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DEFENCE R&D DÉFENSE

A DRDC Management Accountability Framework

Results of Cycle 2

Judy A. Baroni
Research Assistant

Warren C.E. Nethercote
Public Servant-in-Residence

Prepared By:
Dalhousie University
School of Public Administration
6100 University Avenue, 3rd Floor
Halifax, NS B3H 3J5

Contract Project Manager: Dr. Fazley Siddiq, 902-494-8802
Contract Number: W7707-074191/001/HAL
Contract Scientific Authority: J.S. Kennedy, DDG/DRDC Atlantic, 902-426-3100 ext 175

Defence R&D Canada – Atlantic

Contract Report
DRDC Atlantic CR 2009-135
September 2009

Canada

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Contract Report
DRDC Atlantic CR 2009-135
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Principal Author

Original signed by Judy A. Baroni

Judy A. Baroni

Research Assistant

Approved by

Original signed by J.S. Kennedy

J.S. Kennedy

DDG/DRDC Atlantic

Approved for release by

Original signed by Dr. Calvin Hyatt

Dr. Calvin Hyatt

Chair/Document Review Panel

Some of the work reported herein was subject to Social Science Research Review Board approval under DGMPRA authorizations 728/09 dated 27 January 2009 and 753/09 dated 29 April 2009.

In conducting the research described in this report, the investigators adhered to the policies and procedures set out in the Tri-Council Policy Statement: Ethical conduct for research involving humans, National Council on Ethics in Human Research, Ottawa, 1998 as issued jointly by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council of Canada.

Abstract

Defence Research and Development Canada (DRDC), a special operating agency of the Department of National Defence, contracted Dalhousie University to support the development of a management accountability framework (MAF) as part of DRDC's EXPEDITION 09 organizational change project. The DRDC MAF used the Treasury Board Secretariat MAF as a model, with Expectations, Indicators and Measures tiers. In Cycle 2 of the contract, full Indicator and Measures tiers were developed, and the Expectations tier developed in Cycle 1 was refined. In Cycle 2, two pilot studies were conducted using web-based surveys of the DRDC management cadre. The first pilot of Cycle 2 evaluated the Risk Management and Accountability elements. The second pilot of Cycle 2 evaluated Policy and Programs and Service elements, and re-evaluated the Stewardship element from Cycle 1. The results of the pilot studies confirm the feasibility of the survey-based approach and provide a partial first assessment of DRDC's organizational performance against indicators for the elements of the proposed DRDC MAF.

Résumé

Recherche et développement pour la défense Canada (RDDC), organisme de service spécial du ministère de la Défense, a embauché l'université Dalhousie pour l'aider à élaborer un cadre de responsabilisation de gestion (CRG) pour EXPEDITION 09, projet de changement organisationnel. Le CRG de RDDC s'inspire du CRG du Conseil du Trésor comme modèle et de ses paliers Attentes, Indicateurs et Mesures. Le cycle 2 du contrat a permis une élaboration complète des paliers Indicateurs et Mesures et un peaufinage du palier Attentes, élaboré pendant le cycle 1. Le cycle 2 a été marqué par la réalisation de deux études pilotes par voie de sondage sur Internet auprès des gestionnaires de RDDC. La première étude pilote du cycle 2 a évalué les éléments Gestion des risques et Responsabilisation. La deuxième étude pilote du cycle 2 a évalué les éléments Politique et programmes, et Service, puis réévalué l'élément Gérance du cycle 1. Le résultat des études pilotes a confirmé la faisabilité de l'approche par sondage et fourni une première évaluation partielle du rendement organisationnel de RDDC au vu des indicateurs pour les éléments du CRG de RDDC proposé.

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Executive summary

A DRDC Management Accountability Framework: Results of Cycle 2

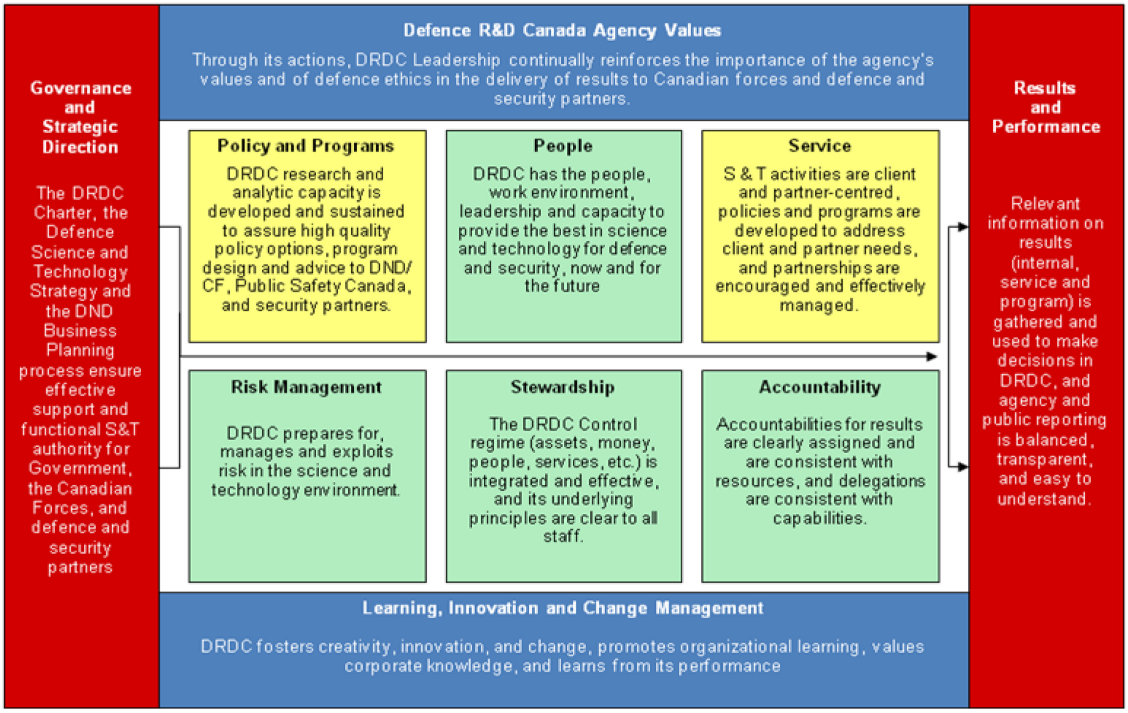
Judy A. Baroni; Warren C.E. Nethercote; DRDC Atlantic CR 2009-135; Defence R&D Canada – Atlantic; September 2009.

Introduction: Defence Research and Development Canada (DRDC), a special operating agency of the Department of National Defence, contracted Dalhousie University to support the development of a management accountability framework (MAF) as part of DRDC's EXPEDITION 09 project. The DRDC MAF used the Treasury Board Secretariat MAF as a model, with Expectations, Indicators and Measures tiers; however, the focal point for the DRDC MAF is the DRDC management cadre, rather than the Deputy Minister for the Treasury Board Secretariat MAF. The elements of the DRDC MAF correspond to those of the Treasury Board Secretariat MAF, but reflect the vernacular of the DRDC management cadre.

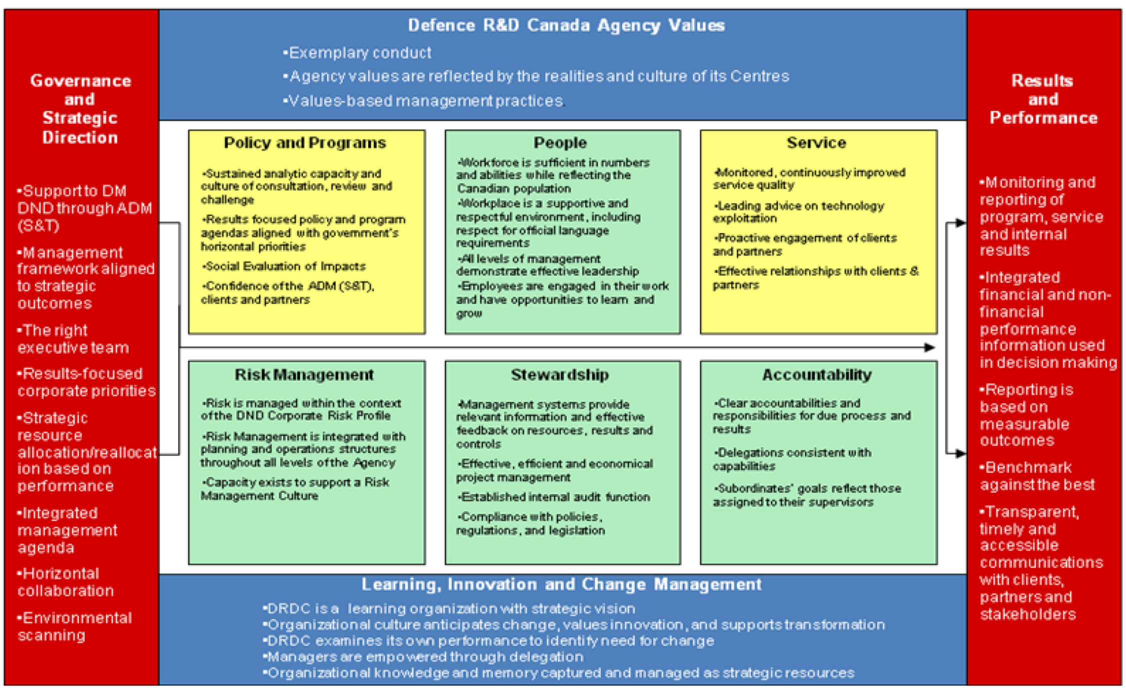
Results: Under Cycle 2 of the contract, full Indicators and Measures tiers were developed, and the Expectations tier, developed under Cycle 1, was refined. The Expectations tier of the DRDC MAF was first derived through consultation with the DDG and Corporate Services communities, and approved in principle by the R&D Executive Committee.

Subsequently, various modifications were made to the elements as a result of lessons learned during the pilot studies. In all cases, amendments to the Expectations tier served to clarify the elements rather than to introduce substantve changes in principle or intent.

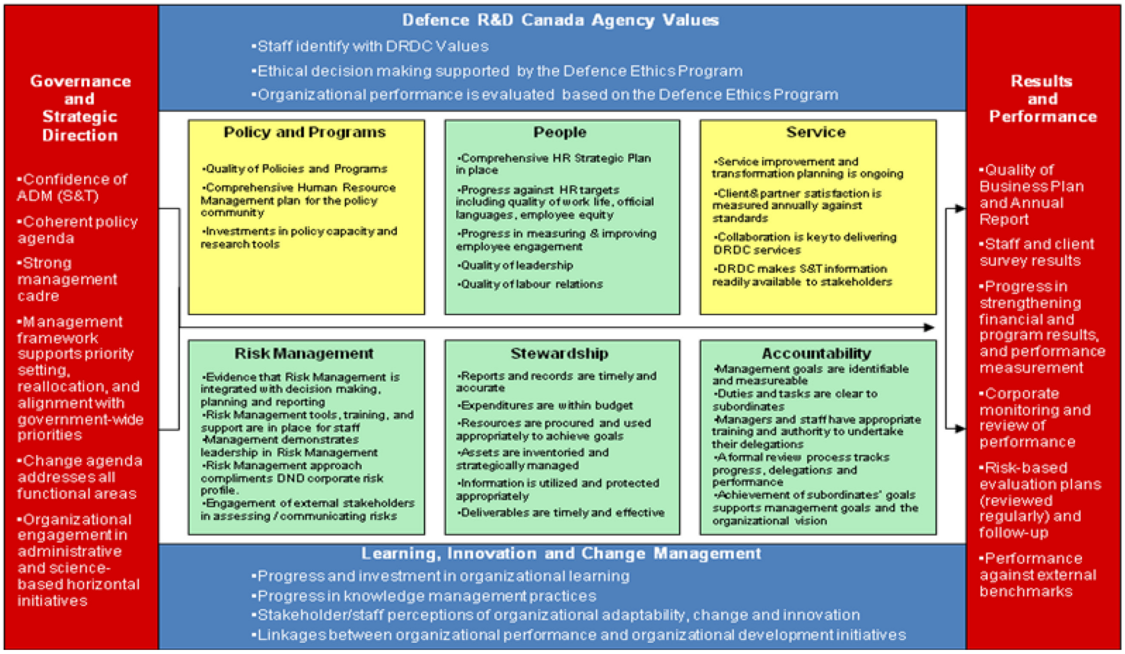
The Indicators and Measures tiers of the DRDC MAF were developed based on academic research of best practices and theoretical frameworks; utilizing this methodology strengthens the validity of the individual indicators and measures. Assessment criteria of Treasury Board Secretariat MAF Rounds I-VI were also utilized in Indicators and Measures development, and efforts were made to align the Indicators and Measures statements with those of the Treasury Board Secretariat MAF where appropriate.



DRDC MAF, Expectations Tier



DRDC MAF, Indicators Tier



DRDC MAF, Measures Tier

As a part of the MAF development, two pilot studies were conducted, each utilizing a web-based survey instrument to examine application of the MAF elements to the DRDC management cadre. The first pilot of Cycle 2 evaluated the Risk Management and Accountability elements; the second pilot of Cycle 2 evaluated Policy and Programs and Service elements, and re-evaluated the Stewardship element from Cycle 1.

Survey questions were developed based on DRDC MAF Expectations, Indicators, and Measures tiers for the target elements, as well as input from pre-existing, publicly available survey instruments. Questions for the Stewardship element focused on areas of concern from the Cycle 1 survey analysis.

In each survey, the majority of questions were closed so that respondents could choose only from pre-determined alternatives. Where appropriate, respondents were given the option to write in alternate responses (open questions). Question sets were sorted into a logic tree structure (so-called 'skip patterns' in survey vernacular) to ensure each respondent was only asked questions applicable to his/her job level and duties. Surveys were reviewed by subject matter experts for validity and tested by a small subset of the target population.

Each survey was implemented bilingually over the DRDC Intranet through a secure server during separate two week periods. Survey participants were provided with a link that could be accessed from anywhere within the DRENet. The surveys were open to Level 2 and Level 3 managers, and Level 4 functional authorities who are eligible to attend the annual DRDC Managers' Workshop. Response rates for Surveys 2 and 3 were 53% and 47.6%, respectively.

Significance: The second and third operational pilots for the DRDC MAF re-confirmed the feasibility of the use of a survey tool as a MAF instrument. The results of the pilots provide a useful partial assessment of DRDC managers' performance against indicators for the MAF, and a starting point for the first operational cycle. It is believed that these results support the vision of a steady state DRDC MAF:

The DRDC Management Accountability Framework (MAF) is a governance tool that facilitates dialogue between managers and executive leadership, helping to clarify managers' understanding of their roles and responsibilities and providing a framework for assessment and improvement of business processes.

Future plans: The following recommendations arise from this report:

1. Defence R&D Canada should adopt the Management Accountability Framework proposed in this report, together with the proposed OPIs and proposed annual cycle;

2. Defence R&D Canada should implement the findings of the EXPEDITION 09 operational pilots for the proposed DRDC MAF, to provide a baseline for the first operational cycle;

3. Implemented recommendations of other WBEs of EXPEDITION 09 should be integrated with the DRDC MAF, and included in future surveys to determine the success of their adoption into the organization.

Sommaire

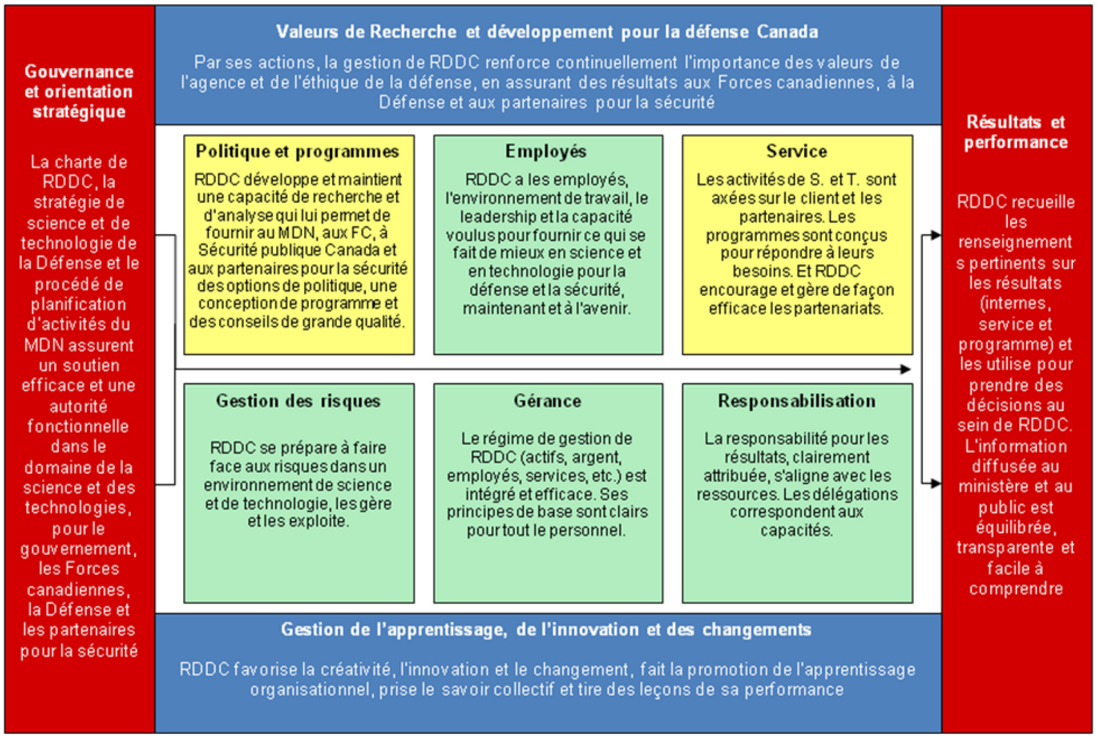
Un cadre de responsabilisation de gestion pour RDDC : Résultats du cycle 2

Judy A. Baroni; Warren C.E. Nethercote; DRDC Atlantic CR 2009-135; R & D pour la défense Canada – Atlantique; Septembre 2009.

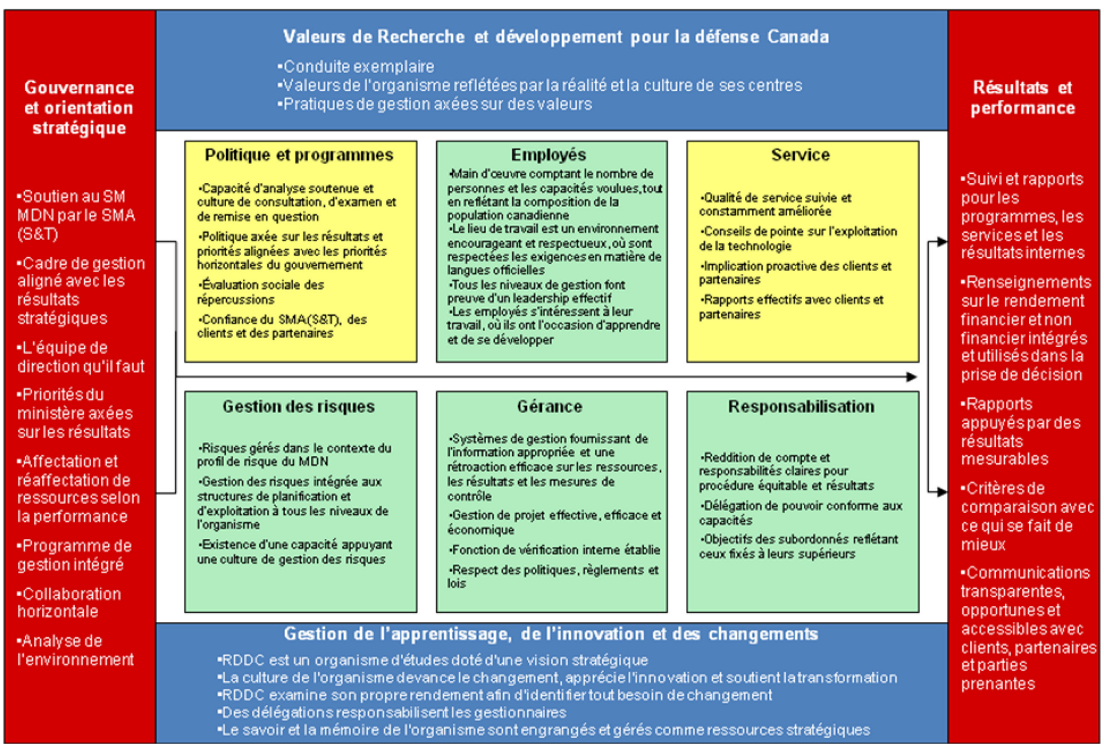
Introduction : Recherche et développement pour la défense Canada (RDDC), organisme de service spécial du ministère de la Défense, a embauché l'université Dalhousie pour l'aider à élaborer un cadre de responsabilisation de gestion (CRG) s'inscrivant dans le projet EXPEDITION 09. Comme le CRG du SCT, le CRG de RDDC comporte des paliers Attentes, Indicateurs et Mesures; mais sa cible principale est les gestionnaires de RDDC, pas le sous-ministre. Les éléments du CRG de RDDC correspondent à ceux du CRG du SCT, mais reflètent les termes utilisés par les gestionnaires de RDDC.

Résultats : Le cycle 2 du contrat a permis une élaboration complète des paliers des indicateurs et des mesures et un peaufinage du palier Attentes élaboré pendant le cycle 1. Le palier Attentes du CRG de RDDC, élaboré après consultation des DGA et des gestionnaires des Services d'entreprise, a obtenu l'approbation de principe du conseil exécutif pour RDDC. Par la suite, ont été effectués divers changements aux éléments, en fonction des leçons tirées des études pilotes. Dans tous les cas, les changements au palier Attentes visaient à clarifier les éléments plutôt qu'à y apporter des changements de fond quant au principe ou à l'intention.

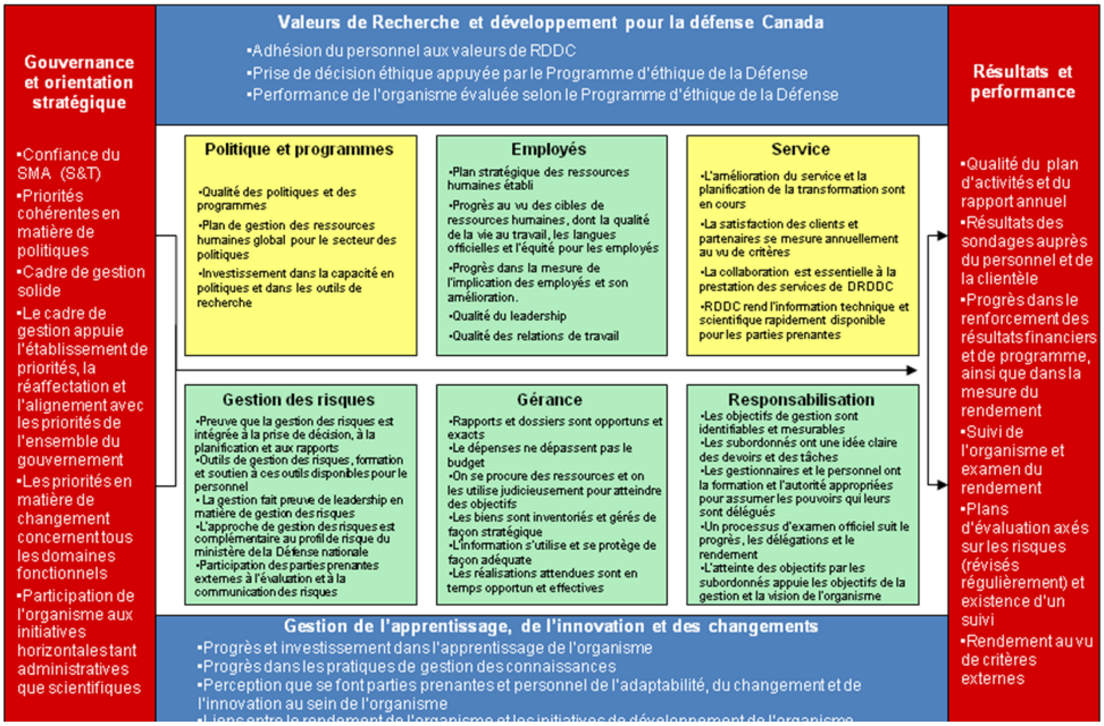
Les paliers Indicateurs et Mesures du CRG de RDDC proposé ont été élaborés à partir de plusieurs éléments : la recherche universitaire sur les pratiques exemplaires et les cadres théoriques (méthodologie qui renforce la validité des indicateurs et mesures individuels); et les critères d'évaluation des rondes I à VI du CRG du SCT (des efforts étant faits, chaque fois qu'approprié, pour aligner les énoncés d'indicateurs et de mesures avec ceux du CRG du Conseil du Trésor).



CRG de RDDC, Palier Attentes



CRG de RDDC, Palier Indicateurs



CRG de RDDC, Palier Mesures

Dans le cadre de l'élaboration du CRG, ont été effectuées deux études pilotes, faisant chacune appel à un instrument de sondage en ligne pour étudier l'application des éléments du CRG aux gestionnaires de RDDC. La première étude pilote du cycle 2 a évalué les éléments Gestion des risques et Responsabilisation; la deuxième, les éléments Politique et programmes, et Service, puis réévalué l'élément Gérance du cycle 1.

Les questions de sondage pour les éléments ciblés ont été élaborées d'après les paliers Attentes, Indicateurs et Mesures du CRG de RDDC, ainsi que d'après les données d'instruments de sondage existants, librement disponibles. Les questions posées pour l'élément Gérance s'attachaient à des points préoccupants révélés par l'analyse du sondage du cycle 1.

Chaque sondage comportait surtout des questions fermées où les répondants devaient opter uniquement pour des choix prédéterminés. Si approprié, les répondants avaient la possibilité de fournir leur propre réponse différente (question ouverte). Les ensembles de questions s'organisaient selon une structure d'arbre logique (nommée « instructions passez à » dans le langage des sondages) afin de poser à chaque répondant uniquement les questions s'appliquant à son niveau de travail et à ses responsabilités. Les sondages ont fait l'objet d'un examen par des spécialistes, qui ont vérifié leur validité, et d'un essai préliminaire par un petit sous-ensemble de la population cible.

Chaque sondage a été effectué, dans les deux langues officielles, dans l'intranet de RDDC, avec un serveur sécurisé, pendant deux semaines distinctes. On a fourni aux participants au sondage un lien à un site libre d'accès pour quiconque au sein du DRENet. Pouvaient y participer les gestionnaires de niveau 2 et 3, ainsi que les détenteurs d'autorités fonctionnelles de niveau 4 autorisés à participer à l'atelier annuel des gestionnaires de RDDC. Le taux de réponse aux sondages 2 et 3 a été de 53 p. cent et de 47,8 p. cent, respectivement.

Signification : Les études pilotes opérationnelles 2 et 3 effectuées pour le CRG de RDDC ont reconfirmé la faisabilité de l'emploi de sondages comme instruments du CRG. Les résultats des études pilotes fournissent une évaluation partielle du rendement des gestionnaires de RDDC au vu du CRG et un point de départ pour le premier cycle opérationnel. Nous estimons que ces résultats appuient la vision d'un CRG de RDDC constant :

Le cadre de responsabilisation de gestion (CRG) de RDDC est un outil de gouvernance qui facilite le dialogue entre les gestionnaires et la direction. Il permet de clarifier le rôle et les responsabilités des gestionnaires et fournit un cadre pour l'évaluation et l'amélioration des processus opérationnels.

Recommandations : Au vu du présent rapport, voici nos recommandations

Recherche et développement pour la défense Canada devrait adopter le cadre de responsabilisation de la gestion proposé dans le présent rapport, ainsi que les BPR proposés et le cycle annuel proposé;

Recherche et développement pour la défense Canada devrait mettre en œuvre les constatations des projets pilotes opérationnels d'EXPEDITION 09 pour le CRG de RDDC proposé, afin d'avoir une base de référence pour le premier cycle opérationnel;

Il serait bon d'intégrer au CRG de RDDC les recommandations d'autres éléments de répartition du travail d'EXPEDITION 09 et de les inclure dans les sondages à venir pour déterminer leur niveau d'adoption par l'organisme.

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Drs. Ross Graham and Malcolm Vant provided executive oversight on behalf of DRDC's Executive Committee, in their role as co-Leaders of EXPEDITION 09 WBE 1.4.

1 Introduction

This report is one of three in a series of reports chronicling the development of a Treasury Board style Management Accountability Framework for Defence Research Development Canada. This report provides a knowledge base for subject matter experts to aid in the implementation of a DRDC MAF. For an executive overview of the DRDC MAF project in its entirety, please see Baroni and Nethercote, *A DRDC Management Accountability Framework: Final Report*, DRDC Atlantic CR 2009-136.

1.1 Expedition 09

Defence Research and Development Canada (DRDC), a special operating agency of the Department of National Defence, contracted Dalhousie University to support the development of a management accountability framework (MAF) as part of DRDC's EXPEDITION 09 project.

EXPEDITION 09 is DRDC's core organizational change initiative, following an earlier change initiative, EXPEDITION 07. The EXPEDITION series established the principle of an 'umbrella,' agency-wide change program, under the control of the DRDC Executive Committee, demonstrating organizational support. Figure 1 illustrates the project structure of EXPEDITION 09 schematically. This contract report supports Task 3 of WBE 1.4: Management Leadership Capabilities.

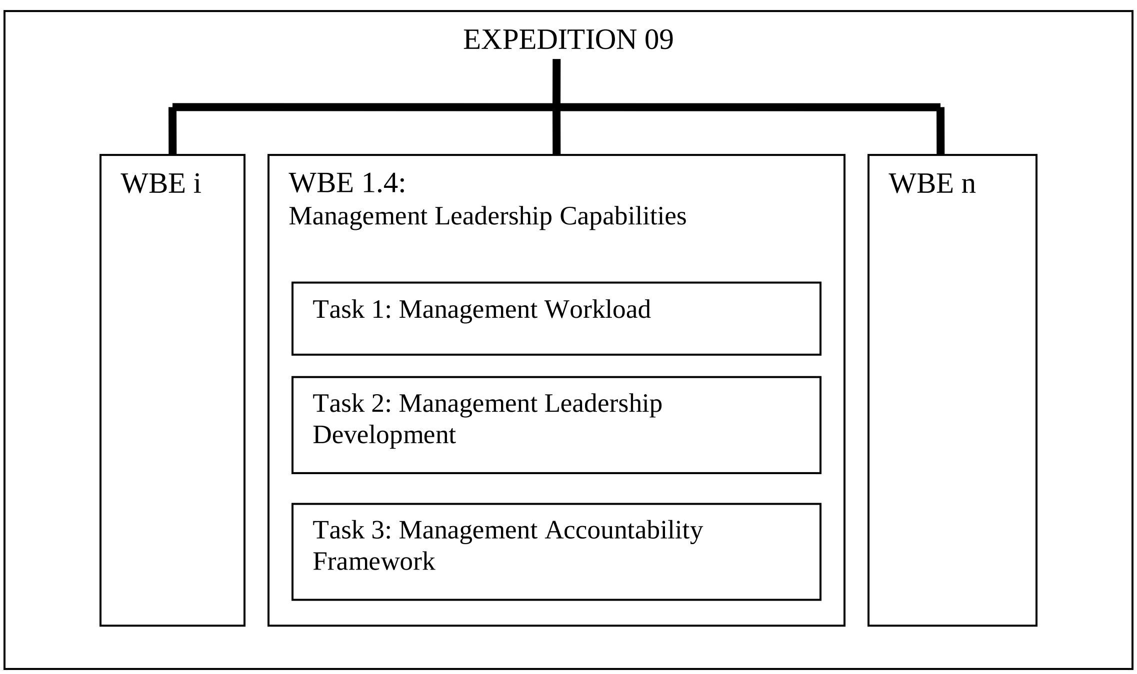

Figure 1: Expedition 09 Project Structure

Under the contract, Dalhousie University supported a cyclic development process for a DRDC management accountability framework (MAF), as follows:

Cycle 'zero', which established executive direction and developed a basic MAF;

Cycle 1, which developed an Expectations Tier based on the TB MAF through consultation with DRDC managers; developed Indicators and Measures for Stewardship and Accountability, and conducted an operational pilot of the Stewardship element through a survey of managers; and,

Cycle 2, which completed the development of all elements of the DRDC MAF and completed survey-based operational pilots of all the core elements.

1.2 Scope of this Report

This report describes the results of the following activities under Cycle 2 of the process:

Develop a Cycle 2 MAF based on the Cycle 'zero' 'straw-man MAF'[1], the results of the Cycle 1 operational pilot, through academic research, with reference to appropriate TBS documents and policies, and in consultation with DRDC Deputy Directors General, DRDC Corporate Services, functional authorities and managers.

- The Cycle 2 MAF includes complete Expectations, Indicators, and Measures tiers;

Plan, execute and analyze the second operational pilot survey of the *Risk Management* and *Accountability* elements;

Plan, execute and analyze a third operational pilot survey of the *Policy and Program* and *Service* elements;

Revisit the *Stewardship* element as a part of the third survey pilot;

Working in parallel with these operational pilots, develop Indicators and Measures for the remaining elements;

Revise the Cycle 2 MAF as necessary as a result of research and survey results to achieve a final DRDC MAF.

1.3 Structure of this Report

The structure of the report is as follows:

Section 2 introduces the Treasury Board MAF, providing background on its development and implementation; it also references the Management, Resources, and Results Structure (MRRS);

Section 3 outlines the principles of a DRDC MAF, referencing the DRDC corporate mandate, strategy, vision and mission. This section also proposes an annual MAF cycle schedule as well as the anticipated process, resources, participants necessary to adopt the proposed MAF cycle;

Section 4 introduces the four Pillar Elements of the DRDC MAF;

Section 5 details the development of the six Core Elements of the MAF:

---

[1] Warren Nethercote, *A DRDC Management Accountability Framework: A Straw-man, April 2008*, Dalhousie University School of Public Administration, Discussion Paper, April 21, 2008.

- Policy and Programs
- People
- Service
- Risk Management
- Stewardship, and
- Accountability;

Section 6 describes the design of the survey instruments for operational pilots 2 and 3, including survey implementation and limitations;

Section 7 provides a detailed analysis of the results of the two operational pilot surveys;

Section 8 explains and categorizes the findings of the two operational pilot surveys according to the six Core Elements of the DRDC MAF. This section also rates organizational performance according to the element indicators assessed by our surveys;

Section 9 concludes Cycle 2 with recommendations for DRDC based on the results of academic research and the findings of our operational pilots;

Annexes A and B provide the text of the English and French language surveys, respectively;

A bibliography lists 131 documents and references utilized by the authors.

2 Background[2]

2.1 Treasury Board Management Accountability Framework (TB MAF)[3]

Since 1997, the Treasury Board and its Secretariat have been the designated management board for the Government of Canada, with a variety of roles including "leading and providing expertise in the development of an agenda to improve management practices."[4] This management improvement agenda expressed in *Results for Canadians* is arguably the genesis of the TB Management Accountability Framework[5].

