

One drawback of this measure is that it does not deal with the extent of noncompliance, i.e. devices are either in compliance or not in compliance and if not in compliance the whole of the value of product weighed on that device is viewed as being at risk. A simple modification to the measures overcomes this difficultly as follows:

$$R_2 = \sum_{i,j} P_{ij} V_{ij} D_j$$

D_j = degree of non-compliance (expressed as the absolute value of the average percentage by which the device is found to be out of tolerance).

with other symbols as before. It should be noted at this point that the information needed to utilize R_1 or R_2 in practice is currently collected by the Branch with the exception of the value of product weighed. However, estimates of this last piece of data for various device

classes have been made using information collected through an extensive survey of establishments. It should be further noted that these measures could readily and usefully be broken down into two components: noncompliance against the trader and noncompliance in favour of the trader.

A summary of compliance and effectiveness indicators for Weights and Measures is included as Exhibit 4.2. $\,$

EXHIBIT 4.2 COMPLIANCE AND EFFECTIVENESS INDICATORS WEIGHTS AND MEASURES

Indicator	Operational Definition	Uses	Limitations	Possible Improvements
Device Compliance Rates	# of devices found in compliance total # of devices inspected	 to plan and target work to measure effectiveness to monitor device compliance 	 doesn't measure inequity in measurement systematic but non-random approach currently used may lead to under estimate of device compliance 	* use randomized inspections to collect unbiased data
Establishment Class Compliance Rates	# of devices foundin_compliance_ total # of devicesinspected	 to plan and target work to measure effectiveness to monitor establishment compliance 	 doesn't measure inequity in measurement systematic but non-random approach currently used may lead to under estimate of establishment compliance 	• use randomized inspections to collect unbiased data
Commodity Compliance Rates	# of samples (packages) found in compliance total # of packages inspected	 to plan and target work to measure effectiveness to monitor commodity compliance 	 doesn't measure inequity in measurement systematic but non-random approach currently used may lead to under estimate of Commodity compliance 	* use randomized inspections to collect unbiased data
Reinspection Rate	# of reinspections # of devices origi- nally found out of compliance	 to monitor performance of district offices in terms of reinspections 	 indicator measures one useful dimension of compliance program and may be useful in comparing performance across districts, but it is not a valid indicator of compliance or effectiveness 	 indicator is adequate for the limited purpose it serves
Control vs. Zone Compliance Rates	Comparison of device compliance rates for zone vs. control inspections for a given device class	 to determine whether or not control inspections are being targeted effectively 	 usefulness of indicator is limited by accuracy of compliance data 	* use randomized inspections to collect unbiased data
Risk Index*	R = Σ Pij Vij i,j R = overall risk Pij = probability of non-compliance on the jth device in the ith establishment Vij = total value weighed on the jth device in the ith establishment	 proposed indicator, not currently in use could be used to set priorities for inspections among establishments or among device classes could be used (perhaps with modifications) to monitor sub-activity performance 	doesn't deal with extent of non-compliance, although this could be readily handled by modifying the measure .	 use unbiased compliance information improve and update estimates of value of product weighted or measured the risk index is suggested as an interim measure which could be readily calculated with existing data and easily understood by field staff. However, there are several other preferred measures which could be calculated using existing data as explained in the text

^{*} Proposed Indicator

3.3 Bankruptcy

3.3.1 Legislation Administered and Compliance Standards

The Bankruptcy Act of 1949 was designed to equitably resolve the interests and claims of insolvent debtors, creditors, and the general public. The Act aims to relieve the bankrupt of his debt burden and return him to economic life in a rehabilitated state. Protection is afforded to creditors in order to maintain confidence in the integrity of the financial credit system.

The Act and General Rules define compliance standards with respect to such matters as:

- . duties and responsibilities of bankrupts;
- . duties and responsibilities of trustees;
- . creditors claims.

These compliance standards are documented in the Act and General Rules including a number of specific forms. These documents are made available to interested parties on request.

3.3.2 Approach and Instruments

The Bankruptcy sub-activity differs from the two previously discussed sub-activities in that it is not primarily a compliance system, rather it is concerned with the provision of a government mandated service to individuals and firms. Nevertheless, important aspects of the sub-activity's operations can be usefully discussed within a compliance framework. These aspects can best be brought out by briefly discussing the compliance approach within the broader context of Bankruptcy's role in the bankruptcy process.

The role of headquarters personnel is largely concerned with policy development and administration with an emphasis on supervision of field activities. Operations at headquarters includes the National Audit Group, the Joint Committee on Bankruptcy Estate Policy and Practices, the Supervision of Estate Administration Program, and Trustee Licensing.

A substantial burden of responsibility for program implementation falls to the field offices. Each district office is headed by an Administrator (reporting to the Deputy Superintendent) who oversees the activities of a group of Official Receivers and support staff.

The Official Receivers play a key role in the bankruptcy process, being sufficiently involved to assure an awareness

of how each individual estate is being handled, but not interfering with the trustee (who is a member of the private sector) except when necessary. The main tasks performed by the Official Receiver include registration of the bankrupt, examining the bankrupt, attending the first meeting of creditors and issuing letters of comment on estate administration. Trustees are trained and examined by the Bankrupt-cy Branch and are licensed (and may be delicensed) by the Minister of CCAC on the recommendation of the Superintendent of Bankruptcy. The trustee, although selected and hired by the bankrupt, actually administers the bankruptcy estate and thus holds a challenging position in which the interests of both the bankrupt and the creditors must be reconciled in a fair manner.

3.3.3 Current Indicators and Uses

At the present time, Bankruptcy does not produce overall compliance rates. The performance reporting system presently in use is based on four basic Branch functions and the volume of bankruptcies. The four functions are all Official Receivers' responsibilities: registration of the bankrupt; examining the bankrupt; attending the first meeting of creditors; and issuing letters of comment on estate administration. These four are brought together in a formula to calculate work units completed:

work units completed

- = 0.1 (filings) + 0.4 (examinations)
- + 0.35 (meetings) + 0.15 (letters)

The weights are meant to reflect the relative operational importance of each function. If all four tasks are performed for every bankruptcy estate then the work units completed figure would equal the number of estates.

Comparisons of performance over time are made by dividing work units completed by the number of filings for each year. This measure is called the operational coverage rate, i.e.:

operational coverage rate

= # work units completed. # filings

The operational coverage rate is used to monitor and compare operational performance at the district office level and to plan future work.

The management information system, or BRASS, produces a considerable amount of information on various aspects of bankruptcy including:

- assets
- . liabilities
- . realizations
- . dividends.

This information is monitored by sub-activity management and staff. Much of this information is potentially useful for the calculation of additional effectiveness indicators as outlined below.

3.3.4 Assessment

We noted above that Bankruptcy presently has no indicators of overall compliance with the provisions of the Act.

The operational coverage rate is a useful measure of the extent of coverage of principal bankruptcy activities by the Official Receivers. However, the measure has several limitations, if it is to be used as a measure of overall performance:

- . first, the indicator measures one dimension of Branch performance, but it is not an indicator of compliance or effectiveness;
- second, certain important and time consuming functions including handling complaints and inquiries and preparing Investigation Orders are omitted, so that while the indicator may be adequate for certain objectives, it is not comprehensive in terms of the scope of work of the Official Receivers;
- third, the indicator does not distinguish among types of bankruptcies (eg. consumer vs. business, simple vs. complex) with varying time demands;
- fourth, weightings are arbitrary and may merit reexamination.

3.3.5 Improvements to Indicators

Several modifications could improve the usefulness of the operational coverage rate as a measure of workload coverage. These modifications include:

- calculating separate rates for consumer and business bankruptcies;
- calculating separate rates for simple and complex = bankruptcies;
- including additional important and time consuming activities such as handling complaints and enquiries and preparing investigation orders in the formula; and
- revising the weights to reflect either consensus on relative importance of each activity or relative work time required for each activity.

These modifications to the operational coverage rate will improve its comprehensiveness and validity, but will not convert it into a measure useful for getting a handle on either compliance with or effectiveness of the work of the Bankruptcy sub-activity. To do this requires the development of new indicators.

At least three useful indicators could be developed using information currently collected by Bankruptcy. All three indicators capture various aspects of the efficiency of the bankruptcy process rather than compliance with the Bankruptcy Act. They may also prove useful in comparing trustee performance over time and be thus used as one factor in targetting of trustee audits.

The first proposed indicator is the ratio of cases paying dividends defined as follows:

ratio of cases paying dividends =

cases paying dividends, # cases

where dividends are the proceeds of the bankrupt's estate going to creditors. This indicator is one measure of the effectiveness of trustee efforts since greater or more effective effort by trustees will result in more estates which pay dividends (as opposed, say, to just generating enough cost to cover the cost of the bankruptcy - including trustee costs - in which case dividends would be zero). Although not routinely produced, this indicator has been used in a special study prepared in Bankruptcy.

This indicator, although useful, does not squarely address the real issue - whether or not trustees are maximizing realizations as is required by the Act. Realizations are the total proceeds of the estate and thus include funds used to cover the costs of bankruptcy as well as the dividends left over which go to creditors.

A second proposed indicator, the ratio of realizations to liabilities, addresses the key issue of realizations more directly. This second indicator is defined in this manner:

ratio of realizations to liabilities:

= value of realizations.
value of liabilities

This ratio could be used to monitor performance at the level of the individual trustee, district office or nationally. To facilitate its use in trustee profiling exercises, it would be useful to examine the statistical determinants of the ratio.