One element of *Results for Canadians* was the Modern Comptrollership Initiative (MCI), which called for "more effective decision-making, greater accountability, a mature approach to risk management, results-based control systems, and shared values and ethics."[6] Strong and clear accountability was a central element of the MCI, to ensure that the four management commitments of the Government of Canada would be met: Citizen Focus; Values; Results; and Responsible Spending.

The Management Accountability Framework was the successor initiative to the MCI, subsuming modern comptrollership along with other key elements of modern management to provide management expectations for deputy heads and public service managers.[7]

In 2003, the Treasury Board introduced a draft MAF with ten core elements of public service management for bilateral discussions between deputy ministers and the Secretary of the Treasury Board.[8] The MAF uses an integrative approach, combining the ten elements to show what the Treasury Board, and the public indirectly, expects of managers. These ten elements, shown in Table 1, are meant to succinctly capture what Jim Judd, Secretary of the Treasury Board Secretariat at the time, called 'the questions that keep Deputy Ministers' up at night". [9]

[2] Editor's note: The rest of this report includes numerous internet links. Unless otherwise noted, they were current as of 30 June 2010.
[3] This section draws substantially from Craig O'Blenis and Warren Nethercote, *A DRDC Management Accountability Framework: Cycle 1 Final Report*, DRDC Atlantic CR 2008 – 188, October 2008, pp. 5 -9.
[4] Treasury Board of Canada Secretariat, *Results for Canadians: A Management Framework for the Government of Canada*, March 30, 2000, p. 18.
[5] Evert Lindquist, "How Ottawa Assesses Departmental/ Agency Performance: Treasury Board's Management Accountability Framework" in How Ottawa Spends, 2009 – 2010: Economic Upheaval and Political Dysfunction, Allan M. Maslove, ed, forthcoming, October 2009.
[6] Jean Depuis, *Modern Comptrollership and the Management Accountability Framework*, Parliamentary Information and Research Service: PRB 06-23E, April 3, 2006, p. 3.
[7] Jean Depuis, p. 9.
[8] Treasury Board of Canada Secretariat, *MAF Assessments – Round I*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/assessments-evaluations_e.asp#r1.
[9] Ivan Blake, video presentation on *Management Accountability Framework* at CCMD, 2005, available from: http://www.tbs-sct.gc.ca/maf-crg/documents/video-video/video-video_e.asp .

Table 1: TB MAF Elements

Governance and Strategic Directions	Public Service Values
Policy and Programs	People
Risk Management	Stewardship
Results and Performance	Learning, Innovation and Change Management
Citizen-focused Service	Accountability

In 2004, the Treasury Board, with 35 federal departments and agencies, developed management priorities based on the ten elements.[10] From this, the Treasury Board identified 41 indicators and in 2005, it assessed 53 departments and agencies against the indicators. At this time, the Treasury Board did not intend to review management quality; instead, it was looking for organizational performance compared to the specific indicators.[11] The latest round of assessments, conducted in 2006, expanded to 55 departments and agencies.[12] The Treasury Board revised the 2004 indicators based on departmental and agency input,[13] and to focus on management aspects it could assess easily through normal oversight activities. Information sources included estimates, management resources and results structures (e.g., program activity architectures, Memoranda to Cabinet, and Treasury Board submissions), and existing consultations.[14]

The three MAF tiers detail the commitments senior managers make as departmental leaders. The top tier, Expectations, defines leadership standards and recognizes that successful management relies on the connection between each element. The second tier, Indicators, supports Expectations, providing practical descriptions easily adapted to an agency's unique context. The bottom tier, Measurements, is an expression of each element's performance standards. While the expectations are constant, a MAF recognizes departments and agencies are unique by allowing flexibility in definition of Indicators and Measures.

The MAF is a living document and Indicators and Measures in particular may change based on changes in its foundation pieces, such as a change in the Organizational Mandate, changes to the TB values, or changes to legislation affecting core elements. Ivan Blake, then the Executive Director of the Comptrollership Modernization Directorate which was responsible for overseeing the creation of the MAF, has said the TB MAF is open to change: "Jim Judd [Secretary of the Treasury Board Secretariat, May 2002 – November 2004] has been absolutely adamant: the document will never be

[10] Treasury Board of Canada Secretariat, *MAF Assessments – Round II*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/assessments-evaluations_e.asp#r2.
[11] Treasury Board of Canada Secretariat, *MAF Assessments – Round III*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2005/index_e.asp.
[12] Treasury Board of Canada Secretariat, *List of Departments and Agencies assessed during MAF Round IV*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2006/departments-ministeres_e.asp.
[13] Treasury Board of Canada Secretariat, *MAF Assessments – Round IV*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/assessments-evaluations_e.asp#r4 .
[14] Treasury Board of Canada Secretariat, *MAF Elements and Indicators - 2006*, available from: http://www.tbs-sct.gc.ca/maf-crg/indicators-indicateurs/2006/elements-elements_e.asp.

carved in stone". [15] This has proven to be true to some degree, as each year, the TBS adjusts and refines the information sources it uses to assess departmental performance.[16]

The MAF was designed as a visual graphic of a flow chart, which represents the relationships among the elements. Each tier of the TB MAF has ten elements that, according to TBS, describe key characteristics of management performance, in which four *pillar* elements surround six *core* elements. The authors of this study propose that this layout helps describe the relationship of the elements. The MAF begins on the left hand side, with *Governance and Strategic Direction* and ends on the right side with *Results and Performance*. The directional arrows which take the observer from the left to the right of the MAF cross through the six core elements, which are flanked by the two remaining pillar elements. This layout suggests that the six core elements, bounded by *Values* and *Learning, Innovation and Change Management* principles, are the means by which *Governance and Strategic Direction* are translated into *Results and Performance.*

The colours used in the MAF are also significant; the four colours were chosen to represent the four key areas of the *MAF Vision for the Public Service*, as shown in Table 2, below, and further define the relationships among the elements.[17]

Table 2: Colours of the MAF

Blue	Is founded on **values** that will never **change** and an appreciation that everything else may
Red	Exists for the express purpose of turning the direction of **Government** into **results** for Canadians
Yellow	Continuously improves the quality of its **analysis** and its understanding of the perspectives of its **citizens**
Green	Frames all its decisions with due regard to **risk**, rigorous **stewardship** of public resources, the capacity and condition of its **human resources** and the systematic management of its **accountabilities**

[15] Ivan Blake, 2005.
[16] Treasury Board of Canada Secretariat, *MAF VI Methodology Changes 2008-2009*, available from: http://www.tbs-sct.gc.ca/maf-crg/indicators-indicateurs/2008/elements-elements-eng.asp .
[17] Robert Fonberg, *Measuring Management: The Canadian Experience*, Treasury Board of Canada Secretariat Presentation Notes, National School of Government Conference on 21st Century Public Services, London, United Kingdom, 6 June 2006; and Virginie Ethier, *Management Accountability Framework (MAF) Overview*, PPX Presentation, May 15, 2007.

Expectations Tier

Figure 2: TB MAF, Expectations Tier

The elements of the Expectations tier in Figure 2 describe the Treasury Board's expectations of senior managers in the Government of Canada[18]. This framework overcomes silo thinking by emphasizing the relationship between each of the elements. For example, although Stewardship can be narrowly considered a financial activity, managing human resources has significant impact on financial performance. In addition to the People element, Policy and Program directives connect intimately to Stewardship decisions. A manager may find that project failure is due to limited resources, but without sound financial management, it is a challenge to overcome the problem. A manager succeeds at delivering high-quality public service by meeting the expectations of each element. To meet expectations, managers need performance indicators and clear measures, detailed in the remaining MAF tiers.

[18] Treasury Board of Canada Secretariat, *Management Accountability Framework*, 2003, available from: http://www.tbs-sct.gc.ca/maf-crg/documents/booklet-livret/booklet-livret-eng.asp.

Indicators Tier

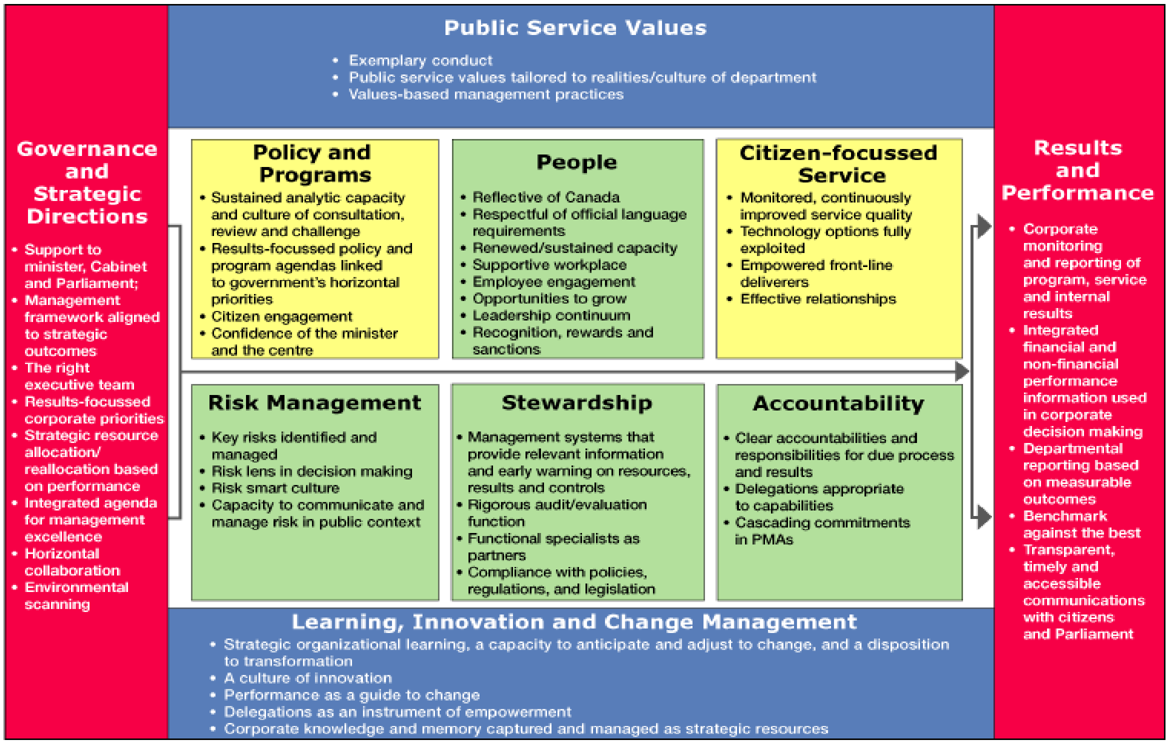

Figure 3: TB MAF, Indicators Tier

The indicators, as seen in Figure 3, describe the breadth of the elements[19]. The Treasury Broad intends that Deputy Ministers engage their executive councils in discussions of the items listed in the indicators to determine how well their department reflects the MAF's expectations. In later rounds of assessment, TBS refers to Indicators as 'Areas of Management'; however, the descriptive material on the TBS website continues to use the nomenclature of Indicators; therefore, we have preserved this original wording.

[19] TBS, *Management Accountability Framework*.

Measures Tier

Figure 4: TB MAF, Measures Tier

Measures are used to determine how a department functions; unlike Expectations and Indicators, measures may change in response to departmental needs[20]. Sources of information change, particularly when reporting methods change. The measures tier of the Treasury Board MAF, shown in Figure 4, lists potential sources, while acknowledging a department may have other, accurate information sources that describe departmental performance. The Treasury Board Secretariat and Privy Council Office use information found through the measures to engage Deputy Ministers on their department's performance. Depending on performance, certain measures may be more important for discussion than others. For example, a department may perform well at risk management but could benefit from improvement in its accountability guidelines. In this case, the Treasury Board, Privy Council Office, and Deputy Minister would focus on accountability at the expense of risk management.

In later rounds of assessment, TBS refers to Measures as 'Lines of Evidence'; however, the descriptive material on the TBS website continues to use the nomenclature of Measures; therefore, we have preserved this original wording.

[20] TBS, *Management Accountability Framework*.

2.2 Management, Resources, and Results Structures (MRRS) Policy

The Management, Resources, and Results Structures (MRRS), introduced in 2005, is a policy set out by the TBS which requires all government departments "to design and manage their programs in a manner that best achieves results for Canadians."[21]

The goal of the MRRS policy is to integrate the reporting of financial and non-financial program performance information to:

- support informed decisions on program management, and new program proposals
- support improved allocation and reallocation decisions in individual departments and across the government
- improve accountability reporting to Parliament.[22]

The MRRS has four interdependent policy components which work together to align programs, resources, activities and results.[23] When reported together, these components seek to describe results attained in terms of the total resources required to achieve them.[24] They are:

- ***Strategic outcomes:*** Departments have appropriate, clearly identified, and measuarable intended outcomes for all programs and activities, which reflect the mandate and vision of the organization.
- ***Program Activity Architecture*** (PAA): Programs and associated sub-programs are clearly linked. Planned resources, expected program results, and responsibilities are identified at each level. All activities support the departments' strategic outcomes.
- ***Resource and Results Linkages***: The allocation of departmental resources is clearly connected to the achievement of strategic outcomes, and resources are utilized efficiently to achieve results.
- ***Governance Structure***: Departments have a framework of decision-making mechanisms, responsibilities, and accountabilities by which individuals and departments can systematically report intended results against actual results and the resources utilized.

The cornerstone of the MRRS is the ***Program Activity Architecture*** (PAA) component. The Program Activity Architecture interacts with the Management Accountability Framework in two ways; first, by "providing a standard basis for reporting to citizens and Parliament on the alignment of resources, program activities and results",[25] it generates reports which can be used as information measures in the MAF organizational assessment.

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[21] Treasury Board of Canada Secretariat, *Policy on Management, Resources and Results Structure*, available from: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14252&section=text .
[22] TBS, *Policy on Management, Resources and Results Structure.*
[23] Lee McCormack, *Getting the Foundations Right*, presentation notes, November 30, 2004; TBS, *Policy on Management, Resources and Results Structure*.
[24] Lee McCormack, *Getting the Foundations Right*.
[25] TBS, *Policy on Management, Resources and Results Structure.*

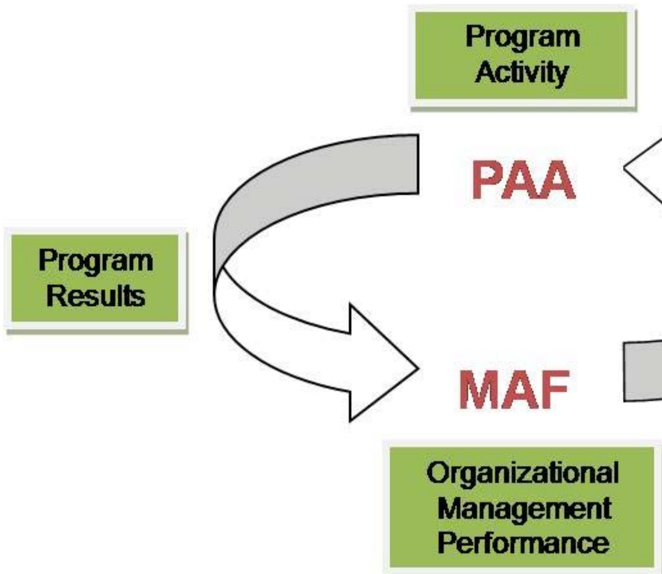

Figure 5: PAA and MAF Interaction

The PAA also interacts with MAF: decisions made within the PAA structure are informed by strategic goals set by organizational leaders based (in part) on the departmental assessment against the Management Accountability Framework. Annually, the organization's performance is assessed utilizing the MAF; results of this assessment help determine the organization's progress in achieveing short term and long term strategic goals; the organization's strategic goals, and level of progress towards them, in turn, determine the programs pursued by the organization. These programs are itemized through the PAA and results of program outcomes are utilized as reporting instruments for assessing organizational performance in terms of the MAF. Figure 5, above, depicts the cyclcical relationship between PAA and MAF.

In other words, the MAF articulates the government's management performance expectations overall (*how we manage*), while the PAA acts as the tool for identifying, collecting and utilizing data to report on program commitments specifically (*what we manage*). [26]

A guidance document published by the TBS Information Management Strategies Branch offers the following explanation of the relationship between MAF and MRRS:

> The MRRS is an inventory of and information on specific departmental programs. It includes financial, results and other information necessary to analyze specific programs and make decisions on these programs (e.g. where the Management Accountability Framework questions whether an institution has an effective evaluation function, MRRS asks for the most recent evaluation report on a program). The MRRS uses MAF to assist in implementing certain elements, and the intention in the future is that

[26] Lee McCormack, *Getting the Foundations Right*.

MRRS program information should include most MAF indicators (e.g. the employment equity status of a program activity).[27]

Because the MAF works in tandem with the PPA and MRRS policy, there should be very little additional administrative reporting workload for managers in DRDC in providing an annual MAF assessment of the organization's program activity performance. As use of the MAF becomes fully integrated in the organization, PAA reporting should include information on MAF indicators, as indicated in the guidance document quoted above, so that additional MAF information can be extracted directly from PAA reporting.

2.3 Issues with the TB MAF

While the MAF offers a useful overview of the Treasury Board's expectations for senior management, it cannot capture the details of decision making environments and pressures which are unique to each institution, nor does it offer a methodology for assessing the quality of programming. In this sense, the TB MAF is neither a replacement for assessing DM performance through the Committee of Senior Officials (COSO), nor an alternative to program evaluations, although it does offer valuable perspectives from which to view each of these areas.[28]

As a guide to good management practices, the elements focus on organizational capacity and capability within a department.[29] However, it does not address a department's relationship with its Minister and it does not discuss horizontal collaboration.[30] These limitations result from the scope of the MAF, which provides for a dialogue between the Treasury Board Secretariat and Deputy Ministers on the expectations of departmental leadership

The MAF was originally intended as a 'code of excellence' type document,[31] demonstrating sound management practices which would rely heavily on the commitment of senior managers (DMs and ADMs) to be effective; however, as the framework has evolved and its use adopted by all departments, it has become "an instrument for management oversight," [32] relying more heavily on the reporting capabilities of subordinates. Theoretically, the benefit of this alternative approach is that by having better defined and mandatory reporting measures, there is increased and better comparability between departments; however, as noted above, each department has unique environments and mandates which make direct comparison difficult.

One drawback in the shift from 'code of excellence' to an oversight tool is that by redefining MAF as a reporting structure, it is effectively alienated from being used as a strategic tool, and places more burden on an already reporting-heavy system:

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27 Treasury Board of Canada Secretariat, "Guidance on Governance, Accountability and Performance Measurement for the Management of Information in Small Agencies," 2007, available from: http://www.informationmanagement.gc.ca/docs/guid-orient/concepts/concepts03_e.asp#_Toc143324500. (accessed 13 August 2009)

28 Lee McCormack, "Using Evaluation in the Canadian Expenditure Management System", OECD Presentation, Washington, DC, June 11-12, 2007, available from: http://www.oecd.org/dataoecd/21/9/39793340.pdf .

29 Ivan Blake, 2005.

30 Ivan Blake, 2005.

31 Evert Lindquist, 2009.

32 Treasury Board of Canada Secretariat, "MAF Implementation," available from: http://www.tbs-sct.gc.ca/maf-crg/implementation-implementation/implementation-implementation-eng.asp.

> "...the cost of moving too far in this direction is that many deputy ministers will create sufficient capability to credibly feed reporting requirements, but effectively 'quarantine' it [the MAF] from strategic dialogue and decision-making in departments focused on dealing with pressing challenges.[33]"

Another issue with the MAF is that it can portray a higher level of departmental accountability than truly exists. This weakness stems from the TBS' dependence on each department to self-report by providing information on MAF measures, a lack of external reviews, as well as a lack of TBS capacity to provide support to departments after the assessment to close gaps in MAF performance areas. [34] Departments which become better at responding to the TB MAF reporting structure can be given improved MAF assessments without actually improving.

The validity of MAF measures and the assessment scoring system are also problematic issues. There is no information available to explain the TBS' methodology in selecting indicators and measures for each Element. The departmental assessment against each measure is largely dependent on qualitative judgments, and is more concerned with the existence and implementation of policies and frameworks than with the impact of those policies and frameworks. The implicit assumption is that the mere existence of policies and procedures within a department will lead to improved results.[35]

Two weaknesses in the scoring system are that each indicator is given equal weight in the assessment of an element and each element is weighted equally for all departments.[36] Weak performance against a particular indicator may not justify a weakened assessment in the element overall, and furthermore, departmental mandates may dictate that a particular element be weighted more heavily[37] (the service element for Service Canada, for example). Note that there is no overall score for the MAF, only individual elemental assessments; the reader is left to draw his/her own conclusions as to the overall departmental performance against the MAF.

While the TB MAF was not intended to evaluate DM leadership *per se*, judgment is implied, particularly because successful performance of the department in each area relies heavily on senior management leadership. Not only is it awkward for subordinates to be, in effect, evaluating the DM's leadership performance when conducting a MAF assessment, the MAF measures do not take into account the conflicting priorities, strategic choices and unique pressures faced by each DM.[38]

Finally, the costs associated with MAF are thought to be quite high in relation to its benefits; one conservative estimate places the cost to TBS at $42 million annually.[39] This figure includes increased overhead costs, people costs and opportunity costs.

In conclusion, the TB MAF is a good checklist against which departments can assess their performance, and the indicators and measures are adequate starting points for generic assessments. However, each department or agency must be sensitive to their particular circumstances when self-

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[33] Evert Lindquist, 2009.
[34] Evert Lindquist, 2009.
[35] Melvin J. Dubnick and Jonathan B. Justice, *Accounting for Accountability,* 2004 Annual Meeting of the American Political Science Association, discussion paper, September 2004, p. 3.
[36] Evert Lindquist, 2009.
[37] Evert Lindquist, 2009.
[38] Evert Lindquist, 2009.
[39] Evert Lindquist, 2009.

assessing against the MAF. It is preferable for each organization to institute their own MAF, based on and aligned with the TB MAF, as a mechanism for assessing performance in order to report effectively to superior bodies and to improve their own management performance.

Table 3 outlines the six main problem areas with the TB MAF and potential strategies to mitigate these problems with the DRDC MAF.

Table 3: MAF Problem Areas and Possible Mitigation Strategies

MAF Problem Area	**Mitigation Strategy for DRDC**
Loss of Strategic Tool	-Discuss MAF as it relates to organizational priorities at RDEC retreats -Select relevant information sources and tools -Executive summary of MAF assessments focuses on key strategic themes and recommendations
Reporting Burden	-Integrate MAF reporting with PAA and other corporate functions
Appearance of Accountability	-Select relevant measures and information sources -Document methodology so that the same approach is utilized each year -Set goals for the next assessment at the end of the previous assessment -Use managers' survey to incorporate information on actual working conditions
Measures and Assessment	- Utilize solid academic theory as basis for selection of measures and development of survey questions -Select relevant information sources and tools
Assessing leadership	-Do not utilize MAF assessments as a performance measurement tool -Ensure recommendations are aimed at organizational level, not individuals
Costs	-Utilize data mining techniques to get relevant information from pre-existing sources -Refine other reporting systems to capture MAF related measures when other data is collected -Select relevant measures and information sources to cut down on unnecessary reporting

3 Principles and Structure of the DRDC MAF

3.1 Principles of the DRDC MAF

A DRDC MAF must satisfy the following conditions in order to be adopted willingly by the organization:

- Support ADM(S&T)'s contributions to the TB MAF process
- Support dialogue that clarifies roles and responsibilities throughout the chain-of-command
- Support assessment and improvement of business processes
- Exploit existing corporate information sources where possible
- Minimize workload where direct data collection from managers is required

A DRDC MAF should also reflect, and thereby promote, DRDC's Mission, Vision and Values, as well as the Defence S&T Strategy.

Mission[40]

DRDC's mission is to ensure that the Canadian Forces are technologically prepared and operationally relevant by:

- Providing expert science and technology advice to the Canadian Forces and the Department of National Defence;
- Conducting research, development and analysis to contribute to new and improved defence capabilities;
- Anticipating and advising on future science and technology trends, threats and opportunities;
- Engaging industrial, academic and international partners in the generation and commercialization of technology; and
- Providing science and technology for external customers to enhance defence science and technology capacity.

Vision[41]

DRDC's vision is to be known worldwide as the best in science and technology for defence and security.

[40] Direct quote from DRDC, *Annual Report for the year ending 31 March 2008: Shaping Defence and Security Capabilities Through Science and Technology*, p. 3.
[41] Direct quote from DRDC, *Annual Report for the year ending 31 March 2008*, p. 3.

Values[42]

DRDC's values guide how we accomplish our mission and maintain excellence in science:

Commitment: We demonstrate dedication and pride in working towards our vision.

Client Focus: We bring excellence to clients, both internal and external, by focusing efforts on discovering and meeting their needs.

Creativity and Innovation: We generate innovative solutions, approaches, products and services that improve the status quo.

Leadership: We actively and enthusiastically seek to exert influence and originate action to achieve our goals.

Professionalism and Integrity: We focus our effort on achieving quality results and we behave in an honest, ethical manner, dealing with others respectfully and fairly.

Trust and Respect: We are open, honest and responsible in our relationships and we recognize and value the contributions of others.

Teamwork: We demonstrate effective interpersonal skills, and work cooperatively and productively within and across DRDC to achieve common goals.

The Defence R&D Strategy includes four interdependent areas, each associated with specific deliverables.[43] These deliverables support the core elements of the DRDC MAF. See Table 4, opposite.

The Defence S&T Strategy also describes six attributes the Organization must cultivate in order to be successful in achieving maximum impact in the identified Action Areas.[44] All six are dependent on the existence of a solid Governance Structure. The Indicators and Measures of a DRDC MAF should assess the strengths of these six attributes, either directly or indirectly.

Linkage - through the Enterprise, departmental and Canadian Forces organizations are effectively positioned and synchronized to contribute to the direction, delivery and exploitation of S&T outputs.

Innovation - the Enterprise, with its external partners, produces innovative, cost-effective solutions or novel alternatives to the highest priority defence and security needs that are appropriate to the Canadian context.

Leverage - the Enterprise attracts top-tier national and international S&T partners so as to leverage their resources, knowledge, experience and technology.

Agility - the Enterprise is appropriately agile so as to identify and respond effectively to new threats and opportunities that derive from the global advancement of S&T or from the rapidly evolving defence and security environment.

Balance - the S&T outputs produced by the Enterprise are suitably balanced from multiple perspectives. These outputs address the prioritized needs from the perspectives of core

[42] Direct quote from DRDC, *Annual Report for the year ending 31 March 2008*, p. 3.
[43] Department of National Defence, *Defence S&T Strategy: Science and Technology for a Secure Canada*, December 2006, pp. 20-22.
[44] DND, *Defence S&T Strategy*, pp. 19-20.

departmental processes, Canadian Forces and environment-specific capability requirements. They address the needs across multiple time horizons, from responding to the challenges of today's operations to shaping the Canadian Forces of the future. Finally, they sustain core internal S&T capabilities across as broad a spectrum as resources allow while ensuring the critical mass necessary in each area to produce world caliber results.

Excellence - the Enterprise consistently produces results of the highest possible quality and credibility built on niche world-caliber internal S&T capabilities and strong, effective external partnerships.

Table 4: S&T Strategy Areas and Deliverables

Action Area	S&T Deliverables	Key MAF Core Elements
Establish an integrated governance mechanism	Defence S&T Enterprise Charter	Accountability; Risk Management
	Defence S&T communications plan	Service
	Process model for the S&T Enterprise Annual Business Cycle	Accountability
	Aligned Research, Technology and Analysis Program management	Accountability
Develop a "full-service" defence S&T capability	S&T capability assessment of the S&T Enterprise	Policy and Programs
	Human resources plan for the S&T Enterprise	People
	Infrastructure plan for the S&T Enterprise	Stewardship
Build strategic partnerships	Process model for managing partnerships	Service
	Partnering arrangements among S&T Enterprise members	People; Service
	International partnering framework and supporting agreements	Policy and Programs; People
	Partnering framework for industrial, academic and other government departments	Policy and Programs
Establish Enablers	Information management/information technology capability to support the S&T Enterprise	Risk Management; Stewardship
	Harmonized procurement practices across research, development and acquisition	Stewardship
	Intellectual property management principles	Stewardship
	Departmental approach to technology insertion	Risk Management; Stewardship

3.2 Structure of the DRDC MAF

This section begins with the presentation of the DRDC MAF followed by a vision of a steady-state DRDC MAF, to provide a strategic overview of the characteristics of a DRDC MAF of interest to DRDC's executive cadre: the purpose of the MAF; the business processes of the MAF; the participants in MAF processes; and the resources required by the MAF processes. An overview of the Expectations Tier of the DRDC MAF is then presented, followed by discussion of the pillar and core elements of the DRDC MAF. This discussion of elements includes a description of elements for the Indicators and Measures Tiers and of proposed instruments to allow data collection for the measures.

The DRDC MAF

The complete DRDC MAF is presented here in TB MAF style. Figure 6, below, depicts the DRDC MAF Expectations Tier; Figure 7, opposite, depicts the DRDC MAF Indicators Tier; and Figure 8, opposite, depicts the DRDC MAF Measures Tier.

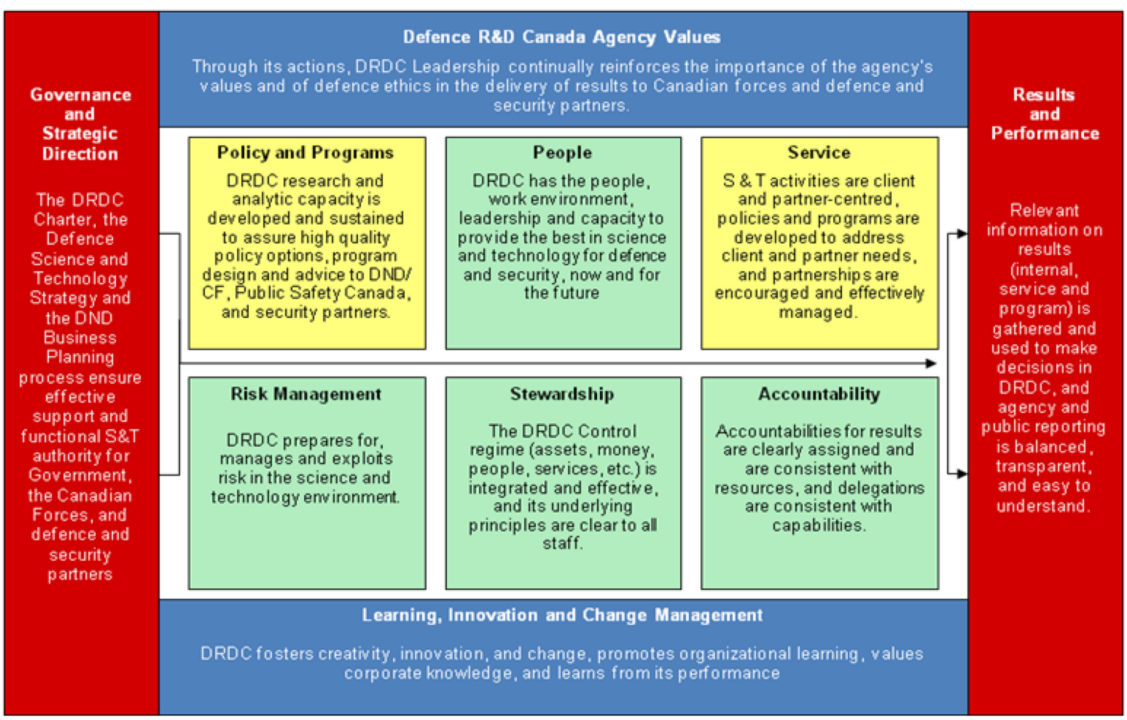

Figure 6: DRDC MAF, Expectations Tier

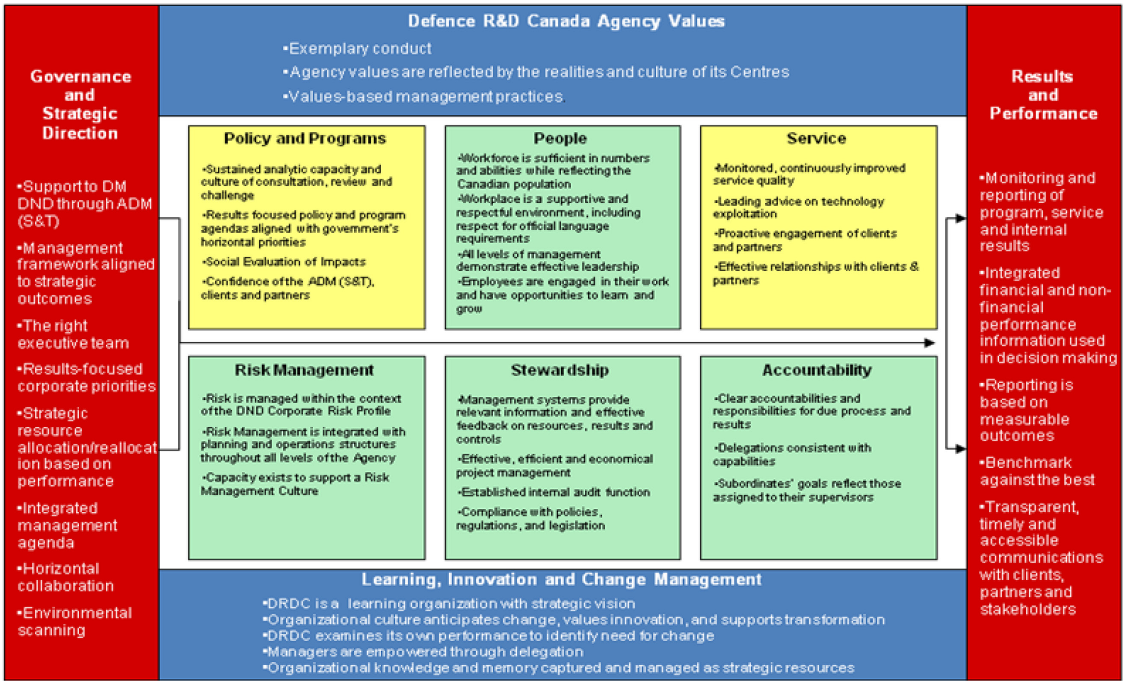

Figure 7: DRDC MAF, Indicators Tier

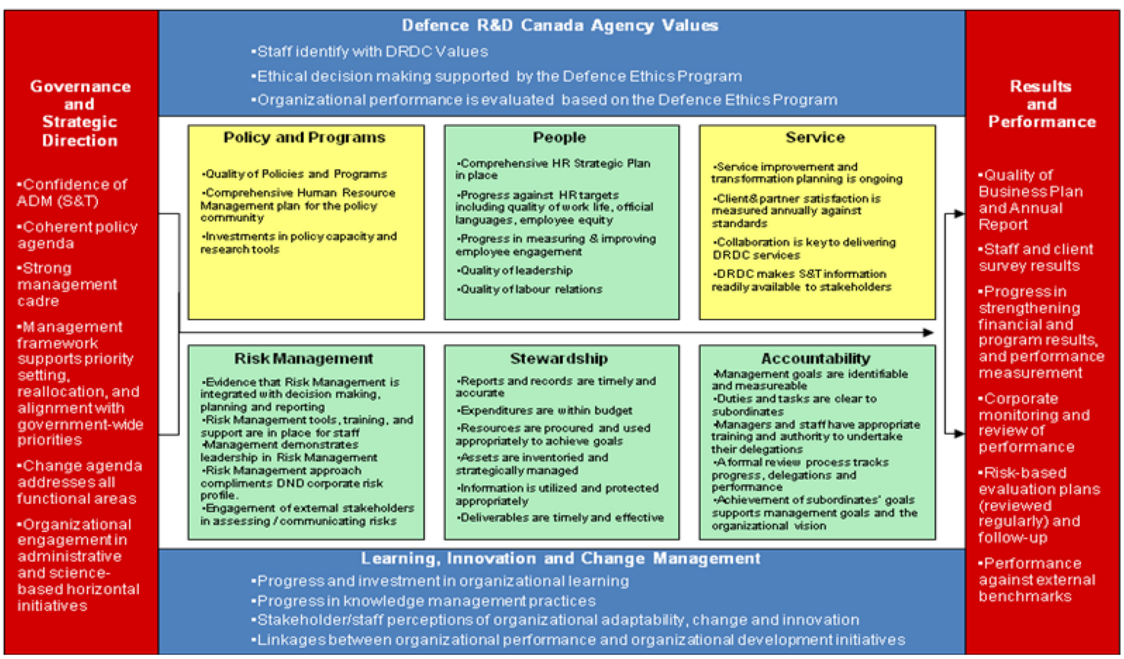

Figure 8: DRDC MAF, Measures Tier

Vision of a Steady-State DRDC MAF

> *The DRDC Management Accountability Framework (MAF) is a governance tool that facilitates dialogue between managers and executive leadership, helping to clarify managers' understanding of their roles and responsibilities and providing a framework for assessment and improvement of business processes.*

The Process

The DRDC MAF process will complement the DRDC business cycle. The DRDC MAF contains 10 elements but ordinarily, RDEC will begin a MAF cycle by determining which elements are of greatest current interest, because of Agency or Departmental priorities. The resultant MAF cycle will focus on those elements, but may also address others on an overview basis.