The third proposed indicator is aimed at providing evidence on the costs of the bankruptcy system. In the past, one complaint of unsecured creditors has been that after bankruptcy fees and trustees costs have been paid, there is relatively little left over for the creditors. To deal with this issue, it is proposed that the following indicator be employed:

ratio of dividends to realizations

= value of dividends.
value of realizations

This ratio, then, indicates the share of realizations or proceeds which are available for creditors, i.e. not eaten up feeding the bankruptcy process itself. Once again, this indicator would be useful in monitoring performance at the level of the trustee, the district or nationally.

The final indicator proposed for Bankruptcy is aimed at the key issue of compliance. The Bankruptcy Act itself specifies in some detail provisions which must be complied with. The Act and Regulations could thus be used to prepare a detailed checklist of provisions which could serve as the basis for what would be, in effect, an inspection procedure. The definition of a compliance rate would then follow naturally in this manner:

bankruptcy file compliance rate =

files found to be in compliance.
files reviewed (or audited)

If desired, the various factors on the checklist could be weighted according to their perceived relative importance.

This approach would deal with formal aspects of bankruptcy procedures and would thus not be well suited to uncovering hidden infractions or violations. It might be useful therefore to supplement this "check-list" oriented approach with in-depth audits undertaken on a random sampling basis. It should be noted, however, that audits are both expensive and time consuming and may not provide much more information then the check-list approach on the degree of compliance with provisions of the Bankruptcy Act.

Exhibit 4.3 contains a summary of compliance and effectiveness indicators for Bankruptcy.

EXHIBIT 4.3 COMPLIANCE AND EFFECTIVENESS INDICATORS BANKRUPTCY

Indicator	Operational Definition	Uses	Limitations	Possible Improvements
Operational Coverage Rate	# work units completed # filings where work units completed = 0.1 (#filings) + 0.4 (#examinations)	 to compare operational performance of district offices to plan future work 	 indicator is designed to measure one dimension of Branch performance but is not an indicator of compliance or effectiveness indicator omits certain important and time consuming functions including handling complaints and inquiries and preparing Investigation Orders 	 calculate separate rates for consumer and business bankruptcies include additional important activities in the indicator calculate separate rates for simple and complex bankruptcies
	+ 0.35 (#meetings) + 0.15 (#letters)		° indicator does not distinguish among types of	bankruptcies (e.g. consumer vs. business, simple vs. complex) with varying time demands
Ratio of Cases Paying Dividend*	# cases paying dividends # cases	 indicator is not routinely produced at present could be used to monitor performance at the level of the individual trustee, district office or nationally 	 a number of factors affecting this ratio lie outside the control of the bankruptcy system the underlying issue is whether trustees are maximizing realizations and this indicator, although useful, does not squarely address this issue 	 calculate indicator on an ongoing basis it might be useful to examine the statistical determinants of this ratio so that it can be employed as a benchmark
Ratio of Dividends to Realiza- tions*	value of dividends value of realizations	 indicator is not routinely produced at present could be used to monitor performance at the level of the individual trustee, district office or nationally 	 variations in this ratio, for example, across trustees, might have valid justification so that the indicator might serve best to target files for intensive audit 	 calculate indicator on an ongoing basis it might be useful to examine the statistical determinants of this ratio so that it can be employed as a benchmark
Ratio of Realiza- tions to Liabili- ties*	value of realizations value of liabilities	 indicator is not routinely produced at present could be used to monitor performance at the level of the individual trustee, district office or nationally 	 a number of factors affecting this ratio lie outside the control of the bankruptcy system indicator is influence by mix of cases managed by a given trustee (eg. Consumer vs. Commercial Estates) 	 calculate indicator on an ongoing basis it might be useful to examine the statistical determinants of this ratio so that it can be employed as a benchmark
Bankruptcy File Compliance Rate*	# of files found to be in compliance # of files audited (or reviewed)	 proposed indicator, not currently being used could be used to monitor compliance could be used to measure effectiveness 	 required data is not routinely produced at present and present audits which are directed to suspected fraudulent activity do not provide information on overall compliance 	 develop a checklist of key provisions of the Act which each file must comply with and develop procedures for conducting necessary audits and collecting data an alternative approach could be to develop checklists of duties under the Act of bankrupts and trustees and develop procedures for conducting necessary audits and collecting data

^{*} Proposed Indicator

3.4 Corporations

3.4.1 <u>Legislation Administered and Compliance Standards</u>

The Corporations sub-activity is responsible for the administration of a number of Acts including most importantly Canada Business Corporations, Canada Corporations, Boards of Trade, Canada Co-operative Associations and Trade Unions. The Canada Business Corporations Act, which is at the core of the sub-activity's work, regulates the creation and existence of federal business corporations. Federal incorporation allows businesses to change corporate residence or head office from one province to another without re-incorporating. Businesses may also choose federal incorporation if they prefer the federal act or the way it is administered compared to provincial incorporation. For the purposes of this study, we will focus our attention on compliance with the Canada Business Corporations Act (CBCA).