The MAF process will collect information both from corporate data sources and from a survey of DRDC managers. Corporate staff will analyze and report on corporate data and survey results at both the Agency and Centre level, in the context of the elements of the DRDC MAF. Results of the analysis will be used to identify both areas of organizational strengths to commend and weaknesses to address, including identifying areas for business process improvement. Results would also support the commitments of the ADM (S&T) to the DM DND and TB MAF.

The Participants

RDEC will establish the priorities of any given MAF cycle.

DRDPO will be the OPI for the DRDC MAF. DGSTO and DGRDCS will be responsible for provision of corporate data, and DGMPRA will be responsible for the development and execution of managers' surveys to DRDPO requirements. Managers' surveys for the DRDC MAF would be addressed to DRDC Level 2 and Level 3 Managers, and those Level 4 functional authorities who are members of Centre management committees. DRDPO would analyze and report the results of the DRDC MAF cycle to RDEC.

The Resources

DRDPO will plan any given DRDC MAF cycle, analyze supplied corporate data and the results of the managers' survey, and report the results to RDEC (17 person-weeks[45]). DRDPO may also use the results to support TB MAF requirements (2 person-weeks).

DGRDCS and DGSTO will provide corporate data to DRDPO requirements (5 person-weeks).

DGMRPA will develop and implement a managers' survey to DRDPO requirements and deliver survey tabulations to DRDPO (8 ½ person-weeks).

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[45] These resource estimates are drawn from Section 4.2 of Judy Baroni and Warren Nethercote, *A DRDC Management Accountability Framework: Final Report*, DRDC Atlantic CR 2009-136.

DRDC Level 2 and Level 3 managers, and those Level 4 functional authorities who are members of Centre Management Committees will be required to complete the managers' survey (4 person-weeks, based on 1 hour per manager).

Annual DRDC MAF Cycle

The DRDC MAF cycle begins in February with planning for the upcoming MAF analysis based on priorities set by RDEC the previous December. Designated DRDC staff will identify the data necessary to report on the organizational performance against these priorities.

From March to June, staff will gather relevant data and information measures for each of the DRDC MAF elements, including, but not limited to, those sources identified in this report. Many information measures will be available through pre-existing databases; some data can easily be retrieved through report generation, other data will need to be manually extracted from documents, while some data may not readily exist and will need to be gathered through survey or audit. As the MAF becomes fully implemented, additional reporting requirements can be integrated with pre-existing reporting structures to capture additional information.

As a part of the annual MAF analysis, DRDC managers will complete a survey instrument that examines practices relevant to the elements of the DRDC MAF being examined that particular year. The survey will be developed and tested during the month of April. Care should be taken to avoid including survey items which can be found through corporate sources (ex: training participation). A shared question bank in the survey instrument for the DRDC MAF will help control the size of a survey instrument for the full MAF, thus encouraging survey responses that are carefully considered.

The survey will be active for a three week period during the month of May. Survey participation will be mandatory for Level 2 and 3 managers, and selected Level 4 functional authorities.

All data, including survey results, will be analysed during the month of June in anticipation of completing a first draft of findings and organizational assessment by the end of July for review by RDEC; a second draft based on RDEC feedback is deliverable to RDEC by the end of August. The final report of the DRDC MAF assessment should be available to the ADM (S&T) by October 1st, for use as input into the DND reporting requirements for the TB MAF which is due to TBS by November 1st. After the report is submitted, DRDC staff would complete a post- mortem of the process to identify areas of strength and opportunities for improvement; staff would also be available for consultation by DND. The MAF assessment is posted for public review on the DRDC website by the end of November. In December, RDEC should identify target areas for the next year's MAF assessment, based in part on the previous year's final MAF report.

The CEO/DRDC will use the results of analyses to support the Deputy Minister's accountabilities to the Treasury Board Secretariat. Level 2 managers (Directors General and COS/ADM(S&T) will use the results of analyses to support organizational development and process improvement. Level 3 managers and Level 4 functional authorities will use the results of analyses to support self-improvement.

Table 5, below, orients the DRDC annual MAF cycle within the broader TB MAF cycle.

Table 5: Annual MAF Cycle[46]

	August (Start of TB Cycle)	September	October	November	December	January
TB	DM is contacted to discuss plans for upcoming MAF review and to get names of departmental contacts for relevant areas of reporting	Data is requested from identified contacts	Web portal is open to receive departmental information	All requested information is due in to TB by November 1; Analysis begins	Analysis	
DRDC	Write report; 2nd draft by end of August: changes to RDEC Retreat	Write final report	DRDC MAF analysis due to DND by Oct 1	Post-mortem; DRDC MAF report is made publically available on website	RDEC identifies target areas for next DRDC round	Staff available to provide more information to DND

	February (Start of DRDC Cycle)	March	April	May	June	July
TB	Draft to department; 4 weeks review period	Analysis	Final report to DM	Post-mortem and plan for next round	Post-mortem and plan for next round	Post-mortem and plan for next round
DRDC	Begin planning for next round; staff available to provide more information to DND	Gather relevant information and data	Gather relevant information and data; develop and test survey	Gather relevant information and data; management survey is active for a 3 week period	Gather relevant information and data; survey and data analysis	Write report; 1st draft to RDEC for RDEC Retreat by end of July

[46] Treasury Board of Canada Secretariat, *MAF Assessment – Round VI*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2008/assessments-evaluations-eng.asp; Citizenship and Immigration Canada, *Integrated Planning: the View from CIC*, presentation, PPX breakfast session, December 2, 2008, available from: http://www.ppx.ca/PPXevents/Archive/Dec2_08/Dec2IntegratedPlanning(AllisonFortinENG.pdf; Evert Lindquist, 2009; and Virginie Ethier, 2007.

4 The Pillar Elements

There are four pillar elements of the DRDC MAF: Defence R&D Canada Agency Values; Governance and Strategic Direction; Results and Performance; and Learning, Innovation and Change Management. These four pillar elements warrant different treatment from the six core elements. The core elements apply to everyone in the organization, but are especially relevant to line managers, whose activities determine the success of DRDC relative to MAF measures. In effect, the core elements set the standards for the performance of management. The pillar elements are different, in that they set the strategic environment for management.

Defence R&D Canada Agency Values set the very character of DRDC, defining the type of environment and the behaviour and attitudes of employees that best represent the organization. *Governance and Strategic Direction* describes the strategic policy basis for DRDC management activities, ensuring that management activities respond to policy-based needs. *Results and Performance* identifies the need for evidence-based decision-making and evaluation of program performance. Finally*, Learning, Innovation and Change Management* describes the environment in which managers manage. If the core elements control *how* managers manage, then the pillar elements set the environment in which they manage. The provision of that environment is the purview of DRDC's executive leadership, rather than of managers. Thus, whereas the core elements of the DRDC MAF focus on Level 3 and 4 managers, the pillar elements should focus on Level 1 and 2 managers, whose behaviour and attitudes set the standard for Level 3 and 4 managers. Of course, Level 3 and 4 managers cannot ignore the pillar elements, but the pillar elements represent enablers or constraints, rather than measures of performance.

The development of the pillar elements relied heavily upon the results of application of TB MAF to the Department of National Defence, together with corporate documents. This approach reflected the strategic nature of the pillar elements and the need to establish clear linkages with the superior TB MAF.

4.1 Defence R&D Canada Agency Values

Defence R&D Canada's values, together with defence ethics standards, position DRDC to respond to changing world and organizational circumstances where management by prescriptive rule-sets will often be found wanting. They represent DND and DRDC's implementation of the Values and Ethics Code for the Public Service.[47]

The *Values and Ethics Code for the Public Service* is reflected in DRDC's values. Table 6 shows the correspondence between the two.

[47] Treasury Board of Canada Secretariat, *Values and Ethics Code for the Public Service*, available from: http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/tb_851/vec-cve-eng.asp.

Table 6: Values and Ethics in DRDC and the Public Service

	Public Service Values			
DRDC Values	**Democratic Values:** Helping Ministers, under law, to serve the public interest	**Professional Values:** Serving with Competence, excellence, efficiency, objectivity and impartiality	**Ethical Values:** Acting at all times in such a way as to uphold the public interest	**People values:** Demonstrating respect, fairness and courtesy in their dealings with both citizens and fellow public servants
Commitment: We demonstrate dedication and pride in working towards our vision	**X**	**X**	**X**	
Client Focus: We bring excellence to clients, both internal and external, by focusing efforts on discovering and meeting their needs		**X**	**X**	**X**
Creativity and Innovation: We generate innovative solutions, approaches, products and services that improve the status quo.		**X**		
Leadership: We actively and enthusiastically seek to exert influence and originate action to achieve our goals		**X**	**X**	**X**
Professionalism and Integrity: We focus our effort on achieving quality results and we behave in an honest, ethical manner, dealing with others respectfully and fairly.	**X**	**X**	**X**	**X**
Trust and Respect: We are open, honest and responsible in our relationships and we recognize and value the contributions of others			**X**	**X**
Teamwork: We demonstrate effective interpersonal skills, and work cooperatively and productively within and across DRDC to achieve common goals.				**X**

DRDC Agency Values: Expectations

> *Through its actions, DRDC Leadership continually reinforces the importance of the agency's values and of defence ethics in the delivery of results to the Canadian Forces and defence and security partners.*

The corresponding statement in the TB MAF is:

> *Through their actions, departmental leaders continually reinforce the importance of public service values and ethics in the delivery of results to Canadians (e.g. democratic, professional, ethical and people values).*

Figure 9, below, depicts the Expectations statement for DRDC Agency Values in the DRDC MAF.

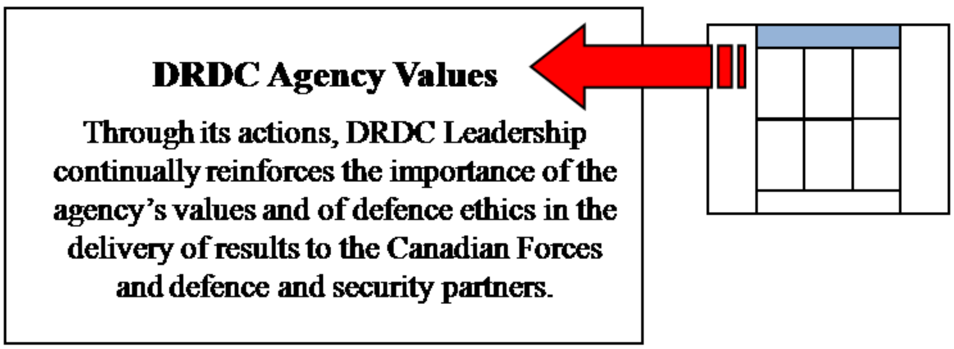

Figure 9 : DRDC Agency Values, Expectations Tier

This Expectations statement has been amended from the Cycle 1 DRDC AMF, changing "through the delivery of results" to "in the delivery of results" and adding reference to defence ethics to maintain alignment with the TB MAF.

DRDC Agency Values: Indicators

The TB MAF employs three indicators for Public Service Values:

<u>Exemplary conduct</u>: This indicator is clear and applicable to the DRDC context. It has been transferred directly to the indicator *Exemplary conduct.*

<u>Public service values tailored to realities/culture of department</u>: This indicator has been adjusted to reflect the DRDC environment as *Agency Values are reflected in the realities and cultures of its Centres.*

<u>Values-based management practices</u>: This indicator is clear and applicable to the DRDC context. It has been transferred directly to the indicator *Values-based management practices.*

Figure 10, below, depicts the Indicators for DRDC Agency Values in the DRDC MAF.

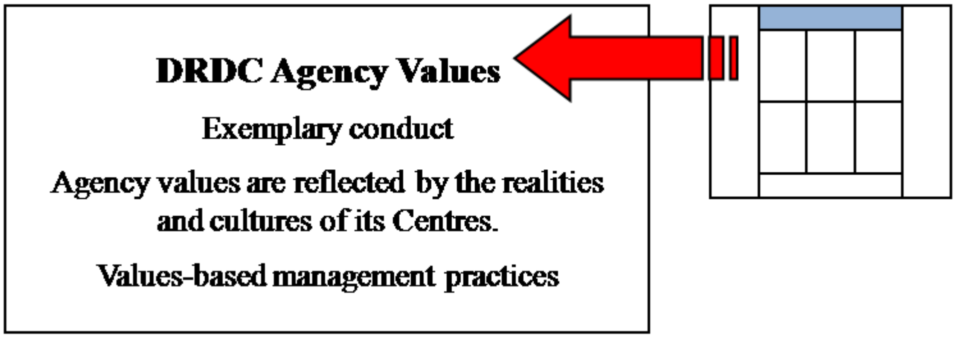

Figure 10 : DRDC Agency Values, Indicators Tier

DRDC Agency Values: Measures

Customized public service values statement and ethical guidelines regularly discussed with all staff: this measure has been re-worded as *Staff identify with DRDC Values.* DRDC has Agency Values (shown above in Table 5) which satisfy the customized values statement requirement. Whether DRDC's ethical guidelines are 'regularly discussed with all staff' is imputed through the level of staff identification with the organizational values.

Sound advisory and recourse mechanism in place: this measure has been adjusted, to better reflect DRDC culture, as *Ethical decision making supported by the Defence Ethics Program*. The Department of National Defence has a well-established Defence Ethics Program[48], to which DRDC subscribes, as a DND Level 1 organization. This program is the mechanism for ethics and values advisory and recourse in the organization. DSTER is DRDC's Level 1 Ethics Coordinator.

Orientation, learning and other tools to support staff: this measure has been folded into the previous measure *Ethical decision making supported by the Defence Ethics Program*. Defence Ethics training is mandatory for all new staff, DND and CF-wide. DAODs and information materials are available for staff support, in addition to Level 1 coordinators, or local level 1 representatives.

Staff assessment of organizational performance against PS values and ethics: this statement is captured utilizing DRDC vernacular as *Organizational performance is evaluated based on the Defence Ethics Program.*

Figure 11, opposite, depicts the Measures for DRDC Agency Values in the DRDC MAF.

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[48] See Department of National Defence, Defence Administration Orders and Directives, *DAOD 7023-0, Defence Ethics*, 2003, available from: http://www.admfincs.forces.gc.ca/dao-doa/7000/7023-0-eng.asp.

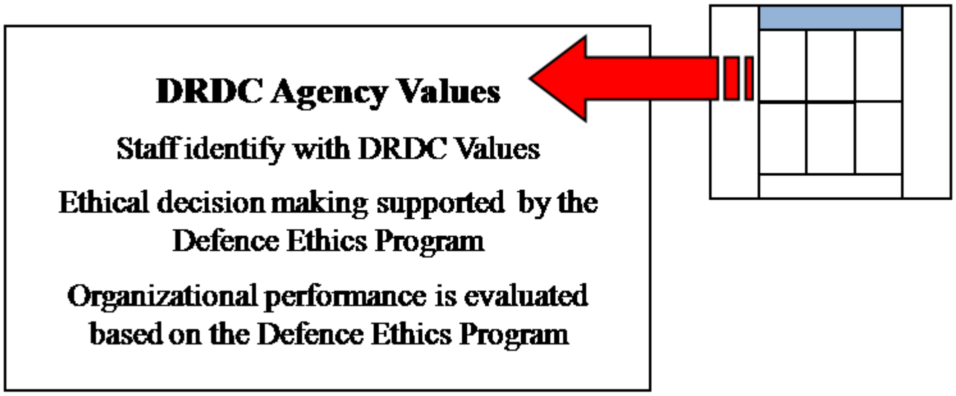

Figure 11 : DRDC Agency Values, Measures Tier

For the most part, measures can be assessed using existing instruments. Commitment to the Defence Ethics program can be readily inferred by examining PeopleSoft®-based training records: for example, have all new staff received defence ethics training within an acceptable time of their being taken on strength (TOS)? Similarly, examining the activities of the DRDC Ethics Coordinator[49] would offer insight into the ethical health of DRDC. The 2008 Public Service Employee Survey includes ethics-related questions and with over 500 respondents for DRDC,[50] and this should offer a reasonable representation of DRDC's ethical health. A *potentially* stronger instrument is the Defence Ethics Survey, delivered every three years,[51] although past versions have only been addressed to DND employees and CF Members with addresses on the DWAN/DIN. Defence R&D Canada employees were not explicitly identified in previous Defence Ethics Surveys; instead, they were grouped with 'other commands and Level 1s'. Going forward, administration to DRDC via DRENet would be feasible, but would likely require reprogramming on a DRENet or web-based utility. On an ongoing basis, ethics-related instruments might be expanded to include workshops or focus groups, although these two are perhaps more diagnostic or even corrective measures than assessment tools. At the manager level, the Managers' Workshop would provide a good opportunity for annual ethical 'exercise'.

Table 7 presents examples of information which can be used as evidence of each measure.

[49] Currently the Director, R&D Business Affairs.
[50] Treasury Board of Canada Secretariat, *2008 Public Service Employee Survey Results: Organizational Report for Department of National Defence Assistant Deputy Minister Science and Technology Group*, available from: http://www.tbs-sct.gc.ca/pses-saff/2008/results-resultats/res-eng.aspx?cd=&o1=03&o2=019&o3=000&o4=000&o5=000#tphp.
[51] Most recently in 2007; see Kyle Fraser, *The 2007 Defence Ethics Survey: Summary of the Overall CF and DND Findings for Decision Makers*, DRDC CORA TN 2008-016, August 2008.

Table 7: Evidence and Instruments for Defence R&D Canada Agency Values

Measure: Staff identify with DRDC Values	
Evidence	Source/ Instruments
• Public Service Values and Ethics Infrastructure in Place, Understood and Effective • Organizational Culture is reflective of DRDC Values and Ethics • Extent to which leaders foster a culture of respect and integrity • Feedback from employees on fairness, respect, satisfaction and engagement;	• Values and ethics exercise at DRDC Managers' Workshop • Focus groups or surveys of staff • Focus groups or surveys of clients

Measure: Ethical decision making supported by the Defence Ethics Program	
Evidence	Source/ Instruments
• Senior management demonstrates strong Values and Ethics • Organizational performance aligns with Values • Leadership communication with employees about expected ethical behaviour and public service values; • Selection, evaluation, promotion and discharge of leaders based on their conduct with respect to values and ethics. • Appropriate, accessible avenues for: employee advice, reports of wrongdoing and resolution of conflict	• Defence Ethics Training statistics from PeopleSoft® • DRDC Ethics Coordinator activity statistics

Measure: Organizational performance is evaluated based on Defence Ethics Program	
Evidence	Source/ Instruments
• Benchmark results and implemented improvements • Extent to which the organization maintains and promotes appropriate, accessible avenues for disclosure of wrongdoing • Trends in management and program irregularities, regularly reported on and reviewed by management.	• Review of Ethics Coordinator activities • Focus groups or surveys of staff

4.2 Governance and Strategic Direction

Governance and Strategic Direction: Expectations

> *The DRDC Charter, the Defence Science and Technology Strategy, and the DND business planning process ensure effective support and functional S&T authority for Government, the Canadian Forces and defence and security partners.*

The corresponding statement in the TB MAF is:

> *The essential conditions - internal coherence, corporate discipline and alignment to outcomes - are in place for providing effective strategic direction, support to the minister and Parliament, and the delivery of results*

The DRDC statement identifies key elements – the ‘essential conditions’ – that serve to ensure effective support and position ADM(S&T) as the Department’s functional authority for defence S&T. The DRDC Charter establishes the *raison d’être* of the organization, its relationship to DND, the CF and stakeholders, and governance, organization and accountability.[52] The Defence S&T Strategy provides the framework for delivery of S&T in the defence and security environment, both by DRDC and by its partners.[53] Finally, DRDC’s integration in the DND business planning process ensures that DRDC’s activities will support the Strategic Outcomes of DND’s Program Activity Architecture.

Figure 12, below, depicts the Expectations statement for Governance and Strategic Direction in the DRDC MAF.

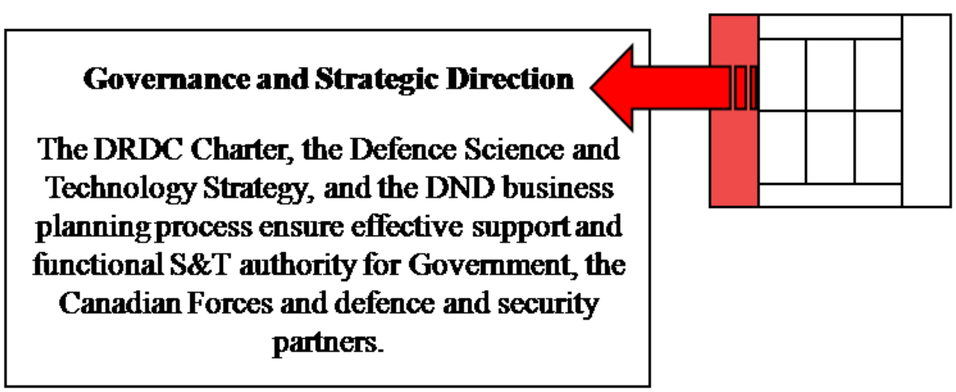

Figure 12: Governance and Strategic Direction, Expectations Tier

Governance and Strategic Direction: Indicators

The TB MAF employs eight indicators for Governance and Strategic Direction:

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[52] Defence Research and Development Canada, *Framework Document*, approved by Treasury Board Ministers July 27, 2000.

[53] Department of National Defence, *Defence S&T Strategy: Science and Technology for a Secure Canada*.

Support to Minister, Cabinet and Parliament: This indicator has been changed to *Support to DM DND through ADM (S&T)* to better reflect DRDC's reporting structure.

Management framework aligned to strategic outcomes: This indicator can be directly applied to the DRDC MAF as *Management framework aligned to strategic outcomes*.

The right executive team: This indicator can be directly applied to the DRDC MAF as *The right executive team.*

Results-focused corporate priorities :This indicator can be directly applied to the DRDC MAF as *Results-focused corporate priorities*.

Strategic resource allocation/reallocation based on performance: This indicator can be directly applied to the DRDC MAF as *Strategic resource allocation/reallocation based on performance*.

Integrated agenda for management excellence: This indicator has been reworded for clarity as *Integrated management agenda.*

Horizontal collaboration :This indicator can be directly applied to the DRDC MAF as *Horizontal collaboration*.

Environmental scanning: This indicator can be directly applied to the DRDC MAF as *Environmental scanning*.

Figure 13, below, depicts the Indicators for Governance and Strategic Direction in the DRDC MAF.

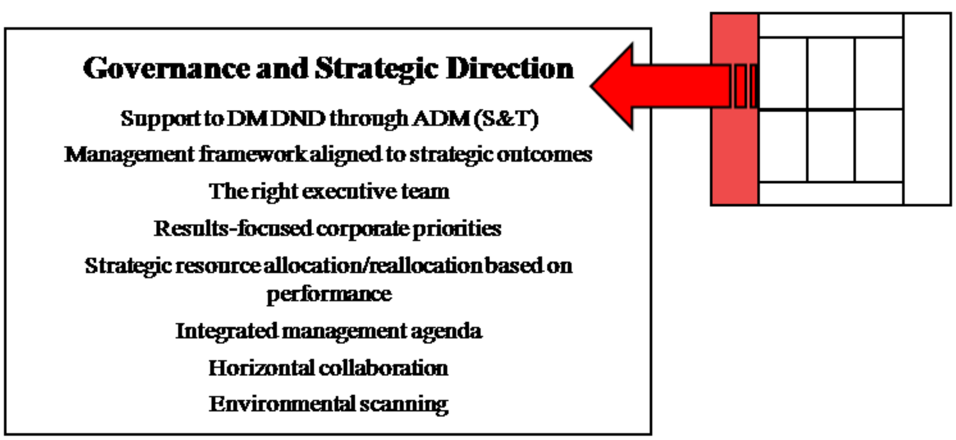

Figure 13: Governance and Strategic Direction, Indicators Tier

Governance and Strategic Direction: Measures

The TB MAF employs six measures for Governance and Strategic Directions, shown below, along with their DRDC MAF counterparts:

Minister’s confidence in departmental support: This measure has been changed to *Confidence of ADM (S&T)* to better reflect DRDC’s reporting structure.

Perceived coherence of policy agenda: This measure can be applied to the DRDC MAF, with a slight rewording, as *Coherent policy agenda;*, the assessment of coherence is intrinsically subjective, thus ‘perceived coherence’ is redundant.

Strength of the management team: This measure has been changed to *Strong management cadre* to better reflect DRDC’s vernacular.

Corporate management framework used for priority setting, reallocation, and alignment to government-wide priorities: this measure has been re-worded for clarity as *Management framework supports priority setting, reallocation, and alignment with government-wide priorities*

Management improvement agenda integrating HR, comptrollership, service, etc.: this measure has been captured more succinctly in the statement *Change agenda addresses all functional areas.*

Leadership/participation in PS-wide initiatives: this measure has been changed to *Organizational engagement in administrative and science-based horizontal initiatives* to better reflect DRDC’s S&T orientation within Government.

Figure 14, below, depicts the Measures for Governance and Strategic Direction in the DRDC MAF.

Figure 14: Governance and Strategic Direction, Measures Tier

Table 8 presents examples of information which can be used as evidence of each measure.

Table 8: Evidence and Instruments for Governance and Strategic Direction

Measure: Confidence of ADM (S&T)	
Evidence	Source/ Instruments
• ADM (S&T) confidence	• Reports of ADM (S&T) • DRDC Level 2 PMA statistics

Measure: Coherent policy agenda	
Evidence	Source/ Instruments
• DRDC Business Plan to show coherence with PAA • DRDC PGAs to show coherence with PAA sub and sub-sub-activities • Presence of a risk-based corporate plan	• DRDC Business Plan to show links to PAA • DRDC PGAs to show coherence with sub- and sub-sub-activities in PAA • DRDC Corporate Risk Profile

Measure: Strong management cadre	
Evidence	Source/ Instruments
• Quality of Performance Management Agreements • Performance Management Agreements support organizational decision making	• Analysis of DRDC PMAs • DRDC MAF survey for management cadre performance against core elements

Measure: Management framework supports priority setting, reallocation, and alignment with government-wide priorities	
Evidence	Source/ Instruments
• Extent to which the organization's Strategic Outcomes and Program Activity Architecture are consistent with its mandate • Clarity and measurability of the organization's strategic outcomes • Level of completeness of the Program Activity Architecture and its alignment to the organization's strategic outcomes • Accountabilities of senior officials and internal decision-making structures are aligned to the organization's strategic outcomes	• Corporate PMA analysis • DRDC MAF survey for management cadre performance against core elements • Business-line planning allows alignment of PGA resources to strategic agenda • Comparison of successive Business Plans for evidence of priority-setting and reallocation • Partner Group Agreements (PGA) form the basis for results-focused S&T • Do PGAs reflect Business Plan priorities?

Measure: Organizational engagement in administrative and science-based horizontal initiatives	
Evidence	Source/ Instruments
• Evidence of activities such as ADMs Committee on S&T and other horizontal S&T initiatives • Level of organizational engagement (e.g. appropriateness, leadership, resource commitment) on horizontal policy and program initiatives	• Evidence of activities (S&T ADMs, CRTI, etc.) • DRDC's Technology Watch program provides warning of disruptive technologies

4.3 Results and Performance

Results and Performance: Expectations

> *Relevant information on results (internal, service and program) is gathered and used to make decisions in DRDC, and agency and public reporting is balanced, transparent, and easy to understand.*

The DRDC expectations statement closely reflects that of the TB MAF, shown below:

> *Relevant information on results (internal, service and program) is gathered and used to make departmental decisions, and public reporting is balanced, transparent, and easy to understand.*

Figure 15, below, depicts the Expectations Statement for Results and Performance in the DRDC MAF.

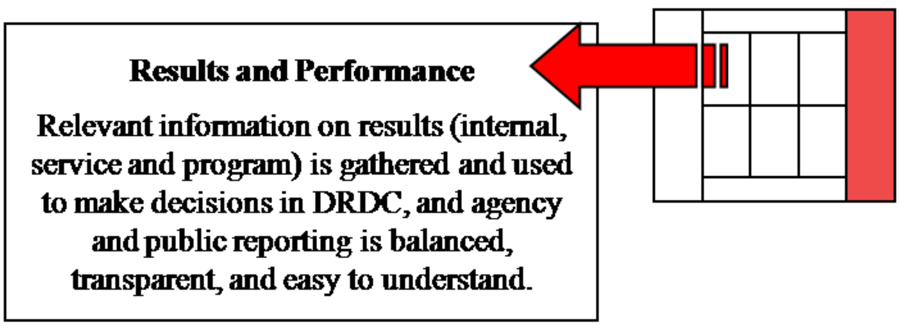

Figure 15: Results and Performance, Expectations Tier

Results and Performance: Indicators

The TB MAF employs five indicators for Governance and Strategic Directions, shown below, along with their DRDC MAF counterparts :

<u>Corporate monitoring and reporting of program, service and internal results</u>: This indicator can be applied to the DRDC MAF with a slight rewording, *Monitoring and reporting of program, service and internal results.*

<u>Integrated financial and non-financial performance information used in corporate decision making</u>: This indicator can be applied to the DRDC MAF with a slight rewording, *Integrated financial and non-financial performance information used in decision-making.*

<u>Departmental reporting based on measurable outcomes</u>: This indicator can be applied to the DRDC MAF with a slight rewording, *Reporting is based on measurable outcomes.*

Benchmark against the best: This indicator can be directly applied to the DRDC MAF, keeping in mind the Agency benchmarks both its corporate functions and its Science and Technology functions.

Transparent, timely and accessible communications with citizens and Parliament: DRDC has a narrower target audience for its reports and publications. Due to the nature of the Agency's work, some reports and communications may not be readily available to citizens. This indicator is captured in the statement *Transparent, timely and accessible communications with clients, partners and stakeholders*

Figure 16, below, depicts the Indicators for Results and Performance in the DRDC MAF.

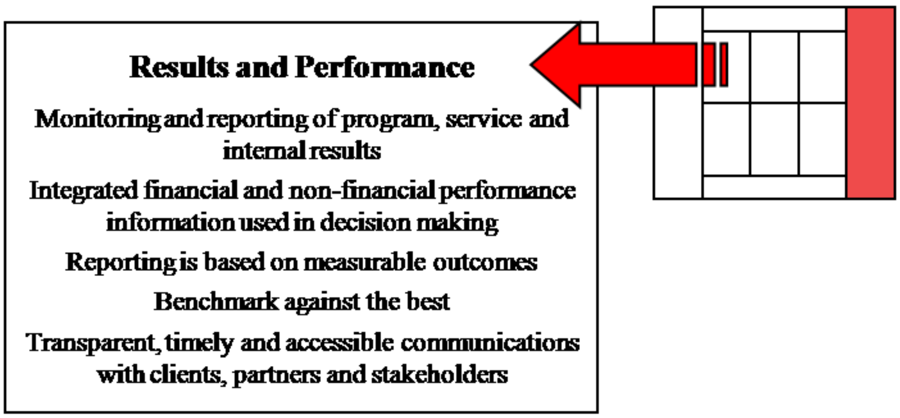

Figure 16: Results and Performance, Indicators Tier

Results and Performance: Measures

The TB MAF employs five measures for Governance and Strategic Directions, shown below, along with their DRDC MAF counterparts :

Quality of Reports on Plans and Priorities and Departmental Performance Report: this measure has been adjusted as *Quality of Business Plan and Annual Report* to reflect DRDC's status as an Agency.

Staff and client survey results: This indicator can be directly applied to the DRDC MAF as *Staff and client survey results.*

Progress in strengthening financial and program results, and performance measurement: This indicator can be directly applied to the DRDC MAF as *Progress in strengthening financial and program results, and performance measurement.*

Corporate monitoring and review of performance: This indicator can be directly applied to the DRDC MAF as *Corporate monitoring and review of performance*.

Risk-based evaluation plans (reviewed regularly) and follow-up: This indicator can be directly applied to the DRDC MAF as *Risk-based evaluation plans (reviewed regularly) and follow-up.*

Performance against external benchmarks: This indicator can be applied to the DRDC MAF as *Performance against external benchmarks.*

Figure 17, below, depicts the Measures for Results and Performance in the DRDC MAF.