Corporations has compliance standards which cover most of the work of the sub-activity. These include such areas as:

- . incorporation and amendments to articles
- . corporate names
- . financial disclosure*
- . annual returns*
- . prospectus
- . insider interest reporting
- . proxy solicitation circulars*
- . take-over bids.
 - * have indicators

In a number of areas (such as Notice of Registered Office, Notice of Directors or change in Directors, and so on), it is difficult to enforce compliance because there is no convenient source of information to determine whether or not a change in the relevant data has taken place.

A wide variety of means is employed to make these compliance standards available to client groups. These include policy statements, notices to clients (such as Bulletin amendments), mass mailing (for financial statement reminders, annual returns), publication (such as intent to dissolve lists) and Incorporation and Amendment lists. Clients are for the most part corporations or their legal

representatives so there tends to be a fairly high level of sophistication among clients.

3.4.2 Approach and Instruments

Corporations provides government mandated services to firms, organizations, the business community and the general public. The quality and quantity of this service is heavily dependent on its compliance system.

In discussing compliance, it is useful to distinguish between statutory shareholder protection provisions and statutory filings. The approach to statutory shareholder protection provisions takes into account the fact that they are partly self-enforcing. Minority stockholder rights are protected through review of complaints, documents, media reports and court applications with inquiries and investigations conducted in cases of suspected abuse.

The approach to statutory filings is proactive and includes a variety of tools including monitoring and reminders to file, information on filing requirements and, as a last resort, prosecution or dissolution for non-complying firms. At the present time, the sub-activity is largely reactive in its approach to violations of statutory shareholder protection provisions, but would like to become more proactive as resources permit.

3.4.3 Current Indicators and Use

At the present time, Corporations employs three main compliance indicators. These cover the filing rate for annual returns, the filing rate for financial statements and the proxy forms and circulars compliance rate.

The filing rate for annual returns is intended to measure the share of corporations which are up-to-date out of the deemed population. Formally:

filing rate for annual returns

= # CBCA Companies up-to-date.
active CBCA companies

In this context, the active CBCA companies or deemed population excludes serious defaulters who by continued noncompliance tend to demonstrate inactivity. Some of these companies may still be active and still have CBCA status since they have not been dissolved. This indicator is used to monitor firm performance with respect to the requirements for annual filings and to identify problem areas and the need to take additional action to improve compliance.

The filing rate for financial statements is a similar measure directed at that portion of CBCA companies which must file annual financial statements. Again formally:

filing-rate for financial statements

= # CBCA companies who have filed or received exemptions.
known disclosing CBCA companies

This rate comprises all corporations that have filed their financial statements, whether timely or not. This information is similarly used to monitor firm performance with respect to the requirements for annual filing of financial statements for firms meeting certain criteria and are used to identify problem areas and the need to take remedial action.

The proxy forms and circulars compliance rate reflects completeness of the filed documents and is used primarily as a monitoring tool. It is defined as follows:

proxy forms and circulars compliance rate

= # proxy forms and circulars in full compliance.
received and reviewed

3.4.4 Assessment

The three compliance indicators outlined above are useful indicators of certain aspects of the work of the subactivity. From the perspective of tracking performance with the relatively routine aspects of Corporations' work i.e. those which occupy the bulk of the resources available to the sub-activity, they are quite helpful.

At the same time, these indicators have certain limitations. Perhaps the major limitation is that resources are not available to check the accuracy of the information provided (even blanks on annual returns cannot be checked). It is no doubt good to know the extent to which corporations are meeting their statutory requirements to file; in theory, it would be even better also to know the extent to which the information provided is complete and accurate.

An additional weakness of the filing rates for financial statements is that there is no comprehensive source of information available about the relevant population. In the case of annual returns, the adjustment made to exclude serious defaulters may in fact be removing some firms which should be in the population. In the case of financial statements, there may be some CBCA companies which should be disclosing but are not included in the list of know disclosing CBCA companies (because, for example, recent sales

growth has brought the firm above the relevant threshold for disclosure).

A final problem pertains to areas which are of considerable interest to the sub-activity and to the public but for which no indicators exist. In some cases, such as take-over bids, the underlying data needed to calculate indicators of certain aspects of compliance exists. Here, indicators could be readily made available. In other cases, such as compliance with requirements for insider trading reporting, large conceptual and practical difficulties stand in the way of developing fully adequate compliance indicators.

3.4.5 Improvements to Indicators

It is convenient to first consider possible improvements to the three indicators outlined above and then describe possible new indicators.