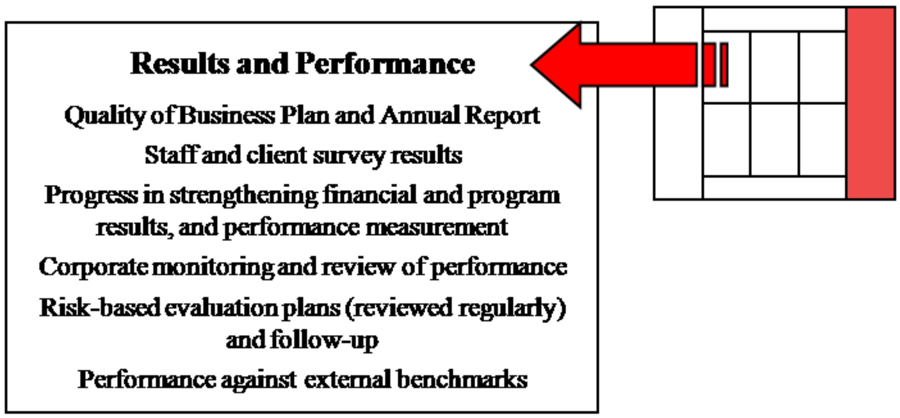

Figure 17: Results and Performance, Measures Tier

Table 9 presents examples of information which can be used as evidence of each measure.

Table 9: Evidence and Instruments for Results and Performance

Measure: Quality of Business Plan and Annual Report	
Evidence	Source/ Instruments
• DRDC Business Plan and Annual Report	• Assessment of the degree to which these documents support superior (Report on Plans and Priorities (RPP), Departmental Performance Report (DPR)) or external (transparency) requirements

Measure: Risk-based evaluation plans (reviewed regularly) and follow-up	
Evidence	Source/ Instruments
• Evidence of RDEC decisions on past, current and future requests to CRS for program evaluations	• Program evaluation

Measure: Staff and client survey results	
Evidence	Source/ Instruments
• Positive survey results • Improved results over time • Staff evaluate managers' performance positively	• Public Servant Employee Survey • Defence Ethics Survey • DRDC Client/ Partner Survey • Annual MAF Managers Survey • 360-degree feedback on managers' performance

Measure: Progress in strengthening financial and program results, and performance measurement	
Evidence	Source/ Instruments
• Ongoing tracking of available measures from sources such as CPME; e.g.: ongoing performance against project milestones; expenditures against plans; etc.	• Peer review files • CPME • Year-to-year comparison of PGAs

Measure: Performance against external benchmarks	
Evidence	Source/ Instruments
• Peer reviews of scientific programs • Potentially, evaluations or audits of corporate services activities	• Environmental scanning • Peer reviews • Program evaluations and project audits

Measure: Corporate monitoring and review of performance	
Evidence	Source/ Instruments
• Coordinated THRUST groups • Successful horizontal initiatives • Quality of collaborative relationships • Program Activity Architecture • Quality of evaluations, including focus on value for money and program improvement • Neutrality of evaluation function (governance and resources) • Evaluation coverage of the organization's programs • Extent to which clear performance expectations in the Report on Plans and Priorities (RPP) are tracked and reported on in the Departmental Performance Report (DPR), on an MRRS basis • Extent to which the Departmental Performance Report (DPR) integrates credible performance information (beyond activities and outputs to results) • Extent to which the Departmental Performance Report (DPR) sets performance in context, is balanced and reports on lessons learned	• PAA reports • Annual MAF Managers Survey • Program evaluation of DRDPO activities

4.4 Learning, Innovation and Change Management

Learning, Innovation and Change Management: Expectations

DRDC fosters creativity, innovation and change, promotes organizational learning, values corporate knowledge, and learns from its performance.

The DRDC expectations statement has been adjusted to better reflect the high level of creativity necessary in an R&D environment; however it still closely reflects that of the TB MAF, shown below:

The department manages through continuous innovation and transformation, promotes organizational learning, values corporate knowledge, and learns from its performance.

Figure 18, below, depicts the Expectations Statement for Learning, Innovation and Change Management in the DRDC MAF.

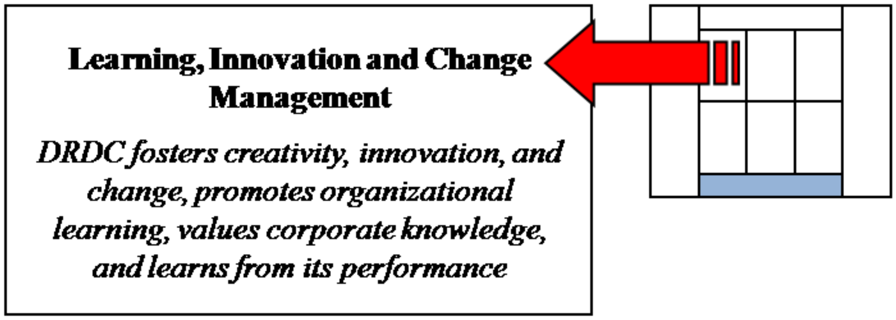

Figure 18: Learning, Innovation and Change Management, Expectations Tier

Learning, Innovation and Change Management: Indicators

The TB MAF employs five indicators for Learning, Innovation and Change Management, shown below, along with their DRDC MAF counterparts:

Strategic organizational learning, a capacity to anticipate and adjust to change, and a disposition to transformation: The ‘organizational learning’ component of this statement has been highlighted in the indicator *DRDC is a learning organization with strategic vision*; reference to change and transformation is captured elsewhere in the indicators.

A culture of innovation: This indicator has been coupled with concepts of change and transformation to produce the DRDC indicator *Organizational culture anticipates change, values innovation, and supports transformation*.

Performance as a guide to change: This indicator has been re-worded for clarity as *DRDC examines its own performance to identify need for change*.

Delegations as an instrument of empowerment: This indictor has been re-worded to *Managers are empowered through delegation* to better reflect the DRDC management structure.

Corporate knowledge and memory captured and managed as strategic resources: This indicator has been re-worded as *Organizational knowledge and memory captured and managed as strategic resource* to better reflect DRDC’s status as an Agency.

Figure 19, below, depicts the Indicators for Learning, Innovation and Change Management in the DRDC MAF.

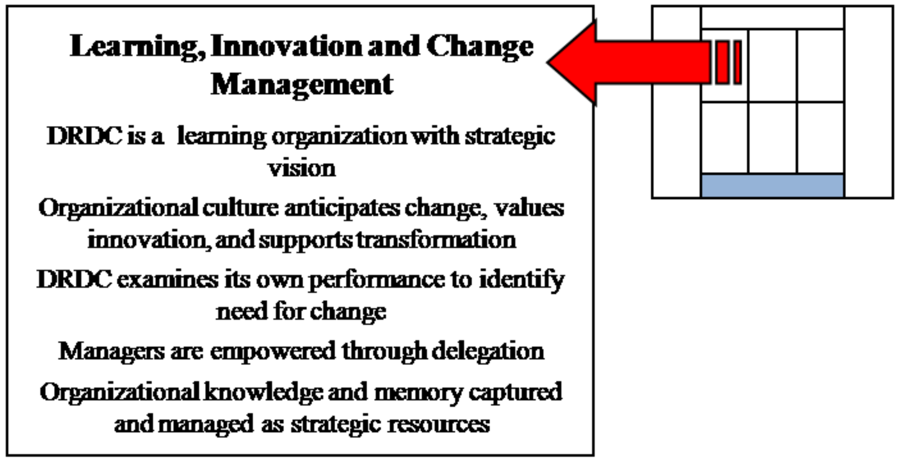

Figure 19: Learning, Innovation and Change Management, Indicators Tier

Learning, Innovation and Change Management: Measures

The TB MAF employs four measures for Learning, Innovation and Change Management, shown below, along with their DRDC MAF counterparts

<u>Progress in improving organizational learning and knowledge management practices</u>: this measure has been divided into two separate measures to indicate the importance of each: *Progress and investment in organizational learning* and *Progress in knowledge management practices*.

<u>Investments in organizational learning</u>: has been incorporated into the measure *Progress and investment in organizational learning.*

<u>Stakeholder/staff perceptions of organizational adaptability, change and innovation</u>: This indicator can be directly applied to the DRDC MAF as *Stakeholder/staff perceptions of organizational adaptability, change and innovation.*

<u>Performance measurement used to improve organizational results</u>: this measure has been re-worded as *Linkages between organizational performance and organizational development initiatives*.

Figure 20, below, depicts the Measures for Learning, Innovation and Change Management in the DRDC MAF.

Figure 20: Learning, Innovation and Change Management, Measures Tier

Table 10 presents examples of information which can be used as evidence of each measure.

Table 10: Evidence and Instruments for Learning, Innovation and Change Management

Measure: Progress and investment in organizational learning	
Evidence	Source/ Instruments
• Change management plans • PeopleSoft® provides information on training and development activities • FMAS provides information on training and development direct investment • Corporate initiatives (such as EXPEDITION 09 1.4) provide a record of organizational intent and commitment • A DRDC MAF survey would address employees' perceptions of the effectiveness of organizational learning initiatives and practices • learning strategy that is integrated into HR/Business Planning and aligned with departmental business priorities and management improvement objectives of government • An organizational learning strategy incorporating regularly reviewed learning objectives, opportunities and requirements; • A strategy to determine organizational knowledge needs as well as to capture, manage and apply organizational knowledge to shape action and improve results.	• PLP • PMA • Employee survey • Internal Communications plan • Change management initiatives

Measure: Progress in knowledge management practices	
Evidence	Source/ Instruments
• Employee participation in mentoring program • Employee satisfaction with mentoring program • CPME will provide information on investment and progress on research in knowledge management • Assessment of operational application of knowledge management will require a variety of instruments, including: ◆ Review of CANDID over time ◆ Review of PGAs ◆ DRDC MAF survey questions	• Employee survey

Measure: Stakeholder/staff perceptions of organizational adaptability, change and innovation	
Evidence	Source/ Instruments
• Employee engagement	• Client/partner surveys • Staff surveys, either directly as DRDC MAF surveys or potentially, the Public Service employee Survey if appropriate questions are asked

Measure: Linkages between organizational performance and organizational development initiatives	
Evidence	Source/ Instruments
• Analysis of DRDC Business Plans, PGAs and EXPEDITION 0x work plans to establish strength of linkages. • Level of organizational engagement on change management • Assignment of responsibilities and support to change management practices	• Business plans • PGAs • Expedition XX work plan • MAF assessments

5 The Core Elements

There are six core elements of the DRDC MAF: *Policy and Programs*; *People*; *Service*; *Risk Management*; *Stewardship;* and *Accountability*. These six core elements apply to everyone in the organization, but are especially relevant to line managers, whose activities determine the success of DRDC relative to MAF measures.

The DRDC MAF core elements are designed to parallel the TB MAF core elements; as such, the TB MAF, and related TB documents and policies, form the foundation of the three tiers of the DRDC core elements. Additionally, in an effort to increase the validity of our operational pilot surveys, the six core elements also build on academic theory.

5.1 Policy and Programs

Mobilizing Science and Technology to Canada's Advantage

In 2007, The Government of Canada released a guiding document for Departments and Agencies involved in Science and Technology called "Mobilizing Science and Technology to Canada's Advantage". This is intended to be a strategic document, outlining how to achieve the goals –or *Advantages*- set in the 2006 economic plan "Advantage Canada" by setting a multi-year S&T agenda for government.[54] The recent world economic crisis will likely cause a revision of this economic plan, but it is unclear how it would affect S&T related goals.

The three S&T relevant goals are identified in the Mobilizing Strategy as: Entrepreneurial Advantage; Knowledge Advantage; and People Advantage. These three Advantages form Canada's Science and Technology Framework, depicted in Figure 21, and are further guided by four core principles: Promoting world-class excellence; focusing on priorities; encouraging partnerships; and enhancing accountability.

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[54] Industry Canada, *Mobilizing Science and Technology to Canada's Advantage*, 2007, available from: : http://www.ic.gc.ca/eic/site/ic1.nsf/eng/h_00231.html.

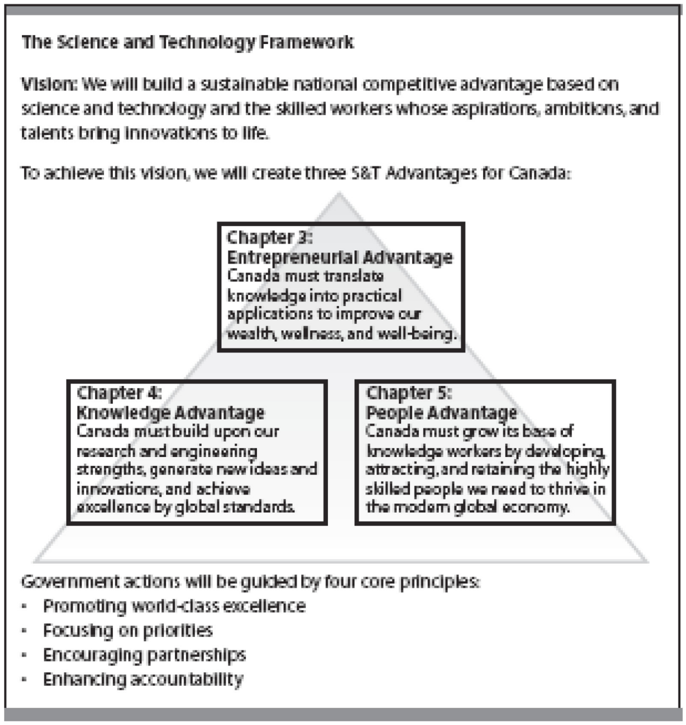

Figure 21: Canada's Science and Technology Framework[55]

As recently as 2006, Canada was identified as lagging significantly behind other OECD countries for intensity of investment in R&D. Three indicators of R&D investment intensity (as ratios of GDP) are Gross Expenditure on Research and Development (GERD), Business Expenditure on Research and Development (BERD), and Higher Education Expenditure on Research and Development (HERD). The HERD is considered a surrogate measure of public expenditure on R&D. Of these three indicators, Canada ranked below average for an OECD country in GERD and BERD, but is considered a leader in HERD. Government is now looking to improve its BERD and GERD standing while maintaining its HERD status by pursuing strategies to increase R&D expenditure through supporting entrepreneurship, R&D commercialization, creating a taxation and regulation environment that encourages R&D activities, and offering additional funding to S&T students.[56]

Exploring the Core Principles

The Science and Technology Framework is guided by four core priorities. This section will explore how these principles interact with DRDC's organizational goals, as articulated in the DRDC 2008 Annual Report.

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[55] Industry Canada, 2007, p 12.
[56] Eleanor Fast, *Mobilizing Science and Technology: The New Federal Strategy*, Library of Parliament, Science and Technology Division, December 2007.

Promoting world-class excellence: This principle aligns perfectly with the DRDC vision of becoming a world leader in Science and Technology for defence and security. The Canada S&T Framework offers the following strategies for achieving world class excellence:

Investing in funding, scholarships, and internships for students and research fellows;

adjusting taxation and regulation to attract international-caliber scientists and organizations to Canada.

While it is beyond the ability of DRDC to affect taxation and regulation policy, the organization can focus on attracting and retaining new and experienced scientists to the organization. Strategies related to these priorities are explored in the People element of the MAF.

Focusing on priorities: The S&T priorities identified in the Strategy are:[57]

Environmental science and technologies;

Natural resources and energy;

Health and related life sciences and technologies;

Information and communications technologies.

DRDC's S&T priorities are dictated by the needs and demands of its Departmental clients and partners, namely DND, CF and Public Safety Canada. Nonetheless, while conducting its S&T activities, DRDC needs to remain conscious of Canada's broader S&T priorities so that outcomes align with and support horizontal, government-wide initiatives.

Encouraging partnerships: DRDC's mission and values statements both highlight a 'client focus' which encourages partnership and engagement with clients, as well as working with private industry to commercialize R&D. The Canada S&T Framework contains recommendations on this principle which DRDC can employ, such as diversifying the industry/business base of R&D, and increasing the commercialization of R&D technology.

Enhancing accountability: Canadians demand accountability for the use of public money in S&T. The clearest way for the public to assess accountability is by determining: a) that the S&T activity supports government's stated priorities; b) the activity has clear, measurable success targets; and c) the activity has met those targets. Accountability focuses on results for Canadians.

Currently, there is a lack of accountability for outcomes in S&T in Canada.[58] The Government of Canada is working together with other OECD countries to develop improved indicators and measures of S&T impacts.[59]

Generally speaking, as an organization, DRDC is actively seeking to enhance Accountability mechanisms through the development and application of the Management Accountability Framework.

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[57] Industry Canada, 2007, p. 13.
[58] Eleanor Fast, p. 88.
[59] Industry Canada, 2007, p. 88.

What is Policy?

Policy making in the context of S&T can be generalized into two categories: Science in Policy and Policy in Science.[60] The first, Science in Policy, refers to any number of policy issues in government which rely on scientific or technical advice for informed decision making; the second, Policy in Science, refers to policies which provide the management framework for S&T activities, including how R&D programs are selected and evaluated.

Whether discussing *Science in Policy* or *Policy in Science*, policy design, analysis and evaluation all follow a simple policy cycle. The cycle includes:

- defining the problem;
- identifying alternatives;
- assessing alternatives;
- recommending preferred alternative;
- implementing preferred alternative;
- monitoring implementation; and,
- evaluating results.[61]

Easton created what he calls a 'systems framework', depicted in Figure 22, outlining the factors which influence the policy cycle.[62] In Easton's model, policy is simultaneously a dependent and an independent variable.[63] As a dependent variable, policy is influenced by such inputs as political culture, interest groups, social ideology and values, environmental concerns, and so on. As an independent variable, policy impacts outputs such as regulation and legislation, and through a feedback loop, influences the input factors.

[60] Sheila Jasanoff referencing Harvey Brooks, "Rationalizing Politics" in The Fifth Branch: Science Advisors as Policymakers, Cambridge: Harvard University Press, 1994, p. 5.
[61] Paul Brown, Dalhousie University, private communication.
[62] David Easton, "An Approach to the Analysis of Political Systems," *World Politics*, 9:3, 1957, p. 384.
[63] Richard Simeon, "Studying Public Policy", *Canadian Journal of Political Science* 9:4, 1976, p. 556.

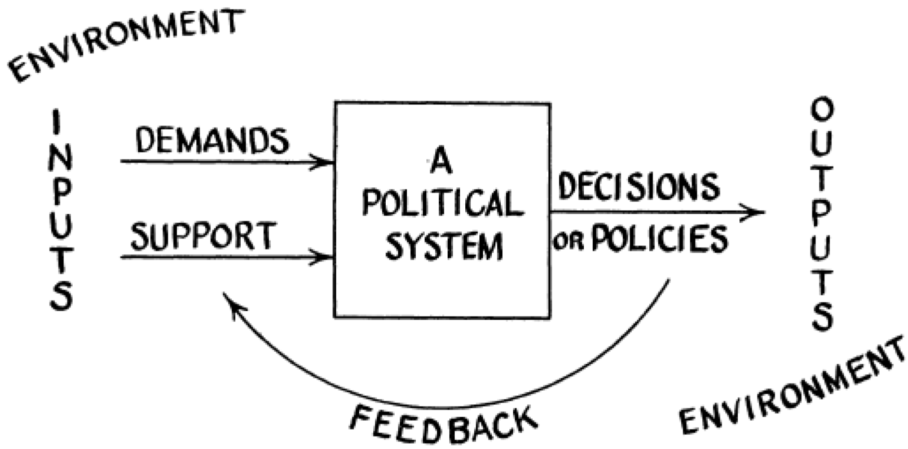

Figure 22: Easton's System Framework: A Public Policy Model

In the DRDC context, much of the policy work is carried out by scientists and technologists through S&T programs. While this may not be the traditional paradigm of policy making, the advice and reports which arise from these programs are, in fact, policy options.

At DRDC, various units are responsible for developing *Policy in Science*:

Director S&T (Policy) staff lead the development of S&T Policy for DRDC and as necessary lead or support policy development for DND/ CF and OGDs;

CORA staff conduct operational research and analysis which supports development of policies for DND, such as military staffing levels or stores policies, or tacnotes (tactical directives);

DGRDCS staff develop DRDC corporate policies, as functional authorities for financial, corporate, and HR;

Staff at local DRDC centres may develop policies supporting local operations.

Science in Policy comes out of the scientific R&D work done through DRDC programs, including the Research Technology and Analysis (RTA) Program, Technology Demonstration Program (TDP), Applied Research Program (ARP), and Defence Industrial Research Program. Each program is comprised of a number of different, independent projects. Projects with common, or interdependent, interests are coordinated through Thrust Advisory Groups (TAG).

The central problem of Science in Policy comes out of Principal-Agent theory.[64] This theory, borrowed from economics, is predicated on the relationship between two actors –the principal and the agent. The principal does not have the appropriate resources (such as scientific knowledge) to achieve its goals, and so must use the resources it does have (such as money) to contract an agent who possesses the required resources to achieve the goals on its behalf.[65] The principals in this case are DND / CF and Public Safety Canada, while the agents are the scientists of DRDC.

[64] David H. Guston, "Principal-agent theory and the structure of science policy, revisited: 'science in policy' and the US *Report on Carcinogens*," *Science and Public Policy*, 30:5 October 2003, p. 347.
[65] Dietmar Braun and David H. Guston, "Principal-agent theory and research policy: an introduction," *Science and Public Policy*, 30:5 October 2003, p. 303.

The problem that arises out of Principal-Agent theory is that of information asymmetry; the principal has no way of knowing if the agent is providing quality outputs because the principal, by definition, lacks the necessary resources to judge the quality. The only recourse for the principal is to either trust the agent or monitor the agent in an effort to ensure it is in compliance with the contract.[66] In the context of government and scientists, the need for Governmental accountability to Parliament for spending and program quality requires that agents be monitored.

Exacerbating the issue of information asymmetry is the tension between the technocratic and democratic views of policymaking, particularly in sciences.[67] Technocrats believe that science and technology is neutral and the best policy options will be generated if experts are allowed to formulate policy based on their exclusive knowledge. Democrats believe that science and technology have social and political biases, so for policy to be successful, it must incorporate public and non-scientific values.[68] An effective agent-monitoring framework would need to balance rational, evidence-based decision making with democratic, public participation.[69]

Science in Policy and Policy in Science

The central problem of Policy in Science is one of lack of consistency in program evaluation, that is a lack of a policy framework which would allow one to answer basic questions such as 'does funding and delivering on this project further the goals of government?' and 'did this project meet its goals?'. The lack of a framework also creates an inability to compare project outcomes from different scientific fields.[70] Development and application of a policy framework that addresses these issues would also function as a monitoring mechanism for assessing accountability in the contributions of science to policy making. An appropriate monitoring mechanism can provide a double-barrelled solution by addressing the issues of both Science in Policy and Policy in Science.

S&T activity outcomes have often been evaluated at the Program level, according to overly broad strategic goals.[71] This approach makes it difficult to determine the success of any one individual project within a program, or if that project has made good use of public funding.

One promising approach to measuring and evaluating S&T programs is to borrow from investment management concepts. Science and technology outcomes are assessed from a 'bottom-up' perspective. Each project is evaluated for its outcomes or 'defined investment goal' and how those outcomes support the program or 'portfolio' goals. Accountability in this context includes having a 'balanced portfolio' of both high risk and low risk S&T projects.[72] In the vacuum left by the current

[66] Dietmar Braun and David H. Guston, p. 305.
[67] Sheila Jassanoff, p. 15.
[68] Philip L. Bereano, "Reflections of a Participant-Observer: The Technocratic/Democratic Contradiction in the Practice of Technology Assessment," *Technological Forecasting and Social Change*, 54:1997, pp. 163-175.
[69] E. Melanie DuPuis and Brian J. Gareau, "Neoliberal Knowledge: the Decline of Technocracy and the Weakening of the Montreal Protocol," *Social Science Quarterly*, 89:5 December 2008, p. 1214.
[70] Irwin Feller, "Mapping the frontiers of evaluation of public-sector R&D programs," *Science and Public Policy*,34:10 December 2007, p.683.
[71] Brian A. Jackson, "Federal R&D: Shaping the National Investment Portfolio" in Shaping Science and Technology Policy: The Next Generation of Research, David H Guston and Daniel Sarewitz, eds, Madison: University of Wisconsin Press, 2006, pp. 33-54.
[72] Brian A. Jackson, p. 34.

absence of an accountability approach to S&T,[73] utilizing this goal-driven, bottom-up approach to accountability seems prudent.

Jackson describes portfolio management:

> "The central challenge in portfolio design is the selection of investments so their component goals will combine appropriately to achieve the desired portfolio goal. Without clearly articulated goals, it is impossible to assess rationally how individual R&D investments fit as components of program or portfolio goals."[74]

Notice that while the portfolio concept is borrowed from the financial sector, there is no attempt to attach monetary value to outcomes. Instead, the outcomes are valued according to whether or not they have achieved their goals. By articulating the desired outcome in 'units', we can select the metric which is appropriate for the outcome; the specific unit metric will depend on the goal. By measuring success according to achievement of goals, we can compare success rates of projects which cannot be directly compared (ex: workforce development and knowledge expansion).

A project really only fails when it does not meet its goal; so success can only be assessed if the goal is articulated. Generally, if R&D seeks to introduce new knowledge, then any project which contributes to scientific knowledge can be considered a success, even if it is not necessarily 'applied science'.

Jackson gives five generalized goals, each with different desired outcomes:

- Expansion of the body of knowledge;
- Monetary returns via economic growth;
- Mission directed needs for R&D results;
- Workforce development and education; and,
- Maintenance of national scientific and technical infrastructure and capacity.

These goals can be aligned with the Advantage Goals of the S&T Strategy, as shown in Table 11.

[73] Eleanor Fast, p.2, and Industry Canada, p. 88.
[74] Brian A. Jackson, p. 38.

Table 11: Alignment of S&T Strategy with Portfolio Management

S&T Strategy[75]	Portfolio Management
Entrepreneurial Advantage	• Monetary returns via economic growth • Mission directed needs for R&D results
Knowledge Advantage	• Expansion of the body of knowledge
People Advantage	• Workforce development and education • Maintenance of national scientific and technical infrastructure and capacity

The ‘roll up’ nature of the portfolio paradigm also fits well with the roll up nature of an Agency level MAF.

> Because an analysis based on individual investment goals begins from the bottom up, evaluation at different levels of aggregation becomes more straight forward. … (T)he program performance of any office is simply a roll-up of the performance of its individual projects and assessment of whether the projects were selected appropriately.[76]

Policy and Programs: Expectations

The Expectations Tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. Figure 23 depicts the Expectations Statement for Policy and Programs in the DRDC MAF.

[75] Industry Canada, p. 13.
[76] Brian A. Jackson, p. 46.

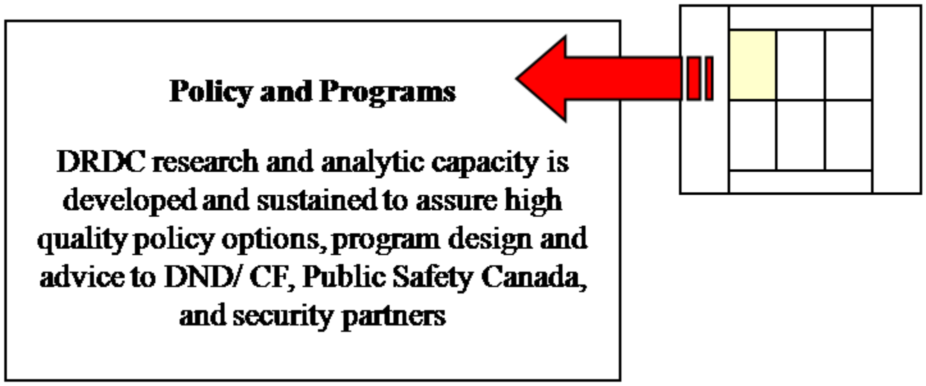

Figure 23: Policy and Programs, Expectations Tier

Policy and Programs : Indicators

Policy capacity can be defined as "the ability to marshal the necessary resources to make intelligent collective choices about and set strategic directions for the allocation of scarce resources to public ends"[77] or more simply, the ability to consistently create and implement policy which meets its intended objectives.

Policy capacity is dependent on having a critical mass of human capital trained in policy development, implementation and evaluation, as well as a policy framework or process in which these analysts do their job, and a culture which supports good policy making. Since policy capacity is dependent on these mutable factors, it will naturally vary over time and place.[78]

The Indicators Level for Policy and Programs reflects the three key indicators needed for policy capacity: people, a framework, and supportive culture. The indicators closely resemble those of the TB MAF, but are tailored for clarity and to reflect the DRDC environment as well as the level of DRDC management utilizing the MAF.

Sustained analytic capacity and culture of consultation, review and challenge: This indicator remains unchanged in the DRDC Policy and Programs indicators tier.

Results focused policy and program agendas linked to government's horizontal priorities. This indicator has been revised as *Results focused policy and program agendas aligned with government's horizontal priorities*. Because DRDC operates as a Special Operating Agency, it is more applicable to describe the Agency agenda as *aligned* with that of government as opposed to *linked*; this word choice better reflects that the work carried out by DRDC is targeted to internal clients yet indicates that the outputs of that work advance the wider Government agenda. It is important to note that aligning with 'horizontal priorities' "ensures that individual policies build on

[77] Martin Painter and Jon Pierre, "Unpacking Policy Capacity: Issues and Themes," in Challenges to State Policy Capacity, Martin Painter and Jon Pierre, eds, New York: Palgrave Macmillan, 2005, p. 2.
[78] Martin Painter and Jon Pierre, p. 3.

each other, to the extent possible, and minimises inconsistencies in the case of conflicting policy goals... [s]trengthening the 'whole-of-government' perspective."[79]

Citizen Engagement. This indicator needs to be replaced by something which acknowledges the need to consider how projects and programs impact citizens, and that the impacts of S&T are not neutral in society. *Social Evaluation of Impacts* is proposed. In some cases this may include engagement of citizens to determine the nature of impacts of S&T, both positive and negative, on selected groups.

> While technocrats might be more efficient in their processes...a fundamental hallmark of democracy is the realization that efficiency may sometimes be compromised because of our devotion to multiple values.[80]

Confidence of the Minister and the centre: This indicator has been revised as *Confidence of the ADM (S&T), clients and partners*, as these groups are the direct recipients of DRDC policy, programs, and advice.

Figure 24, below, depicts the Indicators for Policy and Programs in the DRDC MAF.

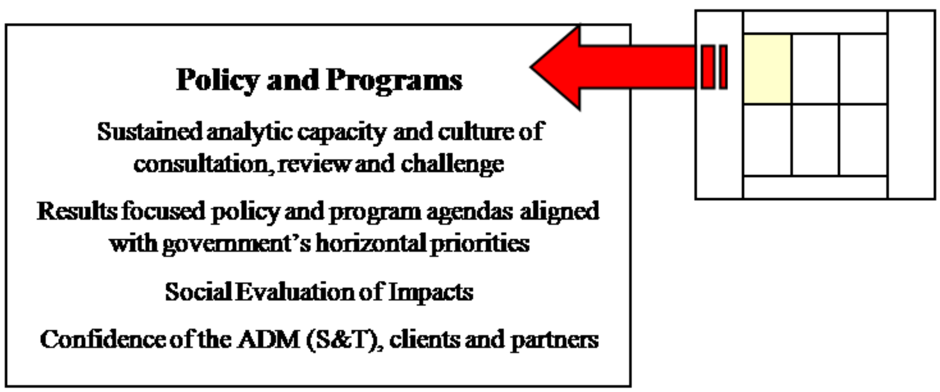

Figure 24: Policy and Programs, Indicators Tier

Policy and Programs: Measures

Measures for the *Policy and Programs* element are based on the TB MAF Policy and Programs Measures tier, as well as Round VI of the MAF review and the DND 2006 MAF review.[81]

Confidence of the minister and the PCO in the quality of policy options and advice: This measure has been revised and shortened to simply *Quality of Policies and Programs*. The confidence of the minister and PCO is not relevant to the DRDC organizational structure, and its equivalent,

[79] OECD, *Government Coherence: The Role of the Centre of Government*, October 2000, available from: www.oecd.org/dataoecd/42/52/33981740.doc.
[80] Philip L. Bereano, p. 167.
[81] Treasury Board of Canada Secretariat, *MAF Assessment – DND 2006*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2006/dnd/dnd-eng.asp; TBS, *Management Accountability Framework*; TBS, *MAF Assessment - Round VI*.

confidence of the ADM (S&T), is listed above as an Indicator, so will not be repeated here as a measure. When measuring the quality of policies and programs, it is essential to consider not just outputs, but also the methodology of achieving the outputs and outcomes, and satisfaction of clients and partners with the methods and resulting outcomes.

Recruitment/ development/ succession plans for policy community: The HR elements of this measure have been more succinctly captured in the statement *Comprehensive Human Resource Management plan for the policy community*. Much of this measure is addressed as part of the People element of the DRDC MAF.

Investments in policy capacity/ analytic tools: This measure has been revised as *Investments in policy capacity and research tools* to better reflect the R&D activities of DRDC.

Figure 25, below, depicts the Measures for Policy and Programs in the DRDC MAF.

Figure 25: Policy and Programs, Measures Tier

Table 12 presents examples of information which can be used as evidence of each measure.

Table 12: Evidence and Instruments for Policy and Programs

Measure: Quality of Policies and Programs	
Evidence	Source/ Instruments
• Clear linkage to achievement of government priorities • Reliability of information • Peer review/ challenge • Realistic timelines • Evidence based explanation of all options and justification of preferred options • Documented risk mitigation strategies • Evidence of environmental impact assessment • Evidence of social impact assessment • Appropriate stakeholder consultations • Client/partner satisfaction • Evaluation of results with feedback mechanism	• Program/ Project audit • Results of peer reviews • Number of ATI requests granted/ denied • Social Impact Assessment checklist • Environmental Impact Assessment checklist • Client/partner satisfaction survey

Measure: Comprehensive HRM plan for the policy community	
Evidence	Source/ Instruments
• Succession Plan in place for Science and Technology personnel • Policy capacity assessment at the Organizational level • Targets for recruiting and retaining new and experienced scientists and technologists in current and emerging fields. • Participation in co-operative education programs and summer student internships • Marketing the Agency as a choice employer for scientists and technologists	• Audit of succession plan ◆ Existence of Plan ◆ Implementation of Plan ◆ Evaluation for results • Audit of recruitment and retainment demographics • Managers survey • Exist survey for students employees • Effectiveness of student employment programs

Measure: Investments in policy capacity and research tools	
Evidence	Source/ Instruments
• Maintaining equipment and infrastructure • Partnering with academic institutions • Partnering with the R&D community • Investing in new technologies • Funding professional development and/or continuing education	• Manager survey • Audit of CPME • Evidence of Research Collaboration through CPME or manager surveys • Audit of professional development programs • Audit of professional development programs • Equipment maintenance, repair and replacement logs • Percentage of secondment requests approved

5.2 People

In December 2005, the Government of Canada fully implemented the *Public Service Modernization Act* (PSMA). The Act was created to improve and reform the Public Service in order to meet the demands of the 21st Century. Factors such as new technology and globalization had lead to increased service demands and heightened expectations from citizens; a shift was occurring in labour relations, leading to the need for a more collaborative labour relations model; and the appointments process had become cumbersome and ineffectual, necessitating the creation of a new, streamlined hiring system which could function more effectively while protecting the core principle of merit-based hiring.[82]

The PSMA has four components, which work together to enable the creation of a new, modern public service.

The *Public Service Employment Act* (PSEA)[83]:

empowers organizations and managers by encouraging the delegation of appointment authorities from the PSC to deputy heads;

gives deputy heads the flexibility to tailor their staffing system to meet their organizational needs. They also have greater accountability for human resources management;

provides a framework for staffing that is simple, flexible, modern and more responsive;

provides managers with the flexibility to hire the right people, when and where they are needed;

Integrates human resources and business planning; and,

[82] Senator Sharon Carstairs, *Move Second Reading of Public Service Modernization Act*, speech, June 5, 2003.
[83] PSMA Resource Centre, *Key Messages: Public Service Employment Act*, available from: http://www.psagency-agencefp.gc.ca/arc/hrmm-mgrh/psma-lmfp/centre/products-produits/messages_e.asp#PSEA. (accessed 13 August 2009)

eliminates the appeals process; the Public Service Staffing Tribunal now deals with complaints related to internal appointments and lay-offs.

The *Public Service Labour Relations Act* (PSLRA):[84]

requires all deputy heads in the core public administration to establish an informal conflict management system (ICMS) and communicate its existence to employees;

requires all deputy heads to establish a labour-management consultation committee;

requires the negotiation of essential services agreements between employers and bargaining agents;

enables co-development of workplace improvements;

enhances conciliation (e.g. through the appointment of a public interest commission);

provides for negotiated essential services agreements;

establishes the new Public Service Labour Relations Board, with a mandate to provide compensation research and analysis, as well as adjudication and mediation services;

establishes more comprehensive provisions regarding unfair labour practices;

creates more comprehensive grievance and adjudication mechanisms; and,

requires a secret ballot before a strike.

The *Financial Administration Act (FAA)*: amendments put "direct responsibility for certain aspects of human resources management (such as determining learning and developmental requirements, providing awards and setting standards of discipline) in the hands of deputy heads. With this new responsibility, deputy heads are required to submit an annual report to Parliament on the application of the human resources management provisions of the *Act*."[85]

The *Canadian Centre for Management Development Act (CCMDA)*: Coordinate and integrate learning, training, and development activities under a single entity, the Canada School of Public Service.[86]

Two other Legislative drivers impacting Human Resource Management in the Federal Government are the Employment Equity Act and *Official Languages Act*.

The goal of the *Employment Equity Act* is:

> to ensure that no person is denied employment opportunities and benefits for reasons unrelated to ability. It requires employers to correct disadvantages in the workplace experienced by members of the four

[84] Canada Public Service Agency, *Role of the PSLRA in Public Service Modernization Act (PSMA) Implementation and HR Modernization*, available from: http://www.psagency-agencefp.gc.ca/arc/smp-gps/cm-gc/cmf-pslral_e.asp. (accessed 13 August 2009)
[85] PSMA Resource Centre, *Key Messages: Financial Administration Act*, available from: http://www.psagency-agencefp.gc.ca/arc/hrmm-mgrh/psma-lmfp/centre/products-produits/messages_e.asp#FAA. (accessed 13 August 2009)
[86] PSMA Resource Centre, *Key Messages: Canadian Centre for Management Development Act*, available from: http://www.psagency-agencefp.gc.ca/arc/hrmm-mgrh/psma-lmfp/centre/products-produits/messages_e.asp. (accessed 13 August 2009)

designated groups: women; Aboriginal peoples; persons with disabilities; and visible minorities.[87]

The EEA also requires that employers identify and eliminate employment barriers for designated group members and make reasonable accommodations. The representation of persons in designated groups should reflect their representation in society.

The *Official Languages Act* applies to all federal institutions. The Act is intended to:

- ensure respect for English and French as the official languages of Canada and ensure equality of status and equal rights and privileges as to their use in all federal institutions, in particular with respect to their use in parliamentary proceedings, in legislative and other instruments, in the administration of justice, in communicating with or providing services to the public and in carrying out the work of federal institutions;
- support the development of English and French linguistic minority communities and generally advance the equality of status and use of the English and French languages within Canadian society; and
- set out the powers, duties and functions of federal institutions with respect to the official languages of Canada. [88]

The TBS has coordinated all policies related to Official Languages in an Official Languages Policy Framework, available on its website.[89]

Staffing Management Accountability Framework[90] *(SMAF) translates the PSEA into a more accessible working model. It* meshes with the MAF to provide clearer direction on the People Element. The SMAF *is comprised of eleven elements:*

- Delegation of Staffing;
- HR Planning and Integration with Business Planning;
- Organizational HR Support Systems;
- Organizational Accountability for Results;
- Flexibility and Efficiency;
- Merit;
- Non-partisanship;
- Representativeness;
- Access;

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[87] Canadian Human Rights Commission, *Frequently Asked Questions about Employment Equity*, available from: http://www.chrc-ccdp.ca/publications/ee_faq_ee-en.asp.
[88] Marie-Ève Hudon, *The Official Languages Act: Understanding its Principles and Implementation*, Library of Parliament, October 2008, available from: http://www2.parl.gc.ca/Content/LOP/ResearchPublications/prb0423-e.htm.
[89] Treasury Board of Canada Secretariat, *Official Languages Policy Framework*, available from: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12515&section=text.
[90] Public Service Commission, *Staffing Management Accountability Framework*, available from: http://www.psc-cfp.gc.ca/plcy-pltq/frame-cadre/acco-resp/smaf-crgd-eng.htm.

Fairness; and,

Transparency.

Other, non-legislative documents relevant to Human Resource Management in the Public Service are Treasury Board's *Values and Ethics Code for the Public Service*[91] and *Guidance for Deputy Ministers,*[92] *as well as the Privy Council Office Annual Report.*[93]

Succession planning is a crucial element of HR management and is vital to sustaining capacity in Policy and Programs.[94]

People: Expectations

The Expectations tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. The expectations elements are being further refined as the project continues, based on additional research and an understanding of the interplay among the elements. Figure 26 illustrates the revised *People* component of the DRDC MAF Expectations tier.

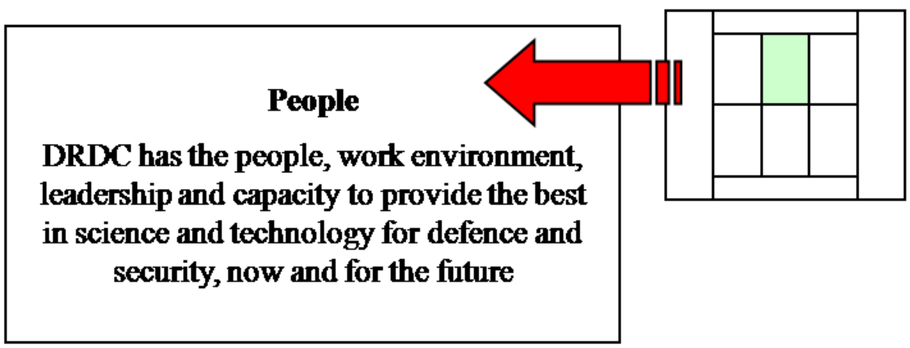

Figure 26: People, Expectations Tier

People: Indicators

Indicators for the *People* element are based on the TB MAF People Indicators tier, as well as Round VI of the MAF review, the DND 2006 MAF review, and the eleven elements of the SMAF.

The TB *People* Indicators tier has eight individual elements:

Reflective of Canada

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[91] TBS, *Values and Ethics Code for the Public Service*.
[92] Privy Council Office, *Guidance for Deputy Ministers,* available from: http://www.pco-bcp.gc.ca/index.asp?lang=eng&page=information&sub=publications&doc=gdm-gsm/doc-eng.htm.
[93] Privy Council Office. *Annual Reports to the Prime Minister on the Public Service of Canada,* available from: http://www.pco-bcp.gc.ca/index.asp?lang=eng&page=clerk-greffier&sub=reports-rapports&doc=reports-rapports-eng.htm.
[94] Treasury Board of Canada Secretariat, *Succession Planning and Management Guide,* available from: http://www.tbs-sct.gc.ca/gui/sure-eng.asp.

Respectful of official language requirements

Renewed/ sustained capacity

Supportive workplace

Employee engagement

Opportunities to grow

Leadership continuum

Recognition, rewards, and sanctions

The DRDC Indicators for *People* are tailored to reflect the managers' vernacular and the DRDC environment.

Reflective of Canada; Renewed/ sustained capacity: These indicators speak to the hiring aspect of Human Resources. As an equal opportunity employer, the Government of Canada including all federal departments and agencies should have a workforce which approximates the demographics of Canadians, including but not limited to the four designated employment equity groups: women, the disabled, visible minorities and First Nations peoples. It is important that the workforce maintain the necessary critical mass to deliver its mandate, and that employees have the necessary skills and abilities to be successful in the delivery of programs and services. These indicators are combined into a more succinct indicator *Workforce is sufficient in numbers and abilities while being reflective of the Canadian population.*

Supportive Workplace; Respectful of official language requirements; Recognition, rewards, sanctions: These elements are captured in the element *Workplace is a supportive and respectful environment, including respect for official language requirements*. The concept of sanctions is addressed in the Accountability Element, as a component of employee performance appraisals.

Leadership Continuum: The classic Tannenbaum and Schmidt model of the Leadership Continuum[95] places managers on a scale of leadership styles ranging from 'manager centered' to 'employee centered'. In the parlance of the TB, the leadership continuum has two meanings. First, it refers to all supervisors from executives to functional authorities,[96] all of whom are expected to demonstrate leadership capabilities; secondly, it also refers to the courses available to help these individuals develop leadership capabilities.[97] This element is captured in the indicator "*All levels of management demonstrate effective leadership*"

Employee engagement; Opportunities to grow: These elements are captured in the indicator "*Employees are engaged in their work and have opportunities to learn and grow*"

Figure 27, below, depicts the Indicators for People in the DRDC MAF.

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[95] Robert Tannenbaum and Warren H. Schmidt, "How to Choose a Leadership Pattern", *Harvard Business Review*, May-June 1973, reprint, p. 164.

[96] Canada Public Service Agency, *Key Leadership Competencies*, available from: http://publiservice.tbs-sct.gc.ca/tal/kcl/intro-eng.asp.

[97] Treasury Board of Canada Secretariat, *Directive on the Administration of Leadership Development Programs*, available from: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?evttoo=X&evttoc=X&section=text&id=12408&AspxAutoDetectCookieSupport=1#leadership.

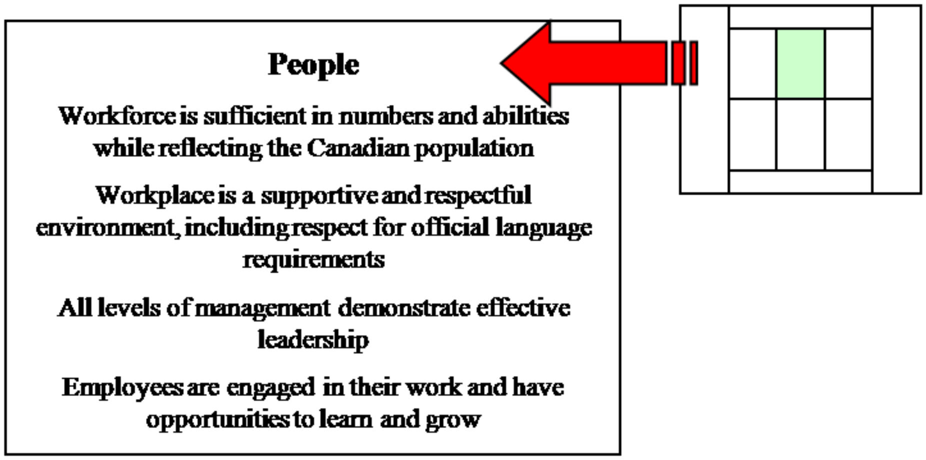

Figure 27: People, Indicators Tier

People: Measures

Measures for the People element are based on the TB MAF People Measures tier, as well as Round VI of the MAF review and the DND 2006 MAF review.[98]

Comprehensive Human Resources development plan in place, including leadership, recruitment, retention, succession, learning, Work/Life Balance, Official Languages and Employment Equity: This measure has been summarized as *Comprehensive Human Resources Strategic Plan in place*.

Progress against Human Resources targets: This measure has been applied directly to the DRDC MAF, along with examples of three core HR initiatives, namely quality of work life, official languages, and employment equity. The measure is presented as *Progress against HR targets including quality of work life, official languages, employment equity*.

Progress in measuring/ improving employee engagement: This measure has been applied to the DRDC MAF, with a small style adjustment, as *Progress in measuring and improving employee engagement*.

Quality of leadership: This measure has been applied directly to the DRDC MAF as *Quality of leadership.*

Quality of labour relations: This measure has been applied directly to the DRDC MAF as *Quality of labour relations*.

Figure 28, below, depicts the Measures for People in the DRDC MAF.

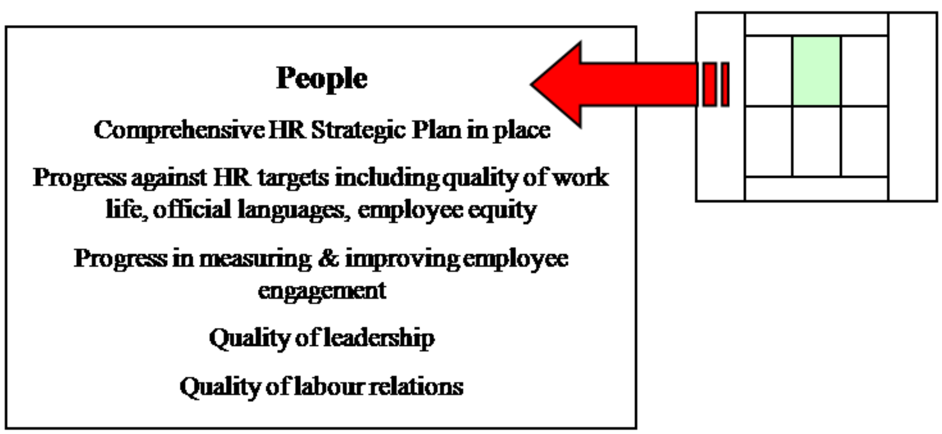

Figure 28: People, Measures Tier

There are a number of information sources for gathering information on the People element. A primary resource is the Public Service Employee Survey, conducted by the Public service Commission (PSC) every three years. Utilizing these data negates the need to ask similar or redundant questions in a DRDC survey. We were unable to access these data as a part of the MAF project; however, the data set is available for purchase.

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[98] TBS, *MAF Assessment – Round VI*; TBS, *MAF Assessment – DND 2006*; TBS, *Management Accountability Framework.*

Another important source of information will be corporate documentation such as training statistics (including official languages training), hiring demographics, promotion, advancement and secondment demographics, data on EAP usage, short term disability and workplace safety. Departmental Staffing Accountability Report (DSAR) may be a useful source of this information.

It is vital that DRDC utilizes a centralized Management Information System (MIS), such as PeopleSoft®, to track these and other Human Resource Management data in order to identify successes and failures within the People Element, for the purpose of continuous improvement.

Table 13 presents examples of information which can be used as evidence of each measure.

Table 13: Evidence and Instruments for People

Measure: Comprehensive HR Strategic Plan in place	
Evidence	Source/ Instruments
• Centralized MIS for tracking HRM data • Succession planning model in place • Number of supervisors that meet the requirements of their position	• DRDC Human Resources Plan[99] • PeopleSoft®

Measure: Progress in measuring & improving employee engagement	
Evidence	Source/ Instruments
• Achievement of goals in employee personal learning plans • Recognition system for employee achievement	• Recognition & reward program statistics • Development program participation levels • Personal Learning plan statistics, especially goal achievement

[99] For example, Defence Research and Development Canada, *Human Resources Plan, FY 2008-2009*.

Measure: Progress against HR targets including quality of work life, official languages, employee equity	
Evidence	Source/ Instruments
• Established targets for OL requirements • Established targets for EE representation at different employment levels for designated groups (women, visible minorities, persons with disabilities, First Nations) • Established targets for EE representation at different employment levels for non-designated, but marginalized groups (i.e. sexual orientation, age, religion, languages) • Established targets for WL balance • Existence and evaluation of programs and policy to advance towards these targets	• PeopleSoft® • PS Employee Survey • EAP reports • Progress against demographic targets, employment equity staffing activities, language of work complaint or discrimination statistics

Measure: Quality of leadership	
Evidence	Source/ Instruments
• Participation in secondments and developmental assignments	• Performance Management Program for executive level • PS Employee Survey

Measure: Quality of labour relations	
Evidence	Source/ Instruments
• Labour Management Consultation Committee (LMCC) in place, meets regularly • Alternative Dispute Resolution (ADR) is in place • Unions consulted on change issues • Management understand collective agreements of subordinates	• PS Employment Survey • LMCC and LMRC activities • Alternative Dispute Resolution statistics • Classification and other grievance statistics

5.3 Service

The TBS document *Quality and Affordable Service for Canadians: Establishing Service Standards in the Federal Government*[100] was implemented in 1994. The service standards published here stress quality and affordable services at the citizen-public servant interface, reflecting the fact that most government departments offer services directly to Canadians. DRDC is an exception to this, since its direct services are delivered to DND, other government departments and private enterprises.

For these reasons, the 'Citizen-focused Service' element of the TB MAF has been reduced to simply 'Service' for the DRDC MAF. This reduction of scope is consistent with the TBS' own assessments of DND in Round V of the TB MAF:

> The Department of National Defence's (DND's) level of participation in whole-of-government service solutions and the extent to which public/client views/needs are considered when developing new services were not assessed as they were not applicable in DND's (case).[101]

Most service-oriented literature and research focuses on private sector organizations delivering direct customer service; however, the conclusions and best practices taken from these studies are relevant to the public sector, and are readily transferable to the DRDC service model in which customers are replaced by client-partner organizations.

The goal of service delivery is to satisfy the recipients of the service. Client satisfaction is dependent not only on service quality but also on the client's perceived value of that service,[102] this view is echoed in the very title of the TBS service standards document *Quality and Affordable Service for Canadians*. There is evidence that high satisfaction levels lead to increased client retention and increased regard for the corporate image.[103] This relationship can be summed up by the service equation shown in Figure 29:

Figure 29: Service Equation[104]

An increased regard for the corporate image, as well as the retention of high calibre clients and partners, has a positive impact on other MAF elements as well. In particular, the *People* and *Policy and Program* elements call for strategic recruitment and retention of new and experienced scientists and technologists, as well as positioning the organization as a leader in the S&T community, both of

[100] Treasury Board of Canada Secretariat, *Quality and Affordable Service for Canadians: Establishing Service Standards in the federal Government – An overview*, available from: http://www.tbs-sct.gc.ca/pubs_pol/opepubs/TB_D3/OQUA-eng.asp

[101] Treasury Board of Canada Secretariat, *MAF Assessment- Round V*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2007/assessments-evaluations-eng.asp.

[102] Hsin-Hui Hu, Jay Kandampully, and Thanika Devi Juwaheer, "Relationships and impacts of service quality, perceived value, customer satisfaction and image: an empirical study", *The Service Industries Journal*, 29:2 Feb 2009, p. 121.

[103] Hsin-Hui Hu, Jay Kandampully, and Thanika Devi Juwaheer, p. 122.

[104] based on Hsin-Hui Hu, Jay Kandampully, and Thanika Devi Juwaheer's conceptual model, p. 113.

which can be bolstered by a strong corporate image and client reputation. By focusing on increasing client satisfaction through high service quality and high perceived value, DRDC service delivery positively impacts these three MAF elements.

Service Quality

'Service quality' is a construct encapsulating a number of dimensions. Most construct models, as demonstrated in Ghobadian et al., [105] can be aligned to group the various dimensions into five broad categories, best identified by Zeithaml et al., as Tangibles, Reliability, Responsiveness, Assurance, and Empathy.[106] The consumer or client judges the quality of the service provided based on his or her *perception* of these dimensions, which may not necessarily be the reality of the dimension in the organization; this is an important distinction. For example, while the organization may in fact have cutting edge information security, the client may not perceive this. These dimensions are designed to apply to a direct client-provider transaction; however, they can equally be applied to DRDC's delivery of services and outputs to government departments and private enterprises.

Tangibles relates to the quality and appearance of facilities, personnel, equipment, and other materials.[107] In the case of DRDC this applies to the appearance and quality of physical infrastructure such as buildings, laboratories and equipment, the appearance of personnel, and the appearance and quality of physical outputs, including documents.

Reliability relates to the organizations ability to provide services and outputs dependably and accurately.[108] In the DRDC context, this includes meeting milestones for projects, providing project updates on time, and delivering outputs to specification.

Responsiveness relates to the willingness of personnel to meet client needs and respond to client requests promptly[109]. In the DRDC context, this includes correcting or addressing problems promptly, finding mutually satisfactory solutions to issues, and keeping clients and stakeholders proactively informed of progress and problems.

Assurance relates to both the competence and courtesy of personnel, and the credibility and security of the organization.[110] In the DRDC context, this includes having highly skilled and knowledgeable scientific personnel who interact with clients and partners in a courteous manner, all personnel convey trustworthiness and confidence in the services and outputs produced, and personnel and tangibles express credibility and security.

Empathy can be thought of as 'individualized attention'[111] and encompasses ease of access, level of communication, and understanding the customer.[112] In the DRDC context, this includes the ease with which a client can contact the appropriate individual in the organization, the quality and

[105] Abby Ghobadian, Simon Speller, and Matthew Jones, "Service Quality: Concepts and Models," *International Journal of Quality & Reliability Management*, 11: 9 1994, pp. 53-54.
[106] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, Delivering Quality Service: Balancing Customer Perceptions and Expectations, New York: Free Press, 1990, p. 26.
[107] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, p. 21.
[108] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, p. 21.
[109] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, p. 21.
[110] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, pp. 21-22.
[111] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, p. 26.
[112] Valerie A Zeithaml , A. Parasuraman, and Leonard L. Berry, p. 22.

quantity of communications a client receives or engages in, and the organization's ability and willingness to understand issues from the client perspective.

Core requirements to achieving high service quality are:[113]

- developing a client focus;
- empowering front-line staff;
- motivated and well-trained staff; and,
- a clearly defined vision of service quality.

Service quality is difficult achieve in part because of "three features unique to services: intangibility, heterogeneity, and inseparability of production and consumption."[114] Some of the obstacles to achieving service quality include:[115]

- inability to perceive problems from the client's perspective;
- difficulty in identifying the origin of a service problem;
- resistance of service personnel or systems to change; and,
- failure to plan for contingencies.

DRDC's core services are the delivery of Science and Technology policy, advice and products;[116] the service quality requirements and obstacles described above are readily transferable to the DRDC service context.

DRDC's success in the S&T domain is dependent on the organization's S&T competence, and specifically the competence of S&T staff of scientists, engineers and technologists. Its program formulation processes, involving R&D Thrust Advisory Groups, for example, are clearly client (now partner) focused. Finally, although there are always exceptions, DRDC's professional development policies, and career management for defence scientists, provide the basis for the well-trained and motivated staff necessary to deliver quality services.

Perceived Value

Various authors observe that evaluation of service quality is difficult since the quality cannot be measured directly (as, for example, a failure rate or some other technical measure) but must be based on user experience or expectation.[117] It can be difficult for an organization to assess or anticipate a client's perceived value of a service because each individual client will perceive value relative to his/her own criteria.[118] Generally, clients' perceived value of a service will be based on a "trade-off between the quality or benefits [i.e. utility] they perceive in product relative to the sacrifice they

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[113] Abby Ghobadian, Simon Speller, and Matthew Jones, pp. 46-47.
[114] A. Parasuraman, Valerie A Zeithaml, and Leonard L. Berry, "SERVQUAL: A Multi-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64:1 Spring 1988, p. 13.
[115] Abby Ghobadian, Simon Speller, and Matthew Jones, pp. 46-47
[116] Here, 'products' is used generally, ranging from reports to experimental hardware, and including in-service support.
[117] For example, Ghobadian, Speller and Jones; or Stephen W. Brown and Teresa A. Swartz, "A Gap Analysis of Professional Service Quality," *The Journal of Marketing*, 53:2 April 1989, pp. 92-98.
[118] Hsin-Hui Hu, Jay Kandampully, and Thanika Devi Juwaheer, p. 114.

perceived by paying the price."[119] The cost or 'price' of a service can include money, time, opportunity costs and other resources. Because the organization is limited in its ability to impact service costs, the most effective method for influencing perceived value is by maintaining high service quality.

The importance of perception is reinforced in an earlier study by Brown and Swartz, which explored professional service quality in primary health care by studying client-professional relationships between doctors and patients. [120] Brown and Swartz examined the gaps between client expectations and experience, and between client expectations and professional perceptions of those expectations. They observe the need either to align service provider behaviours and expectations with those of clients, or to alter client expectations and experiences, often by education of professional capabilities and services.

Measuring Service

Measuring service quality in an S&T environment is more complex than the standards illustrated by Treasury Board Secretariat. Setting service standards, for example, may be straight forward in a traditional, client centered transaction, such as Western Economic Diversification Canada (WEDC), where "[r]esponse to initial application in four days"[121] is presumably a reasonable and measurable service standard, given a 90 percent compliance rate; however, the same is not the case for professional services (like the S&T services of DRDC) where customer, client or partner expectations are not so easily quantifiable.

Evaluation of service quality core requirements and presence of obstacles: Gather information on the organization's performance in the four core Service quality requirements, as well as areas where obstacles to service quality may exist, through an internal audit of core requirements, obstacles, service standards and delivery. *The MAF survey component will provide a valuable portion of this evaluation.*

Perceived Value Gap Analysis: Perform an analysis of the gap between client expectation and perception of service, utilizing a gap analysis model, such as Parasuraman et al, shown in Figure 30.

[119] Hsin-Hui Hu, Jay Kandampully, and Thanika Devi Juwaheer, p. 114.
[120] Stephen W. Brown, and Teresa A. Swartz.
[121] TBS, *Quality and Affordable Service for Canadians: Establishing Service Standards in the Federal Government – An Overview*.

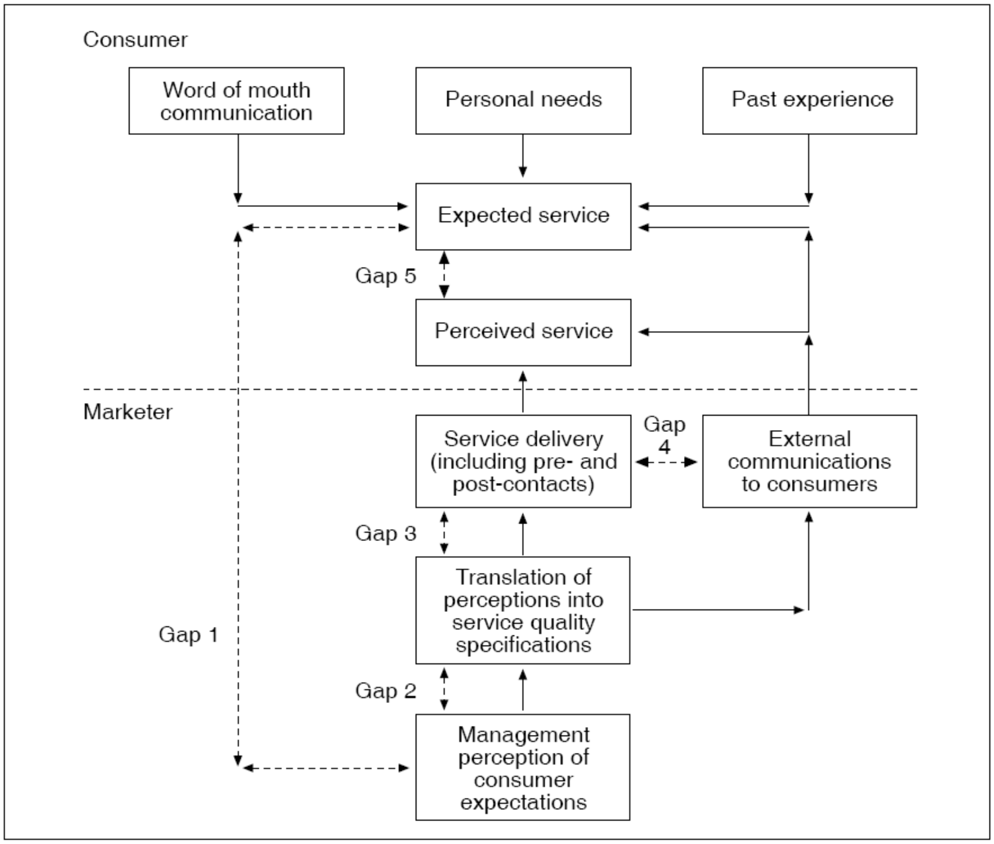

Figure 30: Quality Gap Analysis Model[122]

In this model there are five possible gap areas where client expectations of service may differ from their perceptions of service. By analyzing these five areas, DRDC can minimalize the gap between client expectations and perceptions of service, leading to increased satisfaction. The five gap areas are:

1) Not Knowing Customers' Service Expectations;
2) Faulty Service Quality Standards;
3) Service- Performance Gap;
4) Misrepresentation of Services; and,
5) Gap between client expectations and perceptions.

Service: Expectations

Treasury Board's Citizen-centred Service element,

[122] A. Parasuraman, Valerie A Zeithaml, and Leonard L. Berry, "A Conceptual Model of Service Quality and its Implications for Future Research", *Journal of Marketing*, 49:4, Autumn 1985, p. 44.

Services are citizen-centred, policies and programs are developed from the "outside in", and partnerships are encouraged and effectively managed.[123]

has been reduced simply to 'Service' in the DRDC MAF, in recognition of DRDC's predominantly internal clients:

> *S & T activities are client and partner-centred, policies and programs are developed to address client and partner needs, and partnerships are encouraged and effectively managed.*

The Expectations tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. Figure 31 illustrates the Service component of the DRDC MAF Expectations tier.

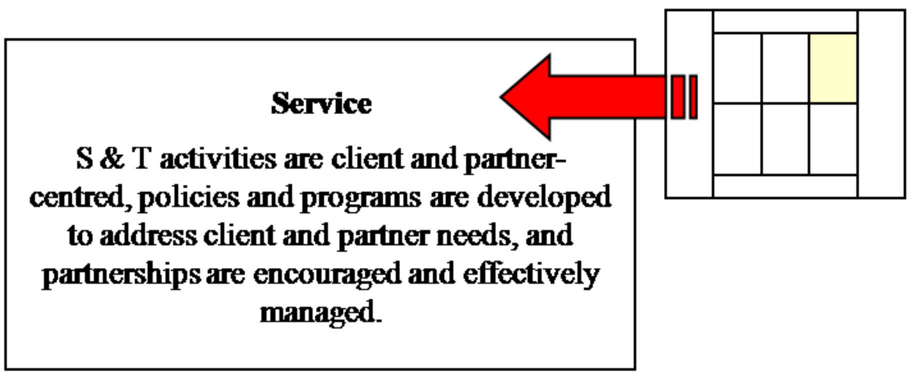

Figure 31: Service, Expectations Tier

Service: Indicators

Treasury Board identifies four Indicators:

Monitored, continuously improved service quality;

Technology options fully exploited;

Empowered front-line deliverers; and,

Effective relationships.[124]

Monitored, continuously improved service quality: Defence R&D Canada's services are largely delivered to clients internal to government, but service quality is nonetheless important. Services include the delivery of policies and programs, whose quality is assessed through a mixture of internal process assessment (e.g.: performance on milestones in CPME, the Collaborative program Management Environment) and external review (e.g.: peer review of programs or client/partner

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[123] TBS, *Management Accountability Framework.*
[124] TBS, *Management Accountability Framework.*

satisfaction surveys). The suggested DRDC MAF indicator is *Monitored, continuously improved program delivery.*

Technology options fully exploited: Treasury Board looks to technology exploitation for the delivery of services whereas technology options are often the deliverables of DRDC's programs. Nonetheless, technology exploitation does have a role in delivery of DRDC's internal services, and in delivery of policy options to clients and partners where, for example, technology-based decision support tools are increasingly used. The suggested DRDC MAF indicator is *Leading advice on technology exploitation.*

Empowered front-line deliverers: Defence R&D Canada does not generally offer 'front-line' service to citizens, but does value relationships with internal clients (generally organizational rather than individual) and partners, both internal and external. Defence R&D Canada's staff are expected to engage clients and partners, to build relationships, and to facilitate new partnerships. The suggested DRDC MAF indicator is *Proactive engagement of clients and partners.*

Effective relationships: Defence R&D Canada's S&T programs are organized using a mixed in-house/external delivery model, so that maintaining effective relationships is absolutely necessary. Additionally, DRDC engages internal clients and partners in program definition, where maintaining effective relationships is again critical. The suggested DRDC MAF indicator is *Effective relationships with clients and partners.*

It would be tempting to collapse the last two indicators into one, but one might have effective *reactive* relationships with partners without ever proactively extending the partner community.

Figure 32 depicts the Indicators for Service in the DRDC MAF.

Figure 32: Service, Indicators Tier

Service: Measures

The Round V call of the TB MAF opened with a statement for Citizen-focused Service (2007):

> *Services are designed and delivered based on client needs and expectations and continuously evolve in response to client feedback.*[125]

This statement is readily adaptable to the DRDC context, and has been considered in the development of Service Measures for the DRDC MAF.

Treasury Board initially identified six measures, with the fourth having been overtaken by events:[126]

Service improvement and transformation plans in place: DRDC's service improvement and transformation plans are reflected within the Defence S&T Strategy for S&T activities and within the EXPEDITION 09 organizational development project for the DRDC corporate agenda. The evolution of the services themselves follows the business planning cycle and particularly client/partner engagement in it. The suggested DRDC MAF measure is *Service improvement and transformation planning is ongoing.*

Client satisfaction measured annually: The Defence S&T Strategy has introduced a change in the DRDC vernacular from clients to partners, although the concept of client satisfaction is applicable to both types of relationships. It has been DRDC's practice to measure client satisfaction, although it is understood that corporate re-organization has caused suspension of the formal activity. The suggested DRDC MAF measure is *Client/partner satisfaction is measured annually against standards or expectations.*

Client satisfaction targets and results: This indicator is the partner of the previous one, addressing standards rather than just activity, and is captured by the measure *Client/partner satisfaction is measured annually against standards or expectations.*

Progress toward Government On-Line targets: this indicator has been overtaken by events, thus it is not included in the DRDC MAF.

Collaboration with other governments and partners: The DRDC business model, with mixed in-house and external delivery of program, client/partner engagement in program formulation, and international collaboration, speaks directly to this element. The suggested DRDC MAF measure is *Collaboration is key to delivering DRDC services.*

Information for citizens: In general, DRDC does not produce information for citizens, although the Defence Research Reports Database is an obvious exception. The suggested DRDC MAF measure is *DRDC makes S&T information readily available to stakeholders.*

Figure 33 depicts the Measures for Service in the DRDC MAF.