The filing rate for annual returns is basically sound as it stands. The Branch has experimented with disaggregating this indicator, which is now prepared on an annual basis, to show compliance rates for firms required to file in different months. This pattern of the time profile would provide additional useful information to management. It would also be helpful if the backlog of firms in serious default could be dealt with, although this is not a major issue affecting the validity of the indicator since an adjustment is already made to remove serious defaulters.

The filing rate for financial statements is also a basically sound indicator. Here two immediate improvements suggest themselves:

- first, it would be useful to try to improve the data on CBCA companies which should be disclosing but are not, perhaps through regular comparisons of listings with the provincial securities commissions and following up on corporations' failure to answer the relevant questions on their annual returns;
- second, since companies granted exemptions are automatically in compliance, it might be more meaningful to calculate the ratio with exempt firms subtracted from the numerator and the denominator.

A more critical issue pertains to the content of financial statements: the present indicator is concerned only with whether or not financial statements have been filed for relevant firms and not with whether the information provided is in accordance with generally accepted accounting principles and satisfactory to the auditors. Although this may be very difficult to resolve, it would be desirable to

consider the need for and feasibility of measuring compliance in this area.

The proxy circulars and forms compliance rate is based on a check-list approach and does not therefore seek to measure the underlying truth and accuracy of the information provided. In principle, this limitation could be partly overcome through the development of a suitable audit procedure. This would, however, be expensive and time consuming and should not be instituted without a careful cost-benefit analysis.

Three other indicators could be based, in whole or in part, on data presently collected by the sub-activity.

The simplest to implement would be a take-over bids compliance rate defined in the following way:

take-over bids compliance rate =

take-over bids in full compliance.
received and reviewed

This measure is the analogue of the proxy circulars and forms compliance rate. It could be readily calculated with existing data and would measure an additional dimension of compliance. It has not been used so far because of the view that the number of take-over bids is relatively small.

The two other proposed measures would require obtaining information from other jurisdictions. The current measures for proxy forms and circulars focuses on completeness of the information provided as opposed to whether or not firms are filing as required. We can define the proxy forms and circulars filing rate as:

proxy forms and circulars filing rate

= # reports filed federally
reports filed federally + # reports filed other

where # reports filed other = # reports filed with other jurisdictions which should have been filed federally but were not.

One can define a similar indicator for insider trading, i.e., insider trader reporting filing rate

= # reports filed federally
reports filed federally + # reports filed other

where the "other" reports are as defined above. Both of these measures would require close cooperation with other jurisdictions to implement effectively.

A summary of compliance and effectiveness indicators for Corporations is included as Exhibit 4.4

EXHIBIT 4.4 COMPLIANCE AND EFFECTIVENESS INDICATORS CORPORATIONS

Indicator	Operational Definition	Uses	Limitations	Possible Improvements
Filing Rate for Annual Returns	# CBCA companies up-to-date # active CBCA companies	 to monitor performance in this area to identify need for additional action to improve compliance 	 in most cases, staff are not able to check the accuracy of the information provided denominator is adjusted to exclude population of serious defaulters, i.e. companies which may be active and still have CBCA status but have not filed for given number of years 	o it would be useful to disaggregate the indicator to show compliance rates for films required to file in different months
Filing Rate for Financial Statements	# CBCA companies who have filed or received exemptions #known disclosing CBCA companies	 to monitor performance in this area to identify need for additional actions to improve compliance 	 in most cases, staff are not able to check the accuracy of the information provided denominator may be missing some CBCA companies which should be disclosing 	 attempt to improve the data on # CBCA companies which should be disclosing develop and implement an audit procedure for a significant sample of financial statements subtract exempt companies from the numerator and the denominator since they are automatically in compliance
Proxy Forms and Circulars Compliance Rate	# proxy forms and circulars in full compliance # received and reviewed	 to monitor performance in this area to identify need for additional actions to improve compliance 	• in most cases, staff are not able to check the accuracy of the information provided	 develop and implement an audit procedure for a significant sample of proxy circulars
Proxy Circulars and Forms Filing Rate*	# reports filed federally (# reports filed federally + # reports filed other), where # reports filed other = reports filed with other jurisdiction which should have also been filed federally but were not	 proposed indicator, not currently in use to monitor performance in this area to identify need for additional actions to improve compliance 	* it may be difficult to develop an accurate list of those who should be filing copies of proxy circulars but neglect to do so	e calculate indicator on an ongoing basis
Take-over Bids Compliance Rate*	# take-over bids in full compliance # received and reviewed	 proposed indicator, not currently being used because of low annual number of take-over bids could be used to monitor one dimension of compliance 	 this proposed indicator does not deal with the accuracy of the information received 	 calculate indicator on an ongoing basis develop and implement an audit procedure for a significant sample of take over bids
Insider Trading Reporting Filing Rate*	<pre># reports filed</pre>	 proposed indicator, not currently in use could be used to monitor one dimension of compliance with insider trader reporting requirements 	 this proposed indicator does not deal with the accuracy of the information received if insiders fail to file in any relevant jurisdiction, or have their trades carried out in someone else's name, it would be most difficult to determine this 	• calculate indicator on an ongoing basis