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[125] TBS, *MAF Assessments – Round V.*
[126] TBS, *Management Accountability Framework.*

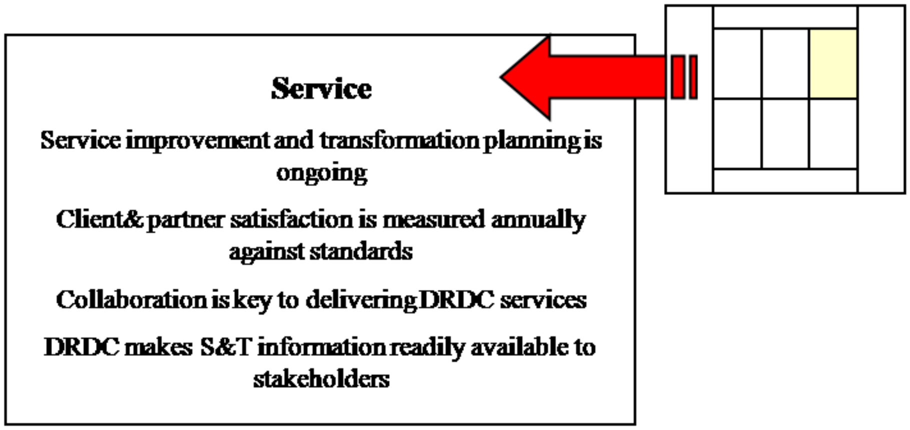

Figure 33: Service, Measures Tier

Table 14 suggests sources and instruments for the proposed Service measures. In some cases survey instruments are proposed for data collection while in others, corporate publications or records should provide the necessary information. In many cases, *assessment* of performance against particular measures will require multiple instruments.

Table 14: Evidence and Instruments for Service

Measure: Client & partner satisfaction is measured annually against standards	
Evidence	Source/ Instruments
• Client satisfaction survey annually • Open communication with clients and partners • Client feedback is utilized to refine systems and informs future projects	• Corporate services files • Surveys of internal clients and service providers • Comparative analysis • DRDC client surveys and peer reviews • Survey of managers addressing perceptions of client satisfaction and peer review • Client surveys • Overview Group records • MAF surveys (DRDC manager perceptions)

Measure: Service improvement and transformation planning is ongoing	
Evidence	Source/ Instruments
• Percentage of projects which are implemented by partners • Integrated System for tracking service targets • Targets based on client survey results • Planning for contingencies • Project managers are empowered to be responsive to changes in client needs	• EXPEDITION XX dashboard and progress reports • DRDC Annual Report • MAF surveys to measure cultural adoption

Measure: Collaboration is key to delivering DRDC services	
Evidence	Source/ Instruments
• Policies and project deliverables are developed with a client focus • Partners are regularly given project updates	• Availability of DRDC-wide SOPs • Analysis of CORS Working Group minutes • Provider and client-focused surveys • Survey of individual collaborative activities • Partner and client-focused surveys • MAF surveys (Collaboration) • Annex on S&T Collaboration

Measure: DRDC makes S&T information readily available to stakeholders	
Evidence	Source/ Instruments
• Acknowledgement of citizens as part of client base • Transparency and availability of non-classified information and reports	• DRDKIM records (CANDID, etc.) • DRDC Annual Report • Partner and client-focused surveys

5.4 Risk Management

Risk is an inevitable factor in most decision making situations. Risk most often has a negative connotation and many conventional definitions describe risk as the possibility of an unwanted outcome, or failure to achieve a desired outcome;[127] however, innovation is also the offspring of risk, and an unanticipated outcome can actually prove to be highly valuable. This tension between *risk as failure* and *risk as innovation* is particularly relevant in science and technology fields. An organizational Risk Management Framework can help guide decision makers in determining the level of risk acceptable to strategically minimize losses, maximize opportunities (including possible innovations) and prepare for uncertainty.[128]

The TBS *Integrated Risk Management Framework* defines risk as "the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives."[129] This definition highlights the notion that an outcome only has meaning relative to how it affects the organization's ability to achieve its goals.

Risk Management is defined in the *Framework* as "a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues."[130] Comcover Australia employs a similar definition of risk management: "[it is] the activities and actions taken to ensure that an organization is conscious of the risks it faces, makes informed decisions in managing these risks, and identifies and harnesses potential opportunities."[131] It is vital to the Framework that the organization has a *Corporate Risk Profile*, a document which outlines the levels of risk that are considered acceptable to the organization; this 'risk tolerance' aids decsion makers in determining when the costs associated with risks are acceptable. [132] A sound risk management plan is also a key component in maintaining accountability among public servants when decision making is required during critical incidents.[133]

While risk management is a process utilized to consider the risks associated with specific scenarios, *integrated risk management* takes a broader view of risk as it affects the organization horizontally and vertically. The TBS defines Integrated Risk Management as

> *a continuous, proactive and systematic process to understand, manage and communicate risk from an organization-wide perspective. It is about making strategic decisions that contribute to the achievement of an organization's overall corporate objectives.*[134]

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[127] Comcover, *Risk Management: Better Practice Guide*, Australian Government, June 2008, p. 5, available from: Available from: http://www.finance.gov.au/comcover/better-practice-guide.html.
[128] Comcover, p. 5.
[129] Treasury Board of Canada Secretariat, *Integrated Risk Management Framework*, April 2001, available from http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?evttoc=X&id=12254&section=text.
[130] TBS, *Integrated Risk Management Framework*.
[131] Comcover, p. 5.
[132] Audit Office of New South Wales, *Performance Audit Report: Risk Management in the NSW Public Sector*, June 2002, available from: http://www.audit.nsw.gov.au/publications/reports/performance/2002/risk_manage/Risk-Contents.html.
[133] Peter Aucoin and Ralph Heintzman, "The dialectics of accountability for performance in public management reform," *International Review of Administrative Sciences*, 66, 2000, p. 48.
[134] TBS, *Integrated Risk Management Framework*.

The DND *Integrated Policy on Risk Management* also utilizes this definition.[135]

In 2004, Chief Review Services contracted Deloitte and Touche to perform a baseline study of Integrated Risk Management (IRM) within DND/CF.[136] The study found considerable weaknesses in the Departments' Corporate IRM approach, consistent with TB MAF assessment of DND/CF in this element. See Table 15, below.

Table 15: Comparison of IRM Key Elements against DND/CF Practice[137]

IRM Key Element/ Characteristic	DND/CF Comparison
Continuous, dynamic risk identification as early warning	Relatively sporadic and annual identification
Possible risk events proactively identified before occurrence	Largely reactive to risk event occurring
Systematic process in place	Risks considered principally as they relate to business planning
Structured analysis of likelihood and impact	Mainly intuitive analyses, although pockets where structure is used
Everyone identifies risk	Mostly a manager's responsibility to identify risk
Organization-wide process	Process not yet in place
Risk managed at the lowest practical level	Risk tolerances often not known or communicated; therefore, difficult for lower levels to manage risks
Risks prioritized	Unstructured prioritization
Reporting of prioritized risks upwards	Reporting partially through annual business planning
Mitigation plans commensurate with severity and likelihood of risks	Few mitigation plans based on risk assessment
Open communication of risks	Limited horizontal communication

A number of recommendations were made to address areas of weakness in the DND/CF Integrated Risk Management performance; all align with the TBS *Integrated Risk Management Framework*. The TBS *Integrated Risk Management Framework*, in turn, appears to be rooted in High Reliability Organization Theory (HRO). Developed by a group of social science researchers at Berkley University through case studies of organizations with low accident and system failure rates, the HRO fundamental principle is that serious accidents and failures can be prevented through good organizational design and management.

In response to the Deloitte and Touche study, DND/CF developed two risk management documents, *Integrated Risk Management Policy*[138] and *Integrated Risk Management Guidelines.*[139]These

[135] Department of National Defence, *Integrated Risk Management Policy*, 2005, available from: http://vcds.mil.ca/dgsp/00native/rep-pub/ddm/riskman/IRMPol_e.pdf. (DWAN only)
[136] Chief Review Services- DND, *Baseline Study: Integrated Risk management within the DND/CF*, 1000-6-4 (CRS) January 2004.
[137] Chief Review Services- DND. *Baseline Study: Integrated Risk Management within the DND/CF*, p. III/IX.
[138] DND, *Integrated Risk Management Policy*, 2005.

documents are no longer available through the DND website. DND has also developed a Corporate Risk Profile; however, it has not yet received final approval for publication.[140]

Table 16, opposite, compares High Resiliency Organization Theory with the TBS Integrated Risk Management Framework and DND Integrated Risk Management Policy and Guidelines. As a Special Operating Agency of DND/CF, DRDC would develop its Risk Management Framework based on TBS and DND/CF documents and practices.

Overall, HRO provides a sound theoretical basis for the development of the DRDC Risk Management Framework, with a few caveats. As public organizations accountable to citizens, Government departments have additional responsibilities in terms of Risk Management, which are not specifically addressed in HRO, including the need to identify and consult stakeholders throughout the RM process, and the need to find a balance among the risks, costs and benefits of a decision or initiative to achieve an outcome with a net social benefit; innovation may be one of these outcomes.[141] Another drawback of the HRO approach is that it fails to take into account the interdependency of organizations through networks and partnerships.

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[139] Department of National Defence, *Integrated Risk Management Guidelines*, 2005.
[140] Private Communication, Karim Dahel.
[141] TBS, *Integrated Risk Management Framework*, p. 10.

Table 16: Alignment of High Resiliency Organization Theory with TBS Integrated Risk Management Framework and DND Integrated Risk Management Policy and Guidelines

Item	***High Resiliency Organization Theory*** [142]	**TBS *Integrated Risk Management Framework***[143]	**DND *Integrated Risk Management Policy***[144] and ***Guidelines***[145]
Organizational Culture	Organizational culture exists which values safety and risk management.	'Risk Smart' workforce supports responsible Risk Management.	Risk Management must be acknowledged as a foundation of management.
Senior Management Commitment	Senior management demonstrates safety as a priority in the organization.	Senior management function as Risk Management champions	Executive guidance and support is essential.
Training	Ongoing Risk Management and safety training for all members is crucial.	Need for formal training in Risk Management principles, applications and tools.	N/A
Risk Management Process	*Anticipation and Resilience*: brainstorming all conceivable failures in order to prevent them, plus having plans in place to deal with them should they arise.[146]	Ongoing internal and external environmental scanning to identify, assess, mitigate, and exploit risks.	Risks are identified through a workshop approach, with a brainstorming technique. Identified risks are prioritized and risk responses developed.
Risk Communication	There is a communication mechanism for sharing information about risk and lessons learned from failures, near failures and successful projects.[147]	Reporting on performance is necessary to identify lessons learned, best practices, and monitor use of resources.	Risks *can be* documented in a risk register or log. A best practices repository *should be* developed. External consultation needs to be considered within the context of the Access to Information Policy
Integration / Redundancy	Redundant mechanisms are in place to monitor high-risk technologies.[148]	Risk Management is integrated within existing structures of decision making, reporting, operations and governance.	Risk management is an on-going activity, embedded within current processes.
Decentralization	Risk Management is decentralized so that safety and risk issues are dealt with at the lowest level of management.[149]	As a component of Risk Smart Culture, all public servants are expected to be risk aware and integrate Risk Management into their existing processes.	Risk Management is everyone's responsibility; risks are shared horizontally or vertically as needed.

[142] Scott D. Sagan, "Chapter One: The Origins of Accidents" in The Limits of Safety: Organizations, Accidents, and Nuclear Weapons, Princeton: Princeton University Press, 1993.
[143] TBS, *Integrated Risk Management Framework*.
[144] DND, *Integrated Risk Management Policy*.
[145] DND, *Integrated Risk Management Guidelines*.
[146] Aaron Wildavsky, as referenced in Scott D. Sagan, p. 16.
[147] This mechanism acts as a feedback loop for making adjustments to policy and procedures in order to improve operational safety and success.
[148] Communication and information sharing is a form of redundancy/ cross check, see Scott D. Sagan, p. 20.
[149] Strong organizational risk management culture, including training and continuous learning, allows for decentralization of risk decision making to the operational level while assuring that responses and conclusions will be consistent with organizational objectives, see Scott D. Sagan, p. 24.

Risk Management: Expectations

The Expectations Tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. Figure 34 illustrates the Risk Management component of the DRDC MAF Expectations tier.

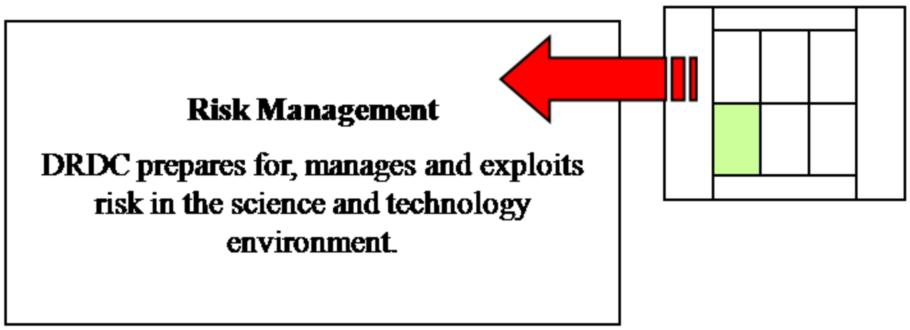

Figure 34: Risk Management, Expectations Tier

Risk Management: Indicators

The Treasury Board MAF explains the Indictors tier as descriptive statements of the Expectations tier "meant to convey the breadth and meaning of the expectations ... [to] help to gauge progress toward those objectives."[150]

The TB RM Indicators tier has four elements; the DRDC Indicators for Risk Management are based on those of the TB MAF, with High Resiliency Organization Theory in mind. The Indicators are tailored to reflect the DRDC environment and level of management utilizing the MAF.

<u>Key risks identified and managed</u>: In order to manage risk successfully, the organization must be aware of its risk areas, risk tolerances, and ability to mitigate and exploit risk. As a Special Operating Agency, DRDC falls under the purview of DND; its CEO is accountable to the DM of DND. This element is captured in the indicator *Risk is managed within the context of the DND Corporate Risk Profile*.

<u>Risk lens in decision making</u>: A risk lens can be thought of as a permanent filter through which all decision making is viewed; this is done by incorporating Risk Management into all existing planning and operational processes and governance and organizational structures.[151] This element is captured in the indicator *Risk Management is integrated with planning and operations structures throughout all levels of the Agency*.

<u>Risk smart culture</u>: The TB identifies a 'Risk Smart Culture' as one which "has the capacity and tools to be innovative while recognizing and respecting the need to be prudent [.]"[152] This element is captured in the indicator *Capacity exists to support a Risk Management Culture*. Capacity in this

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[150] TBS, *Management Accountability Framework.*
[151] TBS, *Integrated Risk Management Framework*, p. 5.
[152] TBS, *Integrated Risk Management Framework*, p. 5.

instance refers to the time, tools, training and support needed to enable risk management to become integrated throughout the agency at all levels.

Capacity to communicate and manage risk in public context. This element is captured in the indicators *Risk Management is integrated with planning and operations structures throughout all levels of the Agency* together with *Capacity exists to support a Risk Management Culture*.

Figure 35, below, depicts the Indicators for Risk management in the DRDC MAF.

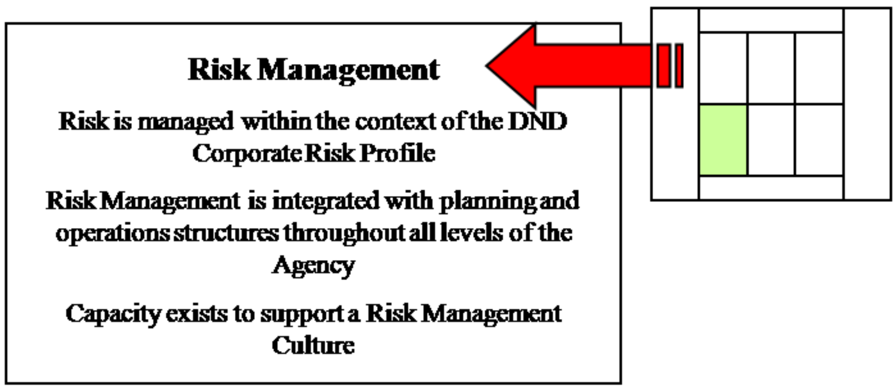

Figure 35: Risk Management, Indicators Tier

Risk Management: Measures

The Measures tier of the TB MAF includes four measures for Risk Management:[153]

Corporate Risk Profile, reviewed regularly;

Tools, training, support for staff;

Evidence of risk considerations in strategic planning; and,

Engagement of external stakeholders in assessing / communicating risks.

In a MAF assessment of select departments in 2006, including DND, TB used the following as measures of risk: [154]

Level of engagement of the senior executive in corporate risk management (e.g. organizational focus, senior executive accountabilities, risk mitigation strategies, Business Continuity Plans, Emergency Preparedness Plans);

Currency of the corporate risk assessment and profile;

Extent to which corporate planning is informed by risk; and,

Risk Mitigation strategies are in place for key program and corporate risks.

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[153] TBS, *Management Accountability Framework.*
[154] TBS, *MAF Assessment – DND 2006.*

Round VI of the TB MAF concerning Risk Management, shown below in Table 17, refines these measures in an effort to align them with the forthcoming, new TBS Risk Management Framework Policy, set to be introduced in 2009.

Table 17: Risk Management in the Treasury Board MAF, Round VI[155]

The executive team clearly defines the corporate context and practices for managing organizational and strategic risks proactively. *Risk is a factor in corporate decision-making processes and management* **Evidence:** • Senior management directs, participates in and provides oversight of the organization's Risk Management approach • Organization is implementing its Risk Management approach • Risk Management explicitly informs corporate decision-making, planning and reporting • Quality assurance of risk information and continuous improvement in Risk Management

Based on these inputs, the suggested DRDC Measures tier for Risk Management attempts to incorporate the Round VI evidence items with the TB MAF Measurements tier as it currently stands. There is no one-to-one correspondence between the Risk Management measures of the TB MAF and those of the DRDC MAF.

Figure 36, below, depicts the measures for Risk Management in the DRDC MAF.

[155] Treasury Board of Canada Secretariat, *MAF VI Methodology Changes 2008-2009: Risk Management*, 2008, available from: http://www.tbs-sct.gc.ca/maf-crg/indicators-indicateurs/2008/risk-risques/risk-risques-eng.asp.

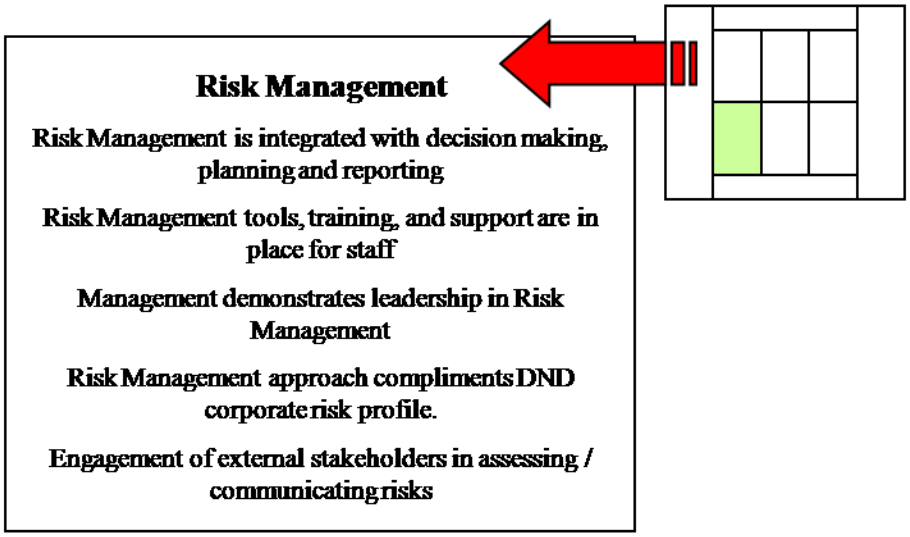

Figure 36: Risk Management, Measures Tier

Table 18 presents examples of information which can be used as evidence of each measure.

Table 18: Evidence and Instruments for Risk Management

Measure: Risk Management is integrated with decision making, planning and reporting	
Evidence	Source/ Instruments
• A systematic process is in place for managing risks and that process is utilized proactively by all employees • Familiarity with the DND policy and guidelines on Risk Management • All standard reports include a section on Risk Management, indicating the identification and assessment of risks • Risk Management tools, such as impact /likelihood matrix, are integrated in the decision making process • A formal recording system exists to track risks and reporting • Lessons learned from past experiences can be shared	• Evidence of risk management processes in project documentation and CPME

Measure: Risk Management tools, training, and support are in place for staff	
Evidence	Source/ Instruments
• Employees receive training and continuous learning in IRM, in a conscious, coordinated fashion. • Employees are aware of what resources are available to them in RM (ex: SWAT analysis tools) • Risk management roles and responsibilities are assigned • IRM is linked to performance reviews/ rewards	• PeopleSoft® training statistics • Risk management SOPs, etc

Measure: Management demonstrates leadership in Risk Management	
Evidence	Source/ Instruments
• Management actively fosters an environment where it is acceptable to not have all the answers. • Innovation is encouraged as an outcome of risk taking. • A common language exists for discussing risk.	• Management surveys

Measure: Risk Management approach compliments DND corporate risk profile	
Evidence	Source/ Instruments
• The DND corporate risk profile is available for employees to review • DRDC risk tolerance level is explicit and understood • Annual reports and business plans are aligned with priorities identified in the Corporate Risk Profile • The Corporate Risk Profile is reviewed regularly	• Use of best practices repository • DRDC Corporate Risk Profile • DRDC Business Plan and Annual Report alignment with Corporate Risk profile (DND and DRDC)

Measure: Engagement of external stakeholders in assessing / communicating risks	
Evidence	Source/ Instruments
• Employees are aware of their responsibilities and limitations in terms of RM (i.e.- when they can address an issue and when it needs to be sent upwards) • Risk information is shared horizontally across the agency • Lessons learned are shared within the Agency and with relevant external communities	• Review of TDP documentation and associated Senior Review board minutes

5.5 Stewardship

The term 'stewardship' is defined as "the careful and responsible management of something entrusted to one's care."[156] In the public sector, government departments act as stewards of the resources of Canadians; national resources include money (specifically tax revenue), information, environmental/ natural resources, national reputation, people, and physical assets.

The Stewardship element of the Treasury Board MAF seeks to place controls on how government employees manage resources. Similar to the problem discussed in the Policy and Programs element, the central issue in Stewardship is based on Agency Theory. This theory, borrowed from economics, is predicated on the relationship between two actors –the principal and the agent. The principal is the party which 'owns' the resource, while the agent is the party responsible for managing the resource. The principals in this situation are Canadian taxpayers, while the agents are the government departments and employees. Each party seeks to maximize the utility of the resource. When the interests of the principal and the agent coincide, there is no agency problem; however, when their interests are divergent, an agency problem exists.[157] Because the agent has control of the resources, s/he can utilize the resources to his/her benefit, resulting in agency costs; the principal can reduce these costs by imposing internal controls on the agent, such as audit requirements, reporting structures, and evaluations.[158]

Controls placed on agents need to be sufficient to curb agency costs without being overly costly or cumbersome. An overly rigid control regime not only utilizes excessive resources in comparison to

[156] Merriam-Webster Online Dictionary, available from: http://www.merriam-webster.com/dictionary/stewardship.
[157] James H. Davis, F. David Schoorman, and Lex Donaldson, "Toward a Stewardship Theory of Management," *Academy of Management Review*, 22:1, 1997, p. 22; Dietmar Braun and David H. Guston, "Principal-agent theory and research policy: an introduction," *Science and Public Policy*, 30:5, October 2003, p. 22.
[158] James H. Davis, F. David Schoorman, and Lex Donaldson, p. 22.

the potential for abuse of resources, it can serve to disengage employees and build resentment towards the organization, leading to diminished motivation, and loss of trust.[159]

An alternative theory may offer valuable information to help enhance trust in the organization. Ironically named Stewardship Theory, it seeks to explain why it is that an agent will sometimes act in the interests of the principal even when to do so appears counter to the agent's own benefit.[160]

Stewardship Theory, also rooted in economic theory, describes the relationship between the principal (Canadian taxpayers) and the stewards (government departments and employees). Just as in Agency Theory, each party seeks to maximize the utility of resources to his/her own benefit. The steward has control of the principal's resources, and will utilize the resources to maximize his/her own utility, which may result in agency costs if the steward's interests are not aligned with those of the principal. Stewardship Theory postulates that the steward places higher value on cooperative behaviours because this will provide greater utility than self-serving behaviours.[161] The principal can encourage cooperative behaviours by granting the steward a degree of trust; this will lead to intrinsic motivation to achieve the organization's goals, based on the steward's desire for higher order needs such as self- determination, achievement, and personal growth.[162]

Successful Stewardship in the MAF context will depend on finding the correct balance between imposing internal controls and granting subordinates an appropriate measure of trust to function autonomously.[163]

Stewardship: Expectations

The Expectations tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. Figure 37 illustrates the Stewardship component of the DRDC MAF Expectations tier.

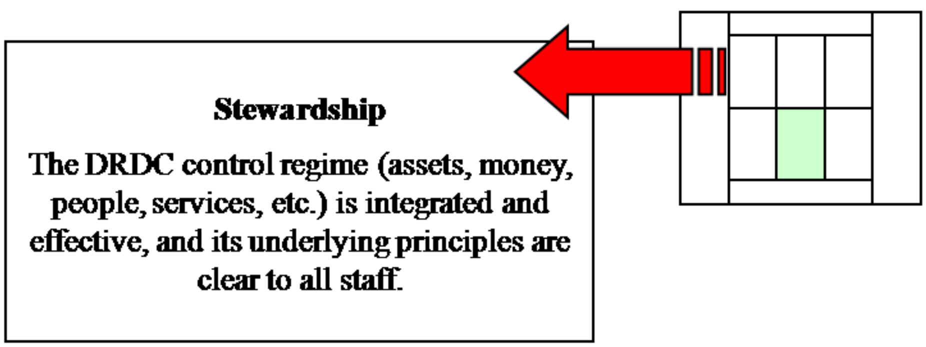

Figure 37: Stewardship, Expecations Tier

[159] Jens Grundei, "Chapter 3: Examining the Relationship between Trust and Control in Organizational Design" in Organization Design: the Evolving State of the Art, R.M. Burton, B. Eriksen, D.D. Håkonsson, C.C. Snow, eds, Springer Information and Organization Design Series, 6, 2006, p. 52; James H. Davis, F. David Schoorman, and Lex Donaldson, p. 25.
[160] James H. Davis, F. David Schoorman, and Lex Donaldson, p. 24.
[161] James H. Davis, F. David Schoorman, and Lex Donaldson, p. 24.
[162] Jens Grundei, p. 52; James H. Davis, F. David Schoorman, and Lex Donaldson, p. 37.
[163] Jens Grundei, p. 49.

Stewardship: Indicators

The DRDC Stewardship Indicators Tier has been revised to better reflect the tone of the overall DRDC MAF and to more succinctly capture the Stewardship Indicators of the TB MAF and the Stewardship Assessment Methodology Changes, Rounds IV –VI. Below is a comparison of the TB MAF indicators and the revised DRDC indicators for the Stewardship element.

<u>Management systems that provide relevant information and early warning on resources, results and controls:</u> This indicator has been re-worded as *Management systems provide relevant information and effective feedback on resources, results and controls*. Management systems include information, technology, financial, asset, security, and people management systems. Project management has been singled out as a separate indicator because of its significance in the DRDC environment.

<u>Rigorous audit/ evaluation function</u>: This indicator has been re-worded as *Established internal audit function*. Performance evaluation is addressed in the People element.

<u>Functional specialists as partners</u>: This indicator has been folded into the indicator *Management systems provide relevant information and effective feedback on resources, results and controls*. Issues around asset management and procurement are specifically addressed in the measures tier.

<u>Compliance with policies regulations, and legislation</u>: This indicator remains unchanged from the TB MAF.

Figure 38, below, depicts the revised Indicators for Stewardship in the DRDC MAF.

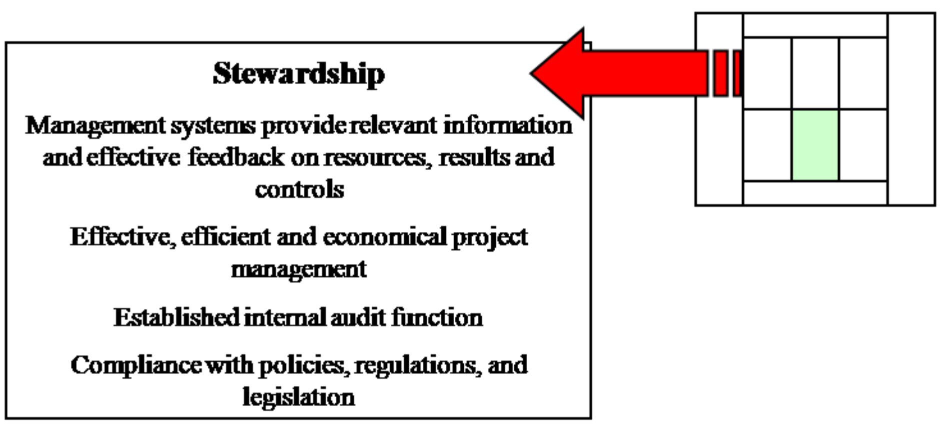

Figure 38: Stewardship, Indicators Tier

Stewardship: Measures

Measures for the *Stewardship* element are based on the TB MAF Stewardship Measures tier, as well as Round VI of the MAF review, the DND 2006 MAF review, and results of the Cycle 1 Pilot

Survey[164]. As such, there is no one-to-one correspondence between the Stewardship measures of the TB MAF and those of the DRDC MAF.

Figure 39, below, depicts the Measures for Stewardship in the DRDC MAF.

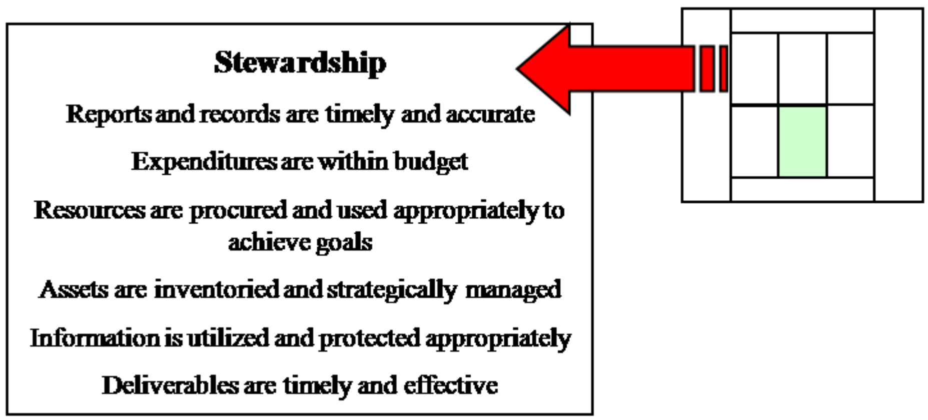

Figure 39: Stewardship, Measures Tier

Table 19 presents examples of information which can be used as evidence of each measure.

Table 19: Evidence and Instruments for Stewardship

Measure: Reports and records are timely and accurate	
Evidence	Source/ Instruments
• Financial forecast performance • Managers' survey	• Audit • Financial forecast performance • Manager survey

Measure: Expenditures are within budget	
Evidence	Source/ Instruments
• Financial Management & Control	• FMAS and forecast performance • CPME year-to-year comparisons

[164] TBS, *MAF Assessment - Round VI*; TBS, *MAF Assessment – DND 2006*; TBS, *Management Accountability Framework*; Craig O'Blenis and Warren Nethercote, *A DRDC Management Accountability Framework: Cycle 1 Final Report*.

Measure: Resources are procured and used appropriately to achieve goals	
Evidence	Source/ Instruments
• Certified procurement specialists at each centre • User friendly procurement process	• Procurement file performance • Number of specialists at each centre • Level of activity at each centre • Average turnaround of requests • Manager survey

Measure: Assets are inventoried and strategically managed	
Evidence	Source/ Instruments
• Scheduled inventory assessment • Designated position with responsibility for asset management in each unit • Unused or underused assets are shared among units	• Asset inventories • Frequency of asset sighting • Write-offs or transfers

Measure: Information is utilized and protected appropriately	
Evidence	Source/ Instruments
• Security infraction statistics (if releasable) • Protection of personnel files • Protection of classified files/assets	• Audits

Measure: Deliverables are timely and effective	
Evidence	Source/ Instruments
• Milestone achievement	• Program audits • CPME

The following issues were noted in the Cycle 1 report, based on results of the Stewardship pilot survey conducted in summer 2008.[165]

Financial Management and Control: Although responses were generally good, there were instances of ineffective use of delegations that suggest a need for professional development of subordinates.

Project Management: Although project management practices seem to be present in DRDC, there are still many instances where a project management culture is not fully established.

Procurement: There seem to be issues around procurement processes and reporting. The processes may be a consequence of the FAA, and so invariant, but improved clarity of process and reporting of progress of files might address this issue indirectly.

Asset Management: Capital planning appears to be weak among level 3 managers.

Information Management: Project documentation, and financial record reconciliation are both candidates for improvement among level 3 managers.

These issues were revisited by Pilot Survey 3 in Cycle 2 to determine if there has been change in these areas. Some of the issues, such as delegation and project management, were addressed in part in Pilot Survey 2 of Cycle 2 under the auspices of *Risk Management* and *Accountability*.

5.6 Accountability

Accountability has become a cornerstone of good governance in Canada, but what does 'accountability' in the government context really mean? The wide use (and misuse) of the term 'accountability' has resulted in a muddying of its meaning.[166]

Romzek and Dubnick describe four alternative systems of accountability within the public administration context: bureaucratic, legal, professional and political accountability.[167] Each of these systems is based on the relative impact of two factors: the source of the agency's control (internal vs. external) and the degree of control that source has over the agency's actions (high vs. low). See Table 20, opposite.

[165] Craig O'Blenis and Warren Nethercote, pp. 37-38.
[166] Melvin J. Dubnick and Jonathan B. Justice, p. 2.
[167] Barbara S. Romzek and Melvin J. Dubnick, "Accountability in the Public Sector: Lessons from the Challenger Tragedy", *Public Administration Review*, 47:3 May/June 1987, p. 229.

Table 20: Accountability Systems[168]

		Source of Control	
		Internal	External
Degree of Control	High	Bureaucratic	Legal
	Low	Professional	Political

The nature of DRDC's management hierarchy and relationships places it within the bureaucratic accountability system. Under this accountability system, the public servant receives priorities from those at the top of the hierarchy, there is a formal relationship between superior and subordinate, and there are rules and regulations governing expectations and behaviours.[169] Our research and subsequent survey questions will utilize the bureaucratic system model of accountability as a framework.

Aucoin and Heintzman identify three purposes of accountability in a bureaucratic system: control, assurance and continuous learning.[170] Accountability is a mechanism for exercising control over the decision-making of subordinates in a system of devolved authority. Managing for and reporting outcomes and results helps ensure accountability, as these increase transparency and disclosure without resorting to excessive micro-management. [171]

In the parlance of Agency Theory,[172] accountability also functions to "provide assurance to principals that their agents are fulfilling their responsibilities as intended."[173] To provide assurance, accountability regimes must specify "goals and objectives, service entitlements and standards, best management practices and performance targets"[174] and include systematic auditing, inspection and review. A key principal of an effective accountability structure is that while "individuals, both when acting alone or in collaboration, must be held accountable for their individual performance"[175], there is also an acknowledgement of "the constraints that affect the realization of outputs and outcomes and over which public servants have little or no control."[176] This is particularly important when determining responsibility for events and outcomes.

To lessen the vulnerability of each person in the superior-subordinate relationship, it is essential to have objective measures of performance, so that the subordinate is aware of the standard to which his/her performance will be held accountable, and the manager has evidence of the subordinate having met (or not) his/her responsibilities for performance.[177]

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[168] Barbara S. Romzek and Melvin J. Dubnick, p. 229.
[169] Barbara S. Romzek and Melvin J. Dubnick, p. 228.
[170] Peter Aucoin and Ralph Heintzman, pp. 45 and 48.
[171] Peter Aucoin and Ralph Heintzman, pp. 48 - 49.
[172] Discussed previously in *Policy and Programs Element*, page 46 of this report.
[173] Peter Aucoin and Ralph Heintzman, pp. 48 - 49.
[174] Peter Aucoin and Ralph Heintzman, pp. 48- 49.
[175] Peter Aucoin and Ralph Heintzman, pp. 48 and 50.
[176] Peter Aucoin and Ralph Heintzman, pp. 48 and 54.
[177] Elliot Jaques, "Chapter Four: Managerial Accountability, Authority, and Dependence" in A General Theory of Bureaucracy, New York: Halsted Press, 1976, p. 79.

Demonstration of performance against expectations implies a regime of reporting and review: the subordinate reports to the superior and the superior reviews performance. In other words, "accountability addresses a manager's responsibility, first to require a subordinate to report, and then to review the subordinate's performance."[178] But it is not enough to just review the performance of subordinates. To have a true accountability regime, the superior must utilize the information gathered from the review to benefit the organization, otherwise, no real purpose is served by the accountability structure. In the words of Aucoin and Heintzman, "those responsible for managing the managers… [must] ensure that accountability for individual management performance counts".[179]

In addition to focusing on control and assurance, the goal of an accountability regime is also to support continuous improvement in policy, the organization or its management.[180] Results of individual performance assessments (both positive and negative) should be utilized as learning opportunities.[181]

[A]ccountability can, and should, be a major force for improving performance.[182]

Elliot Jaques describes the accountability regime as a *three level managerial linkage,* depicted in Figure 40, where "the manager is accountable to the manager-once-removed for his own work and for the work of his subordinate, and he manages his subordinate within the terms of reference set by the manager-once-removed."[183] The manager-once-removed is, in turn, accountable to the Governing Body for his own work and for the work of his subordinate, the manager.[184] The manager may delegate responsibilities to subordinates (in fact, ordinarily *must do so)* but cannot escape accountability to his own manager (the manager-once-removed) for those delegated responsibilities and authorities. The manager must have requisite delegated authority from the manager-once-removed to exploit the resources assigned, whether human or financial. It has been argued that "in fact, accountability should be viewed as that which is exchanged for the devolution of authority. It can be a positive opportunity to demonstrate performance results against the expectations of those who have faith and trust in an individual, an element of the organization, or the organization itself."[185]

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178 Peter Aucoin, private communication, July 7, 2008.
[179] Peter Aucoin and Ralph Heintzman, p. 51.
[180] Peter Aucoin and Ralph Heintzman, p. 52.
[181] Peter Aucoin and Mark D. Jarvis, *Modernizing Government Accountability: A Framework for Reform,* Canada School of Public Service, 2005, p. 9.
[182] Peter Aucoin and Ralph Heintzman, p. 47.
[183] Elliot Jaques, p. 65.
[184] Elliot Jaques, p. 65.
[185] Department of National Defence, *Strengthening Accountability and Comptrollership in National Defence*, June 2004, p. C8/22, available from: http://www.admfincs.forces.gc.ca/sacnd-rrfcdn-eng.asp.

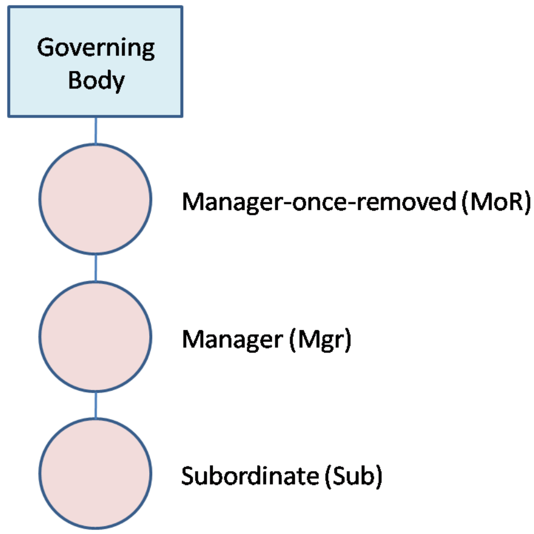

Figure 40: Jacques' Three-level Managerial Linkage[186]

This manager-subordinate relationship has the following features:

The subordinate has contracted to carry out …delegated tasks and must do so;

The subordinate is … vulnerable to the manager's assessment of his performance;

A manager is … vulnerable to the quality of his subordinate's performance. [187]

Frameworks and systems describe the environments in which accountability works, or is required, but do not define accountability *per* se. Definitions of accountability typically include reference to "willingness to accept responsibility or to account for one's actions."[188] However, it can be argued that this definition of accountability neglects much of the word's more subtle yet important aspects: liability, answerability, responsiveness, obligation, obedience, fidelity and amenability.[189] These aspects are not synonymous with accountability, rather they form a part of the accountability concept, and particular aspects may figure more prominently depending on the context in which the term accountability is utilized.

Within the bureaucratic system, the definition of accountability provided by Aucoin, Smith, and Dinsdale eloquently incorporates the aspects of accountability that are necessary for good governance:

> Accountability [is] to justify, explain or defend one's actions (or those of one's subordinates) based on powers and responsibilities bestowed by a superior authority. The account may encompass a statement of any necessary corrective

186 Elliot Jaques, p. 63.
187 Elliot Jaques, p. 66.
188 Merriam-Webster On-line Dictionary, available from: http://www.merriam-webster.com/dictionary/accountability.
189 Melvin J. Dubnick and Jonathan B. Justice, pp. 5-7.

> action to be taken. The superior authority has the obligation to hold to account all those on whom it has bestowed powers and responsibilities.[190]

Responsibility is a key feature of this definition of accountability and it is important to note again that responsibility is not synonymous with accountability. Rather, consider that *responsibilities* are delegated to subordinates along with the *authority* necessary to reasonably perform these delegations; in exchange the subordinate must *account* to his/her superior for his/ her performance of these responsibilities. The Somalia Inquiry attempted, without much success, to clarify the difference as follows:

> One who is authorized to act or exercise (sic) authority is 'responsible.' Responsible officials are held to account. An individual who exercises powers while acting in the discharge of official functions is responsible for the proper powers or duties assigned.[191]

This murky explanation offered in *Dishonoured Legacy* is unfortunate given the importance of the inquiry to the organizational development of the Department of National Defence and the Canadian Forces.

In the document *Organization and Accountability*, the Department of National Defence solidly links the triad of responsibility, authority and accountability, while introducing the concept that delegated authorities and responsibilities bring with them the implicit *obligation* to act:

> Having a [delegated] *responsibility* involves having the [delegated] *authority* and the obligation to act, including the authority to direct or authorize others to act. It also means being *accountable* for how those responsibilities have been carried out in light of agreed or set expectations, particular duties, or obligations. In a public sector organization … each individual is obliged to *account* fully and promptly to those who, in the hierarchy, conferred the responsibilities, for the way they have been carried out and for how the relevant authorities have been used.[192]

The present authors have added "[delegated]" to the quotation to stress that responsibility and authority are typically bestowed by a superior, who will hold the actions of the delegate to account, as per Aucoin, Smith and Dinsdale.

The accountability element of the proposed DRDC MAF will use Jaques' accountability regime, along with Aucoin and Heinzman's tri-partite explanation of accountability's purposes, as its foundation.

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190 Peter Aucoin, Jennifer Smith, and Geoff Dinsdale, *Responsible Government: Clarifying essentials, dispelling myths and exploring change*, Ottawa: Canadian Centre for Management Development, 2004, p. 88.

191 Government of Canada, Report of the Commission of Inquiry into the Deployment of Canadian Forces to Somalia, *Dishonoured Legacy: The Lessons of the Somalia Affair*, Ottawa: Public Works and Government Services Canada, 1997, p. 393.

192 Department of National Defence, *Organization and Accountability: Guidance for Members of the Canadian Forces and Employees of National Defence*, second ed., September 1999, p. 2, available from: http://www.forces.gc.ca/admpol/Organization-e.html.

Accountability: Expectations

The Expectations Tier of the DRDC MAF was developed in Cycle 1, based on the TB MAF and consultation with key DRDC personnel. Figure 41 illustrates the Accountability component of the DRDC MAF Expectations tier.

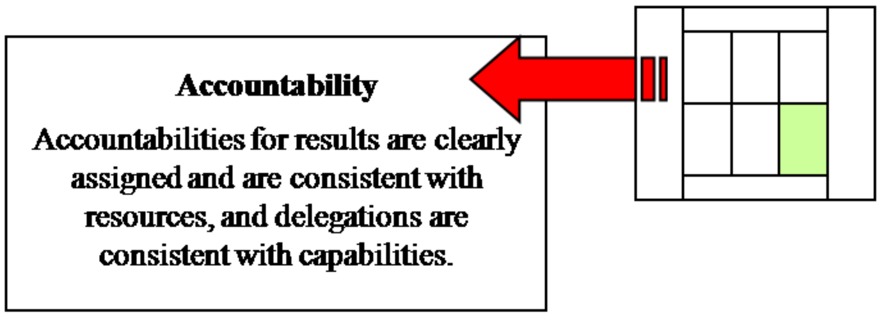

Figure 41: Accountability, Expectations Tier

Accountability: Indicators

The TB Accountability Indicators Tier has three elements; As per the previous section on Risk Management, the DRDC Indicators for Accountability are based on those of the TB MAF. The Indicators are tailored to reflect the DRDC environment and level of management utilizing the MAF.

<u>Clear accountabilities and responsibilities for due process and results.</u> This element clear and applicable and has been transferred directly to the indicator “Clear accountabilities and responsibilities for due process and results”. Due process can be thought of as referring to duties which are included in a subordinate’s job description (including authorities delegated by FAA), while responsibilities for results are tied to tasks assigned to an individual by a superior.193 The subordinate is, in fact, accountable for both duties and tasks, but the chain of accountability may differ. Additionally, the due process and results relationship suggests that public servants are accountable not only for the outcome of an initiative, but also for how the outcome was achieved, or simply put ‘the ends do not justify the means’.

<u>Delegations appropriate to capabilities</u>. This element is applicable, but for the sake of clarity has been amended to the indicator “*Delegations consistent with capabilities*.”

<u>Cascading commitments in Performance Management Agreements</u>. The term ‘Performance Management Agreement (PMA) is not widely used outside of executive (Level 1) management, so would be of little value to managers at DRDC. Instead, managers would have performance objectives or goals, and the assignment of tasks to subordinates should support those goals. This element is captured in the indicator “*Subordinates’ goals reflect those assigned to their supervisors*.”

[193] Peter Aucoin, private communication, July 7, 2008.

Figure 42, below, depicts the Indicators for Accountability in the DRDC MAF.

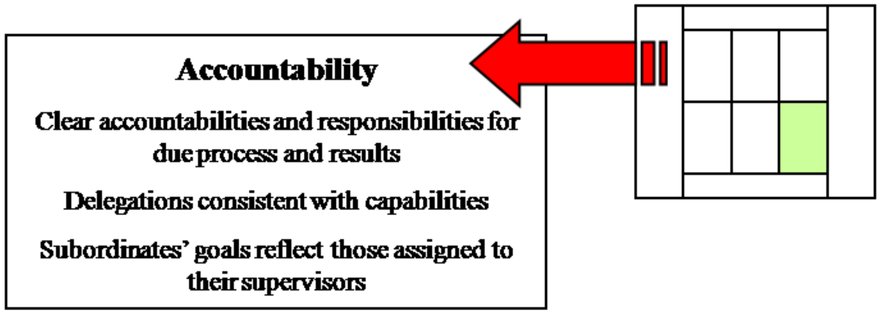

Figure 42: Accountability, Indicators Tier

Accountability: Measures

The Measures Tier of the TB MAF includes four measures for Accountability:[194]

- Clarity of accountabilities;
- Delegations regularly reviewed;
- Executive committee oversight of performance management and regular review of performance; and,
- Alignment of individual with corporate commitments.

Although accountability tends to focus on individual performance, the questions in the survey instrument must also address organizational performance. The Stewardship element addresses delegated authority, and as a result, it will not be covered in Accountability. There is no one-to-one correspondence between the Accountability measures of the TB MAF and those of the DRDC MAF.

Figure 43, below, depicts the Measures for Accountability in the DRDC MAF.

[194] TBS, *Management Accountability Framework.*

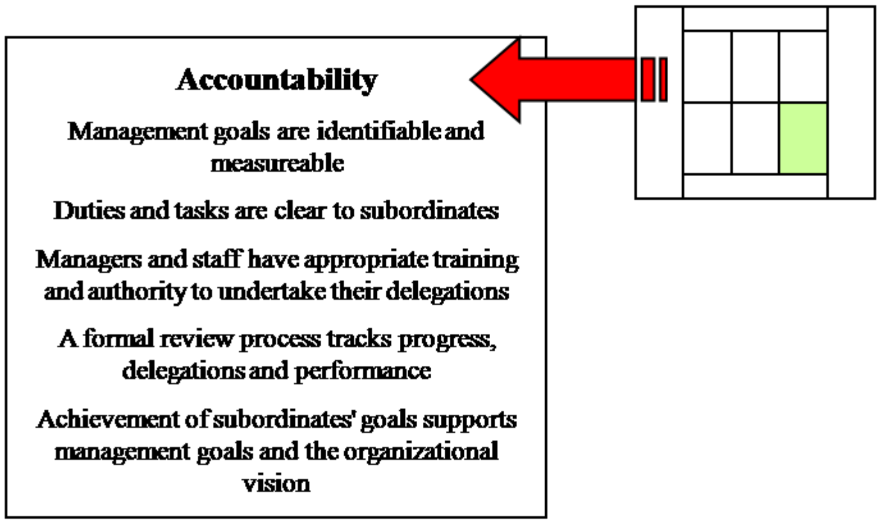

Figure 43: Accountability, Measures Tier

Table 21 presents examples of information which can be used as evidence of each measure.

Table 21: Evidence and Instruments for Accountability

Measure: Management goals are identifiable and measureable	
Evidence	Source/ Instruments
• Goals are set by or agreed on with superior managers • Goals are expressed to identify measurable products. • Desired outcomes are documented • Identified outcomes correspond to the assigned tasks	• Performance Management Program (PMP) Annual or Triennial Scorecard • PMP for Level 2 Managers • Management/annual objectives for Levels 3 and 4 (assessment of local practice) • Managers' survey • Subordinate PLP's

Measure: Duties and tasks are clear to subordinates	
Evidence	Source/ Instruments
• Assigned tasks are communicated effectively. • The duties associated with a position are documented and accessible. • Subordinates are able to seek clarification of duties and/or tasks from superiors and/or Corporate Services.	• Current statements of duties • Measureable objectives • Timely performance assessment, linked to objectives

Measure: Managers and staff have appropriate training and authority to undertake their delegations	
Evidence	Source/ Instruments
• Managers have received the training necessary to execute the delegations normally associated with their position. • Personal Learning Plans inform training and goal assignment.	• Records of managers' certifications • Records of mandatory management training

Measure: A formal review process tracks progress, delegations and performance	
Evidence	Source/ Instruments
• All employees undergo routine Performance Appraisals • Milestones are identified to monitor progress towards goals	• Performance appraisal statistics

Measure: Achievement of subordinates' goals supports management goals and the organizational vision	
Evidence	Source/ Instruments
• goals, if achieved, will support the achievement of a superior's goals. • goals include elements tied to milestones identified in CPME (the DRDC program formulation tool) for which the manager is responsible.	• Managers' survey

6 Survey Instrument Design

The MAF is intended for use as an organizational development and process improvement tool. Annually, the Agency will gather information from a variety of sources to assess its performance against the 10 elements of the MAF to aid in reporting to the ADM. One of the information sources utilized will be a Manager's survey. The survey approach is intended to gather information on how DRDC managers at relevant operational levels function in the framework of the ten MAF elements.

6.1 Cycle 2 Survey Design

The areas of the MAF reviewed through a survey approach in this cycle were Risk Management, Accountability, Policy & Programs, and Service; Stewardship was also reassessed. These elements were assessed through two separate surveys. The first –Pilot Survey 2- encompassed Risk Management and Accountability. The second –Pilot Survey 3- assessed Policy & Programs and Service, and re-assessed Stewardship. The People element was not addressed in these surveys, as relevant information can be accessed through the Public Service Employee Survey, 2005 and 2008.[195]

For our purposes, Levels 2, 3 and 4 were the target population. 'Levels' are as defined or implied, in the DND and DRDC delegation matrices.

The positions which comprise these Levels are listed in Table 22.

Table 22: DRDC Management Levels

Organizational Level	Incumbents
Level 1	CEO DRDC
Level 2	Directors General, Chief of Staff/ADM(S&T)
Level 3	Deputy Directors General, Chief Scientists, Directors, Scientific Section Heads, Managers
Level 4	Functional Authorities, Supervisors

[195] CPSA, *Public Service Employee Survey 2005;* TBS, *2008 Public Service Employee Survey Results.*

Pilot Survey 2 Design

Pilot Survey 2 questions were developed based on DRDC MAF Expectations, Indicators, and Measures Tiers for Risk Management and Accountability, as well as input from pre-existing, publicly available survey instruments. [196]

Survey questions were developed to address each of the measures in Risk Management and Accountability. The majority of questions were closed so that respondents could choose only from pre-determined alternatives. Where appropriate, respondents were given the option to write in alternate responses (open questions). The survey questions were then checked for redundancy, clarity, and brevity, and adjusted where appropriate. Subject matter experts reviewed a draft survey; we utilized their input to adjust the survey content and presentation. At this point, the survey was sent out for translation into French.

The final set of questions were sorted into a logic tree to ensure each respondent was only asked questions applicable to his/her job level and duties. The bulk of questions are aimed at Level 3 managers, and to a lesser extent, Level 4 managers. Level 2 managers are asked comparatively few questions. This is by design, in part because the DRDC MAF is geared towards lower level managers, and also because Level 2 managers are few in numbers, challenging the need for anonymity. Thus we did not ask more sensitive performance related questions to Level 2 managers.

A paper based survey was tested by a small subset of the target population. Information from our test group was used to refine the survey for the online version. We tested the on-line version of the survey, and made minor adjustments to the logic tree. The on-line survey was then re-tested by the subset. Finally, the survey was reviewed for compliance to internal research standards by the DND Social Science Research Review Board through DGMPRA.

The survey was distributed to all 141 of the Level 2, Level 3, and Level 4 functional authorities who were eligible to attend the DRDC Managers Workshop, as of February 1, 2009. The questionnaire was implemented bilingually on the DRDC Atlantic ORACLE® server. Survey participants were provided with a link that could be accessed from anywhere within the DRENet. Pilot Survey 2 was launched through DRDC Atlantic Oracle® server on Wednesday February 4, 2009, and closed on Monday February 16, 2009.

Survey 2 Limitations

There are a number of limiting factors in the design and implementation of this survey. Paramount among these is that DND has not yet released an approved Corporate Risk Profile (CRP). Existence of a CRP and distribution throughout the organization is a cornerstone of the MAF risk management expectation; without this strategic document, DRDC cannot possibly be expected to align its RM

[196] CRS-DND, "Annex B- Diagnostic Tool" in *Baseline Study: Integrated Risk management within the DND/CF*; Audit Office of New South Wales, "Appendix: Questionnaire Risk Management" in *Performance Audit Report: Managing Risk in the NSW Public Sector*; Barbara D. Adams, Sonya Waldherr, and Kenneth Lee, "Annex E" in *Interoperable Risk Management in a Joint Interagency Multinational Environment*, DRDC CR2007-068, August 2007; Canada Public Service Agency, *Public Service Employee Survey 2005,* available from: http://www.collectionscanada.gc.ca/webarchives/20071115073357/http://www.psagency-agencefp.gc.ca/survey-sondage/2005/index_e.asp

strategy with that of DND. The DND CRP is in the final stages of development and is expected to be given Ministerial approval by the end of 2009.

DRDC appears to lack a comprehensive RM strategy; there is neither a process in place to identify stakeholders, nor a communication plan to communicate with stakeholders. Stakeholder identification appears to be based on corporate memory of past consultations; this knowledge should be captured in a data system, and an approach, such as an environmental scan, should be developed to identify stakeholders who may not have been considered in the past.

Pilot Survey 3 Design

Pilot Survey 3 questions were developed based on DRDC MAF Expectations, Indicators, and Measures tiers for Policy and Programs and Service, as well as input from pre-existing, publicly available survey instruments and policy guides. [197] Questions about the Stewardship element are based on the questions and results of Pilot Survey 1.

Survey questions were developed to address each of the measures in Policy and Programs, and Service; for the Stewardship element, questions focused on areas of concern from the Cycle 1 survey analysis. The majority of questions were closed so that respondents could choose only from pre-determined alternatives. Where appropriate, respondents were given the option to write alternate responses (open questions). As with Survey 2, the survey questions were then checked for redundancy, clarity, and brevity, and adjusted where appropriate. Subject matter experts reviewed the draft survey; we utilized their input to adjust the survey content and presentation, and then had the final survey translated into French.

The final set of questions were sorted into a logic tree to ensure each respondent was only asked questions applicable to his/her job level and duties. Depending on the respondent's responsibilities, questions ranged from a minimum of 16 to a maximum of 59 questions to complete, taking from 15 to 40 minutes.

A paper based survey was tested by a small subset of the target population. Information from our test group was used to refine the survey for the online version. We tested the online version of the survey, and made minor adjustments to the logic tree. The online survey was then re-tested by the subset. Finally, the survey was reviewed for compliance to internal research standards by the Social Science Research Review Board through DGMPRA.

The survey was distributed to all 147 of the Level 2, Level 3, and Level 4 functional authorities who were eligible to attend the DRDC Managers Workshop, as of May 15, 2009. The questionnaire was implemented bilingually on the DRDC Atlantic ORACLE® server. Survey participants were provided with a link that could be accessed from anywhere within the DRENet. Pilot Survey 3 was launched through DRDC Atlantic Oracle® server on Friday May 29, 2009, and closed on Friday June 12, 2009.

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[197] Office of the Deputy Prime Minister, *Assessing Strategic Partnerships: The Partnership Assessment Tool*, [AKA Nuffield Partnership Assessment Tool], United Kingdom, 2003, available from: http://www.communities.gov.uk/publications/localgovernment/assessingstrategicpartnership; TBS, *Succession Planning and Management Guide*.

Assessing Measures

A number of questions have response sets utilizing a Likert scale. The most common Likert scale in our survey is that of frequency, ranging from 'Always' to 'Never'. For purposes of analysis, responses are sometimes grouped to reflect consistency, so that responses of Always and Often are considered 'Consistent', while responses of Sometimes and Rarely are considered 'Inconsistent'; a response of Never remains classified as Never.

For Likert Scales utilizing level of agreement, where responses of 'Strongly Agree' and 'Agree' together total 80% or more of the valid responses to a single question, the overall response to the question is considered 'Positive'.

To test relationships between variables, we have chosen to measure statistical significance against a minimum threshold of 95% confidence, where the critical value $\alpha = 0.05$, so that p (the significance of the relationship between the variables) must be < 0.05; SPSS reports the value of p as a statistic, 'Approximate Significance'. For relationships between variables to be considered statistically significant, the 'Approximate Significance' must be between 0.000 (meaning there is less than 0.001% chance the result is due to sampling error, corresponding to a relationship at the 99.9% confidence level) and 0.050 (meaning there is a 5% chance the result is due to sampling error, corresponding to a relationship at the 95% confidence level).

In most cases, Kendall's tau-b or tau-c tests are utilized to analyse relationships between two given ordinal variables. Cramer's V is also reported, to give additional information on the magnitude and significance of any relationship. Kendall's tau-b or tau-c values have been assessed according to the following scale in Table 23.

Table 23: Ordinal Relationship Assessment Scale

Value (absolute)	Descriptor
0.0 – 0.099	No relationship
0.1 – 0.199	Weak relationship
0.2 – 0.299	Moderate Relationship
0.3 – 0.399	Moderate- Strong Relationship
0.4 – 0.499	Strong Relationship
0.5 and higher	Very Strong

7 Survey Analysis

For the convenience of the reader, statistical outputs presented have been numbered consecutively throughout Section 7, using the same convention as numbering of equations.

7.1 Pilot Survey 2 Results

Of the 141 survey invitations solicited, there were 89 responses, of which 75 were valid; this is a valid response rate of 53%.

Response rates by management level were:

L2: 5 valid responses of 11 possible (45% return)

L3: 63 valid responses of 100 possible (63% return)

L4: 7 valid responses of 30 possible (23% return)

Response rates for Level 4 Functional Authorities are too small to be considered generalizable, but their data will be used as a basis of discussion points for future analysis. Level 2 Managers' data can only be reported in non-identifying parameters.

The logic tree within the questionnaire resulted in a varying number of questions for respondents: the minimum was 7 and the maximum was 49 for completed surveys.

Results are presented according to management level of the respondents.

Level 2 Managers

Four of five Level 2 respondents (80%) agree that their centre's organizational chart accurately reflects the reporting structure (Q3); the remaining respondent cited some challenges due to the relationship between the DRDC organization and DND.

Overall, Level 2 Managers appear to have confidence that their subordinates understand their roles, responsibilities, and authority.

Q4 Do you have confidence subordinates understand their roles?				
		Frequency	Percent	Valid Percent
Valid	Always	1	20.0	20.0
	Often	4	80.0	80.0
	Total	5	100.0	100.0

(1)

Q5 Do you have confidence subordinates understand their responsibilities?				
		Frequency	Percent	Valid Percent
Valid	Always	3	60.0	60.0
	Often	2	40.0	40.0
	Total	5	100.0	100.0

(2)

Q6 Do you have confidence subordinates understand their authority?				
		Frequency	Percent	Valid Percent
Valid	Often	5	100.0	100.0

(3)

All L2 managers (100%) report setting performance goals for their subordinates (Q7), but are divided as to applying measurable standards to those goals consistently.

Q9 Do subordinates' performance objectives include measurable standards?				
		Frequency	Percent	Valid Percent
Valid	Often	3	60	60
	Rarely	2	40	40
	Total	5	100	100

(4)

Level 2 managers report basing subordinates' performance objectives on their own performance objectives (100%) and their superior's expectations of performance (100%); employees' Personal Learning Plans (80%); Corporate Initiatives (80%); past year's performance (40%); and employees' statement of duties (20%). None of the Level 2 respondents base performance objectives with reference to CPME milestones.

Q8 How do you set performance objectives for subordinates?		
	Yes (%)	No (%)
based on my superior's expectations	100	0
based on subordinates' PLPs	80	20
based on corporate initiatives	80	20
based on other	80	20
based on past years' performance	40	60
based on statement of duties	20	80
based on CPME milestones	0	100

(5)

'Other' basis for setting performance objectives can be broadly stated as "alignment with identified goals and priorities at a strategic level," specifically, these include:

Performance Management Agreements;

Functional planning priorities;

Convening Letter;

Level 1 priorities; and,

Centre-level goals and initiatives.

All Level 2 managers (100%) report that regardless of how performance objectives are set, subordinates' objectives consistently support the performance objectives of their superiors. This is consistent with the roll up nature of the Accountability element.

Q10 Do subordinates' performance objectives support your own performance objectives?		
	Frequency	Valid Percent
Always	3	60
Often	2	40
Total	5	100

(6)

Level 3 Managers

Level 3 managers were the primary respondents in the survey. They were the largest part of the population, with 63 valid responses of 141 eligible participants, and were the target of the greatest number of questions.

Accountability: Performance measures and management

Most Level 3 respondents report that their performance is reviewed through a combination of methods, most commonly against general expectations, salary administration systems and agreed performance objectives.

Q 11 How does your superior review your performance?		
	Yes (%)	No (%)
against salary admin system or performance management framework	69.8	30.2
against general expectations	60.3	39.7
against agreed performance objectives	50.8	49.2
against statement of duties	39.7	60.3
against my PLP	25.4	74.6
on an ad hoc basis	14.3	85.7

(7)

Although four respondents selected ‘other’ as the method by which their performance is reviewed, the comments actually indicate that the methods fit into established categories, and so were included in the appropriate categories above.

Forty percent (40%) of respondents report that their superior consistently (Always or Often) sets performance objectives for them, while 54% inconsistently (Sometimes or Rarely) have objectives set, and the remaining 6% never have performance objectives set by their superior.

Q12 Does your superior set performance objectives for you?

		Frequency	Percent	Valid Percent
Valid	Always	10	15.9	15.9
	Often	15	23.8	23.8
	Sometimes	20	31.7	31.7
	Rarely	14	22.2	22.2
	Never	4	6.3	6.3
	Total	63	100.0	100.0

(8)

For those who do have performance objectives set by superiors, more than half (64%) do not consistently include any measurable standards.

Q13 Do your performance objectives include measurable standards?

		Frequency	Percent	Valid Percent
Valid	Always	5	7.9	8.5
	Often	16	25.4	27.1
	Sometimes	23	36.5	39.0
	Rarely	14	22.2	23.7
	Never	1	1.6	1.7
	Total	59	93.7	100.0
Missing	99	4	6.3	
Total		63	100.0	

(9)

Level 3 managers who inconsistently have measurable standards as a part of their performance objectives appear more likely to inconsistently set measurable standards as a part of their subordinates' performance objectives, as seen by comparing results of questions 13 and 35.

Q35 Do your subordinates' performance objectives include measurable standards? * Q13 Do your performance objectives include measurable standards?							
		Do your performance objectives include measurable standards?					Total
		Always	Often	Sometimes	Rarely	Never	
Do your subordinates' performance objectives include measurable standards?	Always	1	3	0	0	0	4
	Often	3	7	13	6	0	29
	Sometimes	0	4	8	3	1	16
	Rarely	0	0	1	5	0	6
Total		4	14	22	14	1	55

(10)

A non-parametric Kendall's tau –c test indicates there is a moderate-strong positive relationship between the rankings of the two variables, and that the relationship is statistically significant at 99.9% confidence.

Q13 Do your performance objectives include measurable standards? * Q35 Do your subordinates' performance objectives include measurable standards?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.344	0.000
Nominal by Nominal	Cramer's V	0.381	0.020

(11)

Almost thirteen percent (12.7%) of Level 3 respondents are unaware of how their own objectives might impact their superior's performance objectives, while 23.7% believe their objectives are inconsistent in supporting the objectives of their superior.

Q14 Do your performance objectives support your superior's own performance objectives?				
		Frequency	Percent	Valid Percent
Valid	Always	15	23.8	25.4
	Often	22	34.9	37.3
	Sometimes	11	17.5	18.6
	Rarely	3	4.8	5.1
	Uncertain/ Don't Know	8	12.7	13.6
	Total	59	93.7	100.0

(12)

Level 3 managers are divided in the consistency of setting subordinates' performance objectives to support their own objectives (52.7% consistently vs. 47.4% inconsistently).

Q34 Do your subordinates' performance objectives support your own performance objectives?			
		Frequency	Valid Percent
Valid	Always	7	12.3
	Often	23	40.4
	Sometimes	26	45.6
	Rarely	1	1.8
	Total	57	100.0

(13)

Level 3 managers who consistently have performance objectives which support their superior's objectives appear more likely to consistently set subordinates' performance objectives so that they support their own objectives. This is consistent with a roll-up approach of Program Activity Architecture. A non-parametric Kendall's tau-c test indicates there is a strong positive relationship between the rankings of the two variables, and that the relationship is statistically significant at 99.9% confidence.

Q34 Do your subordinates' performance objectives support your own performance objectives? * Q14 Do your performance objectives support your superior's own performance objectives?			
		Do your performance objectives support your superior's own performance objectives?	
		Always / Often	Sometimes / Rarely
Do your subordinates' performance objectives support your own performance objectives?	Always / Often	64%	29%
	Sometimes / Rarely	36%	71%
Total		100%	100%

(14)

Q 14 Do your performance objectives support your superior's own performance objectives? * Q34 Do your subordinates' performance objectives support your own performance objectives?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.489	0.000
Nominal by Nominal	Cramer's V	0.552	0.000

(15)

Level 3 managers whose subordinates are given performance objectives which roll up to support their own performance objectives also appear more likely to set measurable standards for their subordinates' performance. A Kendall's tau-b statistical test indicates there is a moderate positive relationship between the rankings of the two variables, and that the relationship is statistically significant at 95% confidence.

Q34 Do your subordinates' performance objectives support your own performance objectives? * Q35 Do your subordinates' performance objectives include measurable standards?			
		Do your subordinates' performance objectives support your own performance objectives?	
		Always / Often	Sometimes / Rarely
Do your subordinates' performance objectives include measurable standards?	Always / Often	67%	48%
	Sometimes / Rarely	33%	52%
Total		100%	100%

(16)

Q34 Do your subordinates' performance objectives support your own performance objectives? * Q35 Do your subordinates' performance objectives include measurable standards?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.241	0.044
Nominal by Nominal	Cramer's V	0.279	0.148

(17)

Three-quarters of respondents (74.6%) consistently set performance objectives for their subordinates; however, only 59% consistently include measurable standards.

Q32 Do you set performance objectives for your immediate subordinates?				
		Frequency	Percent	Valid Percent
Valid	Always	22	34.9	37.3
	Often	22	34.9	37.3
	Sometimes	11	17.5	18.6
	Rarely	4	6.3	6.8
	Total	59	93.7	100.0

(18)

Q35 Do your subordinates' performance objectives include measurable standards?				
		Frequency	Percent	Valid Percent
Valid	Always	5	7.9	8.5
	Often	30	47.6	50.8
	Sometimes	18	28.6	30.5
	Rarely	6	9.5	10.2
	Total	59	93.7	100.0

(19)

The most prevalent method for setting subordinates' performance objectives is based on the manager's own superior's expectations of the unit (69.5%).

Q33 How do you set performance objectives for subordinates?		
	Yes (%)	No (%)
Based on my own superior's expectations of my unit	69.5	30.5
Based on subordinate' s PLP	64.4	35.6
Based on corporate initiatives	62.7	37.3
Based on work description or statement of duties	55.9	44.1
Based on past years' performance	54.2	45.8
Based on milestones in CPME	50.8	49.2
Based on other criteria	11.9	88.1

(20)

Nearly twelve percent (11.9%) also base objectives on 'other criteria' which may include:

career requirements for advancement;

pay plan;

subordinate input;

objectives for overall Section performance improvement; and,

documentation such as terms of reference, goals and objectives.