3.5 Marketing Practices

3.5.1 Legislation Administered and Compliance Standards

The Marketing Practices Program is responsible for administering sections 36 through 37.3 of the Competition Act. Section 36 reads, in part, as follows:

"No person shall, for the purpose of promoting, directly or indirectly, the supply or use of a product or for the purpose of promoting, directly or indirectly, any business interest, by any means whatever,

(a) Make a representation to the public that is false or misleading in a material respect..."

The Marketing Practices sub-activity relies primarily on general prohibitions against false or misleading representations. The sub-activity is also responsible for enforcing several related provisions of the Competition Act which prohibit specific trade practices, such as the use of false tests and testimonials in representations, double ticketing, pyramid selling, referral selling, bait and switch selling, and sale above advertised price. The primary focus of marketing practices enforcement has been on representations in advertising, particularly price or other "commercial" aspects of a promotion.

Marketing Practices does not have comprehensive standards in the sense in which we have used the term, i.e. benchmarks which can be used to determine whether or not a given product or action is in compliance with the law. The reason for this is that compliance with the relevant provisions of the Competition Act is concerned with whether or not firms are engaged in offensive or violative practices. This is usually difficult to determine.

The sub-activity does, however, have a variety of means for communication with its clients about the nature of the law and its interpretation. These include the Misleading Advertising Bulletin, guidelines and advisory opinions through the Director's Program of Compliance.

3.5.2 Approach and Instruments

The compliance orientation of the Marketing Practices subactivity arises from the criminal law origins and foundation of the competition legislation in which it is situated. While the predominant enforcement activity of the Program is direct investigation/prosecution, the focus of the enforcement activities is not primarily punitive, but is preventative in nature. The sub-activity is largely reactive in responding to complaints of alleged violations of the Act.

Marketing Practices employs a range of compliance techniques including investigation/prosecution, information letters, information visits, and firm and consumer education activities (e.g. speeches, seminars, the Misleading Advertising Bulletin, and the Misleading Advertising Guidelines). The sub-activity also maintains a "Compliance Program", under which firms may obtain advisory opinions on whether materials to be used in proposed promotions comply with legislative requirements. More recently, alternative case approaches including prohibition orders and negotiated settlements have started to be used.

3.5.3 Current Indicators and Use

Marketing Practices does not routinely produce estimates of compliance with the relevant provisions of the Act. Monitoring of the program is based in large part on actual counts and trends in such statistics as:

- . complaints received
- complaints of substance (meriting review)
- . completed investigations
- . referrals to the Attorney General
- . proceedings commenced.

This data is used from time to time to calculate two measures: the rate for completed investigations and the rate for proceedings commenced. Definitions of these indicators are as follows:

rate for completed = # completed investigations,
investigations # complaints of substance

These indicators can be used to respectively:

- . measure one dimension of quality of service;
- . monitor and control one aspect of the quality of investigative effort up to and including preparation of summaries of evidence.

3.5.4 Assessment

For the limited purposes which they serve, the two indicators discussed - rate for completed investigations and rate for proceedings commenced - are useful performance measures.

They are not designed to be and most certainly are not measures of compliance or effectiveness.

Some experimental work has been done with two other indicators: trader estimate of compliance based on survey data and monitoring of advertisements. Both of these indicators show promise and will be discussed in detail in the next section of the report.

3.5.5 Improvements to Indicators

Dealing first with improvements to present indicators, it is worth noting that rates for completed investigations and proceedings commenced are not routinely produced but are generated on an as needed basis. Assuming that program management would find routine preparation of this information useful, a first possible improvement would be to set up such a system to routinely calculate and make available these indicators, possibly on a regional basis. A second possible improvement to the rate for completed investigations would be to adjust the data to take account of average or typical time lags between the actions involved in the numerator and denominator respectively.

More interesting perhaps are two other indicators which attempt to deal directly with the issue of measuring compliance with the advertising and marketing practices provisions of the Competition Act.

For the reasons discussed above, it is not feasible to directly collect evidence on the extent of compliance with advertising and marketing practices provisions. One possibility is to develop a proxy making use of trader knowledge of behaviour in their own industry. Such a measure can be defined this way:

trader estimate of compliance

= trader estimate of share of advertisements and marketing activities which are in compliance with the Act, for their own industrial sector.

This measure has been calculated for 1985 on the basis of specially collected survey data, and the results look promising. It is important to remember, however, that this indicator measures traders' perception of compliance as opposed to true compliance in the marketplace.

A final indicator would use a more direct approach. This indicator would be based on actual monitoring of advertisements and thus involve an inspection approach. Given the large number of advertisements present in Canadian media and in establishments, a sampling approach would have to be employed. The measure would be defined as:

advertisements compliance rate =

advertisements found to be in compliance.
advertisements reviewed

It is worth noting that a similar approach was used for a short time by the sub-activity on an experimental basis in 1978. That experiment was not viewed as a positive one because it was aimed at identifying noncompliant broadcast advertisements for follow-up enforcement. What is being proposed here is rather different in that it is the use of a monitoring mechanism to estimate the share of advertisements in compliance.

Exhibit 4.5 is a summary of compliance and effectiveness indicators for Marketing Practices.

EXHIBIT 4.5 COMPLIANCE AND EFFECTIVENESS INDICATORS MARKETING PRACTICES

Indicator	Operational Definition	Uses	Limitations	Possible Improvements
Rate for Completed Investiga- tions	<pre># completed investigations # complaints of substance</pre>	 to measure one dimension of quality of service in practice, Marketing Practices monitors components of this index rather than index itself but can calculate it fairly readily 	 there is an unavoidable arbitrary element in defining complaints of substance time lags may potentially lead to misleading movements in this indicator 	 calculate indicator on an ongoing basis adjust to reflect average time lag between receipt of complaint and completed investigations
Rate for Proceedings Commenced	# proceedings commenced # referrals to the Attorney General	 to monitor and control quality of investigative effort up to and including preparation of summaries of evidence 	Department of Justice may choose not to commence proceedings for reason other than quality of investigative effort and resulting summaries of evidence	 monitor reasons why proceedings not commenced with view to determining relevant roles of CCAC investigations and Department of Justice priorities
Trader Estimate of Compliance*	trader estimate of share of advertisements and marketing activities which are in compliance with the Act, for their own industrial sector	 proposed indicator, produced once on an experimental basis Marketing Practices intends to replicate as funds allow could be used to monitor relative compliance across industrial groups and thus better target scarce investigative resources to identified problem areas 	measures subjective views of traders and may thus have significant biases as an indicator	• calculate indicator on an ongoing basis
Monitoring of Adver- tisements*	# advertisments found to be in compliance # advertisements reviewed	 indicator was utilized on an experimental basis beginning in 1976 could be used to monitor compliance to get an assessment of impact of sub-activity's work over time 	 systematic monitoring did not lead to the uncovering of sufficient numbers of prosecutable cases to warrant its continuation resource costs of implementing a system to collect this data could be high relative to usefulness of the information 	if and when resources are available, it may be worthwhile to repeat the experiment with a view to collecting data on compliance

^{*} Proposed Indicator

4. CONCLUSIONS

4.1 Four of the five sub-activities examined have welldefined compliance standards which are made available
to_client groups through such means as consolidated
Acts and Regulations, manuals and information bulletins. Marketing Practices does not have comprehensive
compliance standards, but it does have a variety of
means for communicating with its clients about the
nature of the law and its interpretation.

Compliance standards play a key role in documenting and conveying information to client groups and program staff. Clear and well-defined standards can reduce the costs of regulation by ensuring that those producing or providing a regulated good or service have a clear understanding of the standards which they are expected to meet. Where compliance standards are not clear and well-defined, ensuing uncertainties can increase costs to both business and to the regulator. Appropriately formulated compliance standards can also assist in the implementation of an efficient enforcement program and thus reduce the costs to government of ensuring an appropriate level of compliance.

Given this, it is important that sub-activities carefully monitor the nature and effectiveness of their information activities to ensure regulatees are fully aware of their compliance standards.

Consumer Products, Weights and Measures and Corporations have compliance indicators which cover most key aspects of their activities. Bankruptcy and Marketing Practices have indicators based on internal activities but do not have quantitative indicators of compliance with their respective Acts.

Both Consumer Products and Weights and Measures have compliance indicators which cover all key aspects of their work. Compliance data is collected as a routine aspect of day-to-day operations and is available at varying levels of aggregation. Corporations has indicators which cover filing rates for annual returns and financial statements as well as compliance with proxy circulars and forms requirements. Quantitative indicators do not exist in other areas of interest including take-over bids and insider trading reporting.

Neither Bankruptcy nor Marketing Practices have yet developed quantitative indicators of compliance. As explained above, both of these sub-activities face major conceptual and practical difficulties in developing suitable indicators of compliance.

4.3 Compliance and effectiveness indicators are used by the five sub-activities in a wide variety of ways: to monitor marketplace compliance; to identify potential problem areas; to target inspections and other enforcement activities; to deploy resources efficiently; and measure sub-activities impact and effectiveness.

Compliance and effectiveness indicators serve a wide variety of purposes in the five sub-activities examined.

Monitoring marketplace compliance is a key function since achieving high levels of compliance is an important operational objective of most regulatory programs. Identifying products or devices which have relatively high rates of non-compliance can usefully supplement complaints and other sources of information on problem areas.

All of the sub-activities examined face pressures because of the growing gap between the number of inspection and enforcement actions necessary to maintain an adequate degree of presence in the marketplace on the one hand, and a shrinking or, at best, constant resource base on the other. Valid compliance data is a key input to planning and resource allocation exercises needed to effectively target and deploy scarce resources. Compliance information is also critical in measuring sub-activity impact and effectiveness.

4.4 The compliance and effectiveness indicators currently employed have a number of limitations, including (in specific cases): no indicators for key dimensions of program compliance; indicators which are biased and do not accurately measure compliance in the marketplace; and indicators which fail to measure the economic impacts of program activities.

The compliance and effectiveness indicators utilized by three of the sub-activities have considerable strengths. In Consumer Products, Weights and Measures, and Corporations, for example, considerable data is collected in a routine manner without the need for special, expensive data collection exercises. However, even the best of the indicators are subject to certain limitations.

For the five sub-activities as a group, there are three main weaknesses. First, and most importantly, there are key program areas for which no quantitative information on compliance exists. This is particularly true for large parts of the Bankruptcy and Marketing Practices sub-activities. Second, the methods of data collection employed suggest that most indicators are subjected to potential biases. In other words, there are reasons for believing that estimates derived from data as presently collected may be systematically either underestimating or overestimating true compliance in the marketplace. Third, even valid and accurate compliance data would not be fully

adequate for purposes of program planning, monitoring and control. Where a suitable base of information exists, it is important to develop more comprehensive measures which bring into focus the economic importance of compliance and non-compliance.

For each sub-activity, a number of possible improvements to existing indicators or alternative or new indicators were identified for consideration by program management. In many cases, development of these suggested improvements or additions to present indicators can be based on existing sources and methods of data collection. In other cases, it would be necessary to develop new sources and methods of data collection to implement these ideas.

A wide variety of possible improvements to existing indicators are suggested in the body of this study. Some of the more important of these include the following:

- Consumer Products gathering unbiased compliance data from a discrete program of randomized inspections; developing an establishment risk index as the primary method of resource planning and allocation in the field; and developing improved seriousness weights for dollars at risk;
- Weights and Measures using randomized inspections to gather unbiased data; improving and updating estimates of value of product weighed or measured; and developing a risk index;
- Bankruptcy develop new indicators to cover such aspects of bankruptcy system performance as the ratio of cases paying dividends, the ratio of dividends to realizations, and the ratio of realizations to liabilities;
- Corporations improvements to the methods of calculating the filing rates for annual returns and financial statements are suggested; possible new indicators are identified for proxy circulars, take-over bids and insider trading, but some of these may be difficult or expensive to make operational;
- Marketing Practices undertaking a periodic survey of trader estimates of compliance by industry; and exploring the feasibility and usefulness of monitoring compliance directly.
- 4.6 In the current state of the art, it does not appear to be feasible to implement the Compliance Strategy priority which calls for the determination of "the best

level of private sector compliance to be achieved" for all the su activities examined, since in some cases it is not possible to measure compliance. It would be useful to modify this priority to reflect the varying legislative bases, compliance strategies and sources of information relevant to the diverse compliance programs in the Department.

In general, the ideal of regulatory or enforcement agencies achieving 100% compliance with all requirements of relevant Acts or regulations is usually neither feasible nor cost justified. Instead, such agencies should strive for an optimal level(s) of compliance. Within some sub-activities there is a hierarchy of objectives and requirements. For instance, Weights and Measures ensures 100% compliance with relevant requirements in device approvals, while device inspections aimed at ensuring continuing compliance are allocated on the basis of priorities given resource constraints.

There are two ways of determining optimal target levels, through resource availability and cost justification. In the resource availability approach, the achievable - and thus the target - level of compliance depends upon the efficient allocation of a fixed quantity of resources. this approach, compliance is "optimal" when the sub-activity is doing as well as it can given the resources it has to In the cost justification approach, inspection or enforcement activities should be undertaken as long as the benefits to society of action outweigh the cost. Here, optimal compliance is defined in a cost-benefit sense. Given the heterogeneity of the sub-activities examined, neither of these approaches would be implemented across the board at the present time. Instead, each sub-activity could usefully identify the most suitable approach to compliance in defining its own compliance strategy.

In any event, given the existing compliance indicators, only Consumer Products, Weights and Measures and Corporations could establish quantitative levels of private sector compliance to be achieved. Bankruptcy and Marketing Practices would have to describe their compliance goals in more qualitative terms, perhaps supported by operational indicators and generalized indications of compliance.



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