Almost 80% of Level 3 respondents say they make reports of progress to their superior during a formal program review; 17.5% say they do not make reports of progress, while 3.2% are unsure.

Q28 Do you make progress reports of work to your superior during a formal program review?			
		Frequency	Valid Percent
Valid	Yes	50	79.4
	No	11	17.5
	Uncertain/ Don't Know	2	3.2
	Total	63	100.0

(21)

The results of question 28 were cross-tabulated against centre to further investigate the 13 'No' or 'Uncertain/Don't know' responses. Six of the 13 responses came from S&T Operations and COS ADM(S&T) where annual internal program reviews are not held. The remainder came from DRDC's Valcartier, Toronto and Suffield, where there were a total of 25 'yes' responses. There are a number of possible reasons for the 'No' responses, such as: the respondents could be Chief Scientists or DDGs, who typically support the DG during program reviews, rather than reporting; the respondents could be managers who are for some reason not expected to present at centre program reviews; or, the respondents could be new Level 3s who were not yet aware of that requirement.

Q28 Do you make progress reports of work to your superior during a formal program review? * Q1 Centre Location			
	Yes	No	Uncertain/ Don't Know
Valcartier, Toronto, Suffield, S&T Operations, Chief of Staff	27	11	2

(22)

The number of Level 3 managers who report requiring reports of progress from subordinates in preparation for a formal program review is 82%, a number which mirrors responses from those who say they make reports of progress to their own superior during a formal program review.

Q30 Do you require reports of progress from subordinates in preparation for a formal program review?			
		Frequency	Valid Percent
Valid	Yes	41	82.0
	No	9	18.0
	Total	50	100.0

(23)

It appears that managers who are required to make progress reports to superiors in preparation for formal reviews are more likely to require reports of progress from their subordinates in preparation for a program review. Strictly comparing only responses of ‘yes’ or ‘no’ in the two categories, Fisher’s Exact and Phi tests suggest there is a strong positive relationship between the variables, which is statistically significant at 95% confidence.

Q28 Do you require reports of progress from subordinates in preparation for a formal program review? * Q30 Do you make progress reports of work to your superior during a formal program review?				
		Do you make progress reports of work to your superior during a formal program review?		
		Yes	No	Total
Do you require reports of progress from subordinates in preparation for a formal program review?	Yes	35	5	40
	No	4	5	9
Total		39	10	49

(24)

Q30 Do you require reports of progress from subordinates in preparation for a formal program review? * Q28 Do you make progress reports of work to your superior during a formal program review?			
	Value	Approx Sig.	Exact Sig.
Fisher’s Exact Test	n/a	n/a	0.011
Phi	0.414	0.004	0.011

(25)

Level 3 managers were asked to describe, in general, how they deal with situations where subordinates fail to meet set performance objectives (Q38).

Themes arising from these comments are positive for the most part. The most prevalent method of dealing with subordinates who fail to meet objectives is to discuss the problem face to face, identify the core issues, collaborate to find solutions, develop a revised performance plan and then monitor progress.

> “Mutual agreement of the problem at hand, mutual agreement on a corrective plan, including specific timelines to correct the situation, and regular follow up till satisfactory resolution.”

Solutions to objective failures may include reassigning some of the subordinate’s other duties so s/he can devote more resources to the project, adding another subordinate to the project, or entirely re-assigning the project to another individual. Some managers also report utilizing HR systems; initially this may include coaching and formal training, and may take on more corrective applications such as successive disciplinary action, where necessary. Some managers report noting project failures for discussion at annual employee performance reviews and/or when developing Personal Learning Plans.

> “Work out a solution to assist subordinates to achieve the performance objectives that have been set. This could be accomplished through learning and development; work re-assignment; coaching, etc.”

"Comments on PER."

"Modify the individual's Learning Plan."

Managers tend to differentiate between failures due to factors beyond the subordinate's control, and factors within their control.

"If failure to meet [objectives] is a result of technical challenges or circumstances outside of individual control (i.e. where sufficient planning and effort have occurred), then I help them plan alternatives/corrective measures. We increase driving forces and reduce restraining forces."

"If failure to meet is a result of quality/quantity of effort put forth by the individual, then I counsel them, set metrics that are smaller and closer together, and work with them."

Other themes emerging from the comments appear to be of questionable value. Some managers report they address failures by simply re-iterating the importance of successful project completion. Examples of this type of comment are:

"Keep asking until it gets done."

"Negotiate, nag, and (rarely) issue direct orders to get on with it."

Some managers also report dealing with failure to meet objectives by revising the objectives. If this is done as a result of a reassessment of resources and constraining factors, it may be reasonable; however, some comments seem to suggest that objectives are revised as a way of making the project appear successful.

"Either I repeat what my expectations are or I change my expectations."

Accountability: Duties and Tasks

The survey addressed tasks and duties separately. Tasks are specific work items assigned by a superior that could be associated with milestones, whereas duties represent ongoing responsibilities that would include delegated authorities under legislation, such as FAA. In the language of the MAF, tasks relate to results while duties relate to due process.

Half (50.8%) of Level 3 respondents acknowledge a distinction between assigned tasks and ongoing duties in their own work (Q27). Respondents are somewhat more consistent (61%) in making a distinction between tasks and duties when they assign them to subordinates (Q31).

Q27 Do you see a distinction between ongoing duties and specific tasks assigned to you by your superior?			
	Frequency	Percent	Valid Percent
Yes	32	50.8	50.8
No	28	44.4	44.4
Uncertain/ Don't Know	3	4.8	4.8
Total	63	100.0	100.0

(26)

Q31 Do you distinguish between duties and tasks that you assign to subordinates?				
		Frequency	Percent	Valid Percent
Valid	Always	9	14.3	15.3
	Often	27	42.9	45.8
	Sometimes	16	25.4	27.1
	Rarely	6	9.5	10.2
	Never	1	1.6	1.7
	Total	59	93.7	100.0

(27)

Nearly 70% of those who distinguish between their own duties and tasks also distinguish between the duties and tasks of their subordinates; conversely, nearly the same percentage who do not distinguish between their own duties and tasks, also do not distinguish between the duties and tasks of their subordinates. Results of a tau-b statistical test show a moderate-strong positive relationship between the variables, which is significant at 99% confidence. This suggests that the manager who does see a distinction between duties and tasks assigned by a superior is also more apt to be consistent in distinguishing between duties and tasks that are assigned to subordinates.

Q31 Do you distinguish between duties and tasks that you assign to subordinates? * Q27 Do you see a distinction between ongoing duties and specific tasks assigned to you by your superior?						
		Do you see a distinction between ongoing duties and specific tasks assigned to you by your superior?				
		Yes	No	Uncertain/ Don't Know	Total	
Do you distinguish between duties and tasks that you assign to subordinates?	Always / Often	25	9	2	36	
	Sometimes / Rarely	6	15	1	22	
	Never	0	1	0	1	
Total		31	25	3	59	

(28)

Q31 Do you distinguish between duties and tasks that you assign to subordinates? * Q27 Do you see a distinction between ongoing duties and specific tasks assigned to you by your superior?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.381	0.001
Nominal by Nominal	Cramer's V	0.319	0.017

(29)

Level 3 Managers communicate more often on a weekly basis with subordinates about assigned tasks than about ongoing duties.

Q36, Q 37 How often do you communicate with your subordinates about ongoing duties and assigned tasks?			
	Weekly	Monthly	2- 4 Times/ Year
Ongoing Duties	33.9 %	47.5 %	18.6 %
Assigned Tasks	54.2 %	40.7 %	5.1 %

(30)

Level 3 managers who are inconsistent in differentiating between duties and tasks appear slightly more likely to communicate on a weekly and monthly basis with subordinates to discuss duties than managers who are consistent in distinguishing between tasks and duties. However, statistical testing shows a very weak negative relationship between the variables, which is not statistically significant.

Q36 How often do you communicate with your subordinates about ongoing duties? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?							
		Do you distinguish between duties and tasks that you assign to subordinates?					
		Always/ Often		Sometimes / Rarely		Never	
How often do you communicate with your subordinates about ongoing duties?	Weekly	12	33.3%	8	36.4%	0	0%
	Monthly	16	44.5%	11	50.0%	1	100%
	2-4 Times per Year	8	22.2%	3	13.6%	0	0%
Total		36	100%	22	100%	1	100%

(31)

Q36 How often do you communicate with your subordinates about ongoing duties? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.067	0.568
Nominal by Nominal	Cramer's V	0.217	0.698

(32)

Level 3 managers who are inconsistent in differentiating between duties and tasks also appear slightly more likely to communicate on a weekly basis with subordinates to discuss assigned tasks than managers who are consistent in distinguishing between tasks and duties. However, statistical testing shows a very weak negative relationship between the variables, which is not statistically significant.

Q37 How often do you communicate with your subordinates about assigned tasks? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?							
		Do you distinguish between duties and tasks that you assign to subordinates?					
		Always/ Often		Sometimes/ Rarely		Never	
How often do you communicate with your subordinates about assigned tasks?	Weekly	18	50%	13	59%	1	100%
	Monthly	16	44%	8	36%	0	0%
	2-4 Times per Year	2	6%	1	5%	0	0%
Total		36	100%	22	100%	1	100%

(33)

Q37 How often do you communicate with your subordinates about assigned tasks? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.033	0.756
Nominal by Nominal	Cramer's V	0.247	0.513

(34)

Managers who distinguish between the duties and tasks assigned to subordinates appear more likely to consistently include measurable standards in the performance objectives of subordinates.

Q35 Do your subordinates' performance objectives include measurable standards? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?			
		Do you distinguish between duties and tasks that you assign to subordinates?	
		Always / Often	Sometimes / Rarely
Do your subordinates' performance objectives include measurable standards?	Always / Often	67%	45%
	Sometimes / Rarely	33%	55%
Total		100%	100%

(35)

A non-parametric Kendall's tau-b test indicates there is a moderate positive relationship between the rankings of the two variables, and that the relationship is statistically significant at 95% confidence.

Q35 Do your subordinates' performance objectives include measurable standards? * Q31 Do you distinguish between duties and tasks that you assign to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.270	0.023
Nominal by Nominal	Cramer's V	0.262	0.215

(36)

Risk Management Training

There are both positive and negative results for Risk Management. Despite only 6% of Level 3 managers reporting having received risk management training in the last two fiscal years, nearly 3/4 of Level 3 managers (71%) believe they understand their role in RM, almost 2/3 (62%) believe they understand their responsibilities for RM, and more than half (56%) believe they understand what their authorities are in RM.

Q15 Did you receive risk management training in this fiscal year or last?		
	Frequency	Valid Percent
Yes	4	6.3
No	59	93.7
Total	63	100.0

(37)

Q17 Do you understand your role in managing risk? * Q15 Did you receive risk management training in this fiscal year or last?				
		Did you receive risk management training in this fiscal year or last?		
		Yes	No	Total
Do you understand your role in managing risk?	Yes	4	41	45
	No	0	4	4
	Uncertain/ Don't Know	0	14	14
Total		4	59	63

(38)

Q18 Do you understand your responsibilities for managing risk? * Q15 Did you receive risk management training in this fiscal year or last?				
		Did you receive risk management training in this fiscal year or last?		
		Yes	No	Total
Do you understand your responsibilities for managing risk?	Yes	3	36	39
	No	0	5	5
	Uncertain/ Don't Know	1	18	19
Total		4	59	63

(39)

Q19 Do you understand the limitations on your authority for managing risk? * Q15 Did you receive risk management training in this fiscal year or last?				
		Did you receive risk management training in this fiscal year or last?		
		Yes	No	Total
Do you understand your authority for managing risk?	Yes	2	33	35
	No	1	8	9
	Uncertain/ Don't Know	1	18	19
Total		4	59	63

(40)

On the other hand, a significant number of Level 3 managers are uncertain what their roles, responsibilities and authorities are in relation to risk management.

	Don't Know/ Uncertain
Q 17 Do you understand your role in managing risk?	22%
Q18 Do you understand your responsibilities for managing risk?	30%
Q19 Do you understand the limitations on your authority for managing risk?	30%

(41)

Nearly 80% of managers report that no subordinates in their unit have received risk management training in the last two fiscal years.

Q39 How many of your subordinates received risk management training this fiscal year or last?			
		Frequency	Valid Percent
Valid	Some	12	20.3
	None	47	79.7
	Total	59	100.0

(42)

Q15 Did you receive risk management training in this fiscal year or last? * Q39 How many of your subordinates received risk management training this fiscal year or last?				
		How many of your subordinates received risk management training this fiscal year or last?		
		Some	None	Total
Did you receive risk management training in this fiscal year or last?	Yes	4	0	4
	No	8	47	55
Total		12	47	59

(43)

Risk Management and Planning

Risk items do not appear to be properly or consistently documented as a part of project management. Eighty percent of respondents record risk items in project documentation, 37% record risk items in personal documentation, 14 % of respondents record risk items in CPME, and 14% do not record risk items. Eleven percent document risk items elsewhere, such as Quad Charts, TAG and PG meetings minutes, and SRB presentations. Two respondents note that in their experience, risk documentation only occurs for TDP projects, not for ARP or other projects.

Q25 Where are identified project risks documented?		
	yes (%)	no (%)
project documentation	79.6	20.4
personal documentation	37.0	63.0
CPME database	14.8	85.2
risks are not documented	14.8	85.2
elsewhere	11.1	88.9

(44)

Roughly one third (35.9%) of L3 respondents report 'Always' or 'Often' identifying risk items in a likelihood/ impact matrix.

Q23 Do project plans explicitly identify specific risks in terms of both likelihood and impact?				
		Frequency	Percent	Valid Percent
Valid	Always	3	4.8	5.7
	Often	16	25.4	30.2
	Sometimes	22	34.9	41.5
	Rarely	10	15.9	18.9
	Never	2	3.2	3.8
	Total	53	84.1	100.0

(45)

Follow up on risk issues during projects is also lacking. Only 36% of respondents report revisiting project risk assessments consistently, while 52% report consistently assessing project progress reports against organizational plans such as milestones in CPME.

Q24 Are project risk assessments revisited during the delivery of projects?

		Frequency	Percent	Valid Percent
Valid	Always	2	3.2	4.0
	Often	16	25.4	32.0
	Sometimes	15	23.8	30.0
	Rarely	15	23.8	30.0
	Never	2	3.2	4.0
	Total	50	79.4	100.0

(46)

Managers who report that project plans consistently identify the likelihood and impact of risks appear more likely to revisit risk assessments during the delivery of the project. Statistical tests show a very strong positive relationship between the two variables, which is statistically significant at 99.9% confidence. This suggests that those who explicitly identify project risks through a likelihood/ impact matrix are more likely to revisit risk assessments during the delivery of that project.

Q23 Do project plans explicitly identify specific risks in terms of both likelihood and impact? * Q24 Are project risk assessments revisited during the delivery of projects?

		Do project plans explicitly identify specific risks in terms of both likelihood and impact?					
		Always	Often	Sometimes	Rarely	Never	Total
Are project risk assessments revisited during the delivery of projects?	Always	2	0	0	0	0	2
	Often	1	11	4	0	0	16
	Sometimes	0	4	10	1	0	15
	Rarely	0	0	6	8	1	15
	Never	0	0	0	1	1	2
Total		3	15	20	10	2	50

(47)

Q23 Do project plans explicitly identify specific risks in terms of both likelihood and impact? * Q24 Are project risk assessments revisited during the delivery of projects?

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.743	0.000
Nominal by Nominal	Cramer's V	0.619	0.000

(48)

Little more than half (52%) of respondents who are responsible for managing projects report consistently comparing progress to established project milestones.

Q22 Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)?				
		Frequency	Percent	Valid Percent
Valid	Always	7	11.1	13.5
	Often	20	31.7	38.5
	Sometimes	15	23.8	28.8
	Rarely	7	11.1	13.5
	Never	3	4.8	5.8
	Total	52	82.5	100.0

(49)

Mangers who report always or often comparing progress to established project milestones also appear somewhat more likely to report always or often identifying the likelihood and impact of project risks. There is a moderate positive relationship between these variables, which is significant at 95% confidence.

Q22 Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)? * Q23 Do project plans explicitly identify specific risks in terms of both likelihood and impact?							
		Do project plans explicitly identify specific risks in terms of both likelihood and impact?					Total
		Always	Often	Sometimes	Rarely	Never	
Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)?	Always	3	2	2	0	0	7
	Often	0	8	8	3	1	20
	Sometimes	0	4	6	5	0	15
	Rarely	0	2	4	0	1	7
	Never	0	0	2	1	0	3
Total		3	16	22	9	2	52

(50)

Q22 Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)? * Q23 Do project plans explicitly identify specific risks in terms of both likelihood and impact?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.292	0.010
Nominal by Nominal	Cramer's V	0.381	0.017

(51)

Respondents who are consistent in comparing project progress reports to planned milestones appear to be somewhat more likely to consistently revisit project risk assessments during project delivery. There is a moderate positive relationship between the two variables, which is significant at 95% confidence.

Q22 Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)? * Q24 Are project risk assessments revisited during the delivery of projects?							
		Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)?					
		Always	Often	Sometimes	Rarely	Never	Total
Are project risk assessments revisited during the delivery of projects?	Always	2	0	0	0	0	2
	Often	4	6	3	2	1	16
	Sometimes	0	6	6	2	1	15
	Rarely	0	6	5	2	1	14
	Never	0	0	1	1	0	2
Total		6	18	15	7	3	49

(52)

Q22 Do you compare reports of progress on projects to organizational plans (i.e.: milestones in CPME)? * Q24 Are project risk assessments revisited during the delivery of projects?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.299	0.016
Nominal by Nominal	Cramer’s V	0.355	0.075

(53)

Risk Management Communication

A large number of Level 3 managers (46%) responded 'Don't Know/ Uncertain' when asked if RM is discussed at TAG meetings; this may be due to a respondent not being a participant in Thrust Advisory Group meetings.

Q20 How often is risk management discussed at TAG meetings?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	1	1.6	1.6	1.6
	Often	2	3.2	3.2	4.8
	Sometimes	14	22.2	22.2	27.0
	Rarely	12	19.0	19.0	46.0
	Never	5	7.9	7.9	54.0
	Uncertain/ Don't know	29	46.0	46.0	100.0
	Total	63	100.0	100.0	

(54)

Removing those who responded 'Don't Know/ Uncertain', Level 3 managers report that risk management is inconsistently (76.5%) or never (14.7%) discussed at TAG meetings.

Q20 How often is risk management discussed at TAG meetings?			
		Frequency	Percent
Valid	Always	1	2.9
	Often	2	5.9
	Sometimes	14	41.2
	Rarely	12	35.3
	Never	5	14.7
	Total	34	100.0

(55)

Barely 30% of respondents report being consulted consistently for risk management input on projects the outcome of which they have a direct or related stake.

Q16 How often are you consulted for risk management input on projects the outcome of which you have a direct or related stake?				
		Frequency	Percent	Valid Percent
Valid	Always	3	4.8	4.8
	Often	16	25.4	25.4
	Sometimes	26	41.3	41.3
	Rarely	14	22.2	22.2
	Never	4	6.3	6.3
	Total	63	100.0	100.0

(56)

It appears that the main forum for consultation about risk issues related to projects is TAG meetings. A comparison of the variables suggests that there is a strong relationship between respondents who report being consulted ‘Always’ or ‘Often ‘for risk management input on projects where they are stakeholders, also report that risk issues are discussed ‘Always’ or ‘Often’ at TAG meetings. This relationship is significant at 99.9% confidence.

Q16 How often are you consulted for risk management input on projects the outcome of which you have a direct or related stake? * Q20 How often is risk management discussed at TAG meetings?							
		How often is risk management discussed at TAG meetings?					
		Always	Often	Sometimes	Rarely	Never	Total
How often are you consulted for risk management input on projects the outcome of which you have a direct or related stake?	Always	0	0	1	0	0	1
	Often	1	1	5	3	0	10
	Sometimes	0	1	8	5	2	16
	Rarely	0	0	0	4	2	6
	Never	0	0	0	0	1	1
Total		1	2	14	12	5	34

(57)

Q16 How often are you consulted for risk management input on projects the outcome of which you have a direct or related stake? * Q20 How often is risk management discussed at TAG meetings?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.481	0.000
Nominal by Nominal	Cramer’s V	0.363	0.327

(58)

According to Level 3 respondents, identified project stakeholders are most often consulted about risk issues in projects during the planning phase (86.7%); other times include during project reviews (77.8%) and as risk related events occur (77.8%). There are no statistical relationships between when stakeholders are consulted (Q26) and Risk Management discussions at TAG meetings (Q20).

Q26 When are project stakeholders consulted about risk issues that may affect them?		
	Yes (%)	No (%)
When planning a project	86.7	13.3
During a scheduled project review	77.8	22.2
As risk-related events occur	77.8	22.2
Other	4.4	95.6
Never	0.0	100.0

(59)

Overall, Managers are inconsistent in communicating risk tolerances and priorities to subordinates; only 27% report consistently making their risk priorities and tolerances clear to subordinates.

Q40 Do you make risk management priorities and tolerances clear to subordinates?			
		Frequency	Valid Percent
Valid	Always	2	3.4
	Often	14	23.7
	Sometimes	31	52.5
	Rarely	10	16.9
	Never	2	3.4
	Total	59	100.0

(60)

Level 3 Managers do not appear to consistently have confidence that their subordinates understand their roles, responsibilities, or limitations on authority when managing risks. In each case, over half of respondents either have inconsistent or no confidence that their subordinates understand these risk management duties.

Q41 Do you have confidence your subordinates understand their roles for managing risks?			
		Frequency	Valid Percent
Valid	Always	2	3.4
	Often	25	42.4
	Sometimes	20	33.9
	Rarely	10	16.9
	Never	2	3.4
	Total	59	100.0

(61)

Q42 Do you have confidence your subordinates understand their responsibilities for managing risks?			
		Frequency	Valid Percent
Valid	Always	1	1.7
	Often	28	47.5
	Sometimes	20	33.9
	Rarely	9	15.3
	Never	1	1.7
	Total	59	100.0

(62)

Q43 Do you have confidence your subordinates understand the limitations on their authority for managing risks?			
		Frequency	Valid Percent
Valid	Always	5	8.5
	Often	23	39.0
	Sometimes	15	25.4
	Rarely	13	22.0
	Never	3	5.1
	Total	59	100.0

(63)

Not only do subordinates fail to understand the scope of their authority in risk management, many Level 3 Managers believe that many lack the required authority to effectively manage risk.

Q45 Do subordinates responsible for managing risks have required authority to do so effectively?			
		Frequency	Valid Percent
Valid	All	16	27.1
	Some	35	59.3
	None	8	13.6
	Total	59	100.0

(64)

Statistical testing supports the assumption that managers who make their risk management priorities and tolerances clear to subordinates are more likely to have confidence in their subordinates' understanding of their roles in managing risks. There is a moderate-strong positive relationship between the variables, which is statistically significant at 99% confidence.

Q41 Do you have confidence your subordinates understand their roles for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?							
		Do you make risk management priorities and tolerances clear to subordinates?					Total
		Always	Often	Sometimes	Rarely	Never	
Do you have confidence your subordinates understand their roles for managing risks?	Always	0	1	1	0	0	2
	Often	1	10	10	4	0	25
	Sometimes	1	1	16	2	0	20
	Rarely	0	1	4	4	1	10
	Never	0	1	0	0	1	2
Total		2	14	31	10	2	59

(65)

Q41 Do you have confidence your subordinates understand their roles for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.323	0.009
Nominal by Nominal	Cramer's V	0.376	0.006

(66)

Statistical testing supports the assumption that managers who make their risk management priorities and tolerances clear to subordinates are more likely to have confidence in their subordinates' understanding of their responsibilities in managing risks. There is a moderate-strong positive relationship between the variables, which is statistically significant at 99% confidence.

Q42 Do you have confidence your subordinates understand their responsibilities for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?							
		Do you make risk management priorities and tolerances clear to subordinates?					
		Always	Often	Sometimes	Rarely	Never	Total
Do you have confidence your subordinates understand their responsibilities for managing risks?	Always	0	1	0	0	0	1
	Often	2	9	13	4	0	28
	Sometimes	0	3	15	2	0	20
	Rarely	0	1	3	4	1	9
	Never	0	0	0	0	1	1
Total		2	14	31	10	2	59

(67)

Q42 Do you have confidence your subordinates understand their responsibilities for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.373	0.002
Nominal by Nominal	Cramer's V	0.444	0.000

(68)

Statistical testing supports the assumption that managers who make their risk management priorities and tolerances clear to subordinates are more likely to have confidence in their subordinates' understanding of their authorities in managing risks. There is a moderate-strong positive relationship between the variables, which is statistically significant at 99% confidence.

Q43 Do you have confidence your subordinates understand the limitations on their authority for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?							
		Do you make risk management priorities and tolerances clear to subordinates?					Total
		Always	Often	Sometimes	Rarely	Never	
Do you have confidence your subordinates understand the limitations on their authority for managing risks?	Always	0	4	1	0	0	5
	Often	2	5	12	3	1	23
	Sometimes	0	3	12	0	0	15
	Rarely	0	1	5	6	1	13
	Never	0	1	1	1	0	3
Total		2	14	31	10	2	59

(69)

Q43 Do you have confidence your subordinates understand the limitations on their authority for managing risks? * Q40 Do you make risk management priorities and tolerances clear to subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.332	0.004
Nominal by Nominal	Cramer's V	0.341	0.036

(70)

Subordinates bring risk issues to the attention of managers with varying levels of frequency; 22% of managers have issues brought to them weekly; 35.6% monthly and 33.9% quarterly or semi-annually. However, this does not give any information about the risk factor's importance or impact.

Q44 How often do subordinates bring risk issues to your attention?			
		Frequency	Valid Percent
Valid	Weekly	13	22.0
	Monthly	21	35.6
	2-4 Times/ Year	20	33.9
	Annually	3	5.1
	Never	2	3.4
	Total	59	100.0

(71)

Managers who do not consistently distinguish between tasks and duties appear to be nearly twice as likely to have subordinates bring RM issues to them on a weekly basis. Again, this does not give any information about the significance of the risk factor's importance or impact. However, a Kendall's tau-b test indicates there is no significant relationship between the variables.

Q31 Do you distinguish between duties and tasks that you assign to subordinates? * Q44 How often do subordinates bring risk issues to your attention?

		How often do subordinates bring risk issues to your attention?					
		Weekly	Monthly	2-4 Times per Year	Annually	Never	Total
Do you distinguish between duties and tasks that you assign to subordinates?	Always / Often	6 17%	15 42%	11 31%	3 8%	1 2%	36 100%
	Sometimes/ Rarely	7 32%	6 27%	8 36%	0 0%	1 5%	22 100%
	Never	0 0%	0 0%	1 100%	0 0%	0 0%	1 100%
Total		13	21	20	3	2	59

(72)

Q31 Do you distinguish between duties and tasks that you assign to subordinates? * Q44 How often do subordinates bring risk issues to your attention?

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	-0.071	0.573
Nominal by Nominal	Cramer's V	0.264	0.419

(73)

Only 17% of Level 3 managers report that risk management is consistently (always or often) considered when assessing subordinates' performance; 73% inconsistently (sometimes or rarely) consider subordinates risk management performance as a part of performance assessment, and 10% report never considering risk management performance.

Q46 Is risk management given consideration when assessing the performance of subordinates?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	1	1.6	1.7	1.7
	Often	9	14.3	15.3	16.9
	Sometimes	22	34.9	37.3	54.2
	Rarely	21	33.3	35.6	89.8
	Never	6	9.5	10.2	100.0
	Total	59	93.7	100.0	
Missing	99	4	6.3		
Total		63	100.0		

(74)

There is a moderate-strong positive relationship between how consistently risk management is given consideration when assessing the performance of subordinates and how often risk issues are brought to the supervisor's attention. This relationship is statistically significant at 99.9% confidence.

Q44 How often do subordinates bring risk issues to your attention? * Q46 Is risk management given consideration when assessing the performance of subordinates?

		Is risk management given consideration when assessing the performance of subordinates?					
		Always	Often	Sometimes	Rarely	Never	Total
How often do subordinates bring risk issues to your attention?	Weekly	0	3	7	3	0	13
	Monthly	0	5	9	6	1	21
	2-4 Times per Year	0	1	6	10	3	20
	Annually	1	0	0	2	0	3
	Never	0	0	0	0	2	2
Total		1	9	22	21	6	59

(75)

Q44 How often do subordinates bring risk issues to your attention? * Q46 Is risk management given consideration when assessing the performance of subordinates?

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.343	0.001
Nominal by Nominal	Cramer's V	0.450	0.000

(76)

There is a moderate-strong positive relationship between managers' ratings of their confidence in subordinates' understanding of their roles for managing risks and their ratings of how consistently risk management is given consideration when assessing the performance of subordinates. This relationship is statistically significant at 99.9% confidence.

Q41 Do you have confidence your subordinates understand their roles for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?							
		Is risk management given consideration when assessing the performance of subordinates?					
		Always	Often	Sometimes	Rarely	Never	Total
Do you have confidence your subordinates understand their roles for managing risks?	Always	0	0	1	1	0	2
	Often	1	6	13	4	1	25
	Sometimes	0	2	7	9	2	20
	Rarely	0	1	1	6	2	10
	Never	0	0	0	1	1	2
Total		1	9	22	21	6	59

(77)

Q41 Do you have confidence your subordinates understand their roles for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.388	0.000
Nominal by Nominal	Cramer's V	0.279	0.302

(78)

There is a strong positive relationship between managers' ratings of their confidence in subordinates' understanding of their responsibilities for managing risks and their ratings of how consistently risk management is given consideration when assessing the performance of subordinates. This relationship is statistically significant at 99.9% confidence.

Q42 Do you have confidence your subordinates understand their responsibilities for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?							
		Is risk management given consideration when assessing the performance of subordinates?					
		Always	Often	Sometimes	Rarely	Never	Total
Do you have confidence your subordinates understand their responsibilities for managing risks?	Always	0	1	0	0	0	1
	Often	1	5	15	6	1	28
	Sometimes	0	2	6	10	2	20
	Rarely	0	1	1	4	3	9
	Never	0	0	0	1	0	1
Total		1	9	22	21	6	59

(79)

Q42 Do you have confidence your subordinates understand their responsibilities for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.403	0.000
Nominal by Nominal	Cramer's V	0.304	0.148

(80)

There is a strong positive relationship between managers' ratings of their confidence in subordinates' understanding of the limitations on their authority for managing risks and their ratings of how consistently risk management is given consideration when assessing the performance of subordinates. This relationship is statistically significant at 99.9% confidence.

Q43 Do you have confidence your subordinates understand the limitations on their authority for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?							
		Is risk management given consideration when assessing the performance of subordinates?					
		Always	Often	Sometimes	Rarely	Never	Total
Do you have confidence your subordinates understand the limitations on their authority for managing risks?	Always	1	1	2	1	0	5
	Often	0	5	12	6	0	23
	Sometimes	0	1	6	8	0	15
	Rarely	0	2	2	6	3	13
	Never	0	0	0	0	3	3
Total		1	9	22	21	6	59

(81)

Q43 Do you have confidence your subordinates understand the limitations on their authority for managing risks? * Q46 Is risk management given consideration when assessing the performance of subordinates?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.442	0.000
Nominal by Nominal	Cramer's V	0.465	0.000

(82)

Level 3 Managers and Level 4 Supervisors and Functional Authorities

Questions 57 through 69 asked Level 3 and Level 4 respondents to agree or disagree with a variety of statements. The responses of both groups are presented together here because of the small number of Level 4 respondents.

Many of the responses are positive (Strongly Agree and Agree = over 80%). For example, a large majority express some level of agreement with the following statements:

- Q57 I can disagree with my supervisor on work-related issues without fear of reprisal (80.0%);
- Q58 I never withhold risk information from my superior (97.2%);
- Q59 If I were to suggest ways to improve how we do things, my supervisor would take them seriously (85.7%);
- Q60 My supervisor creates an environment where it is acceptable to not have all the answers (82.9%);
- Q63 In my work unit, we learn from our mistakes and do what it takes to correct them (85.7%); and,
- Q65 My supervisor trusts me to make good decisions in high risk/ emergency situations (88.6%).

Q57 I can disagree with my supervisor on work-related issues without fear of reprisal

	Frequency	Valid Percent
Strongly Agree	32	45.7
Agree	24	34.3
Neither Agree nor Disagree	9	12.9
Disagree	4	5.7
Strongly Disagree	1	1.4
Total	70	100.0

(83)

Q58 I never withhold risk information from my superior

	Frequency	Valid Percent
Strongly Agree	31	44.3
Agree	37	52.9
Neither Agree nor Disagree	1	1.4
Disagree	1	1.4
Total	70	100.0

(84)

Q59 If I were to suggest ways to improve how we do things, my supervisor would take them seriously

	Frequency	Valid Percent
Strongly Agree	27	38.6
Agree	33	47.1
Neither Agree nor Disagree	8	11.4
Disagree	2	2.9
Total	70	100.0

(85)

Q60 My supervisor creates an environment where it is acceptable to not have all the answers		
	Frequency	Valid Percent
Strongly Agree	23	32.9
Agree	35	50.0
Neither Agree nor Disagree	6	8.6
Disagree	4	5.7
Strongly Disagree	2	2.9
Total	70	100.0

(86)

Q63 In my work unit, we learn from our mistakes and do what it takes to correct them		
	Frequency	Valid Percent
Strongly Agree	20	28.6
Agree	40	57.1
Neither Agree nor Disagree	5	7.1
Disagree	4	5.7
Strongly Disagree	1	1.4
Total	70	100.0

(87)

Q65 My supervisor trusts me to make good decisions in high risk/ emergency situations		
	Frequency	Valid Percent
Strongly Agree	24	34.3
Agree	38	54.3
Neither Agree nor Disagree	2	2.9
Disagree	4	5.7
Strongly Disagree	2	2.9
Total	70	100.0

(88)

As one might anticipate, respondents who agree that their superior creates an environment where it is acceptable to not have all the answers are also more likely to agree that they can disagree with a supervisor on work-related issues without fear of reprisal. A Kendall's tau-b test statistic indicates a strong positive relationship between the two variables which is significant at 99.9% confidence.

Q60 My supervisor creates an environment where it is acceptable to not have all the answers * Q57 I can disagree with my supervisor on work-related issues without fear of reprisal							
		I can disagree with my supervisor on work-related issues without fear of reprisal					
		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
My supervisor creates an environment where it is acceptable to not have all the answers	Strongly Agree	17	5	1	0	0	23
	Agree	13	15	5	1	1	35
	Neither Agree nor Disagree	1	1	3	1	0	6
	Disagree	1	1	0	2	0	4
	Strongly Disagree	0	2	0	0	0	2
Total		32	24	9	4	1	70

(89)

Q60 My supervisor creates an environment where it is acceptable to not have all the answers * Q57 I can disagree with my supervisor on work-related issues without fear of reprisal			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.415	0.000
Nominal by Nominal	Cramer's V	0.370	0.001

(90)

Also as one might anticipate, respondents who agree that their superior creates an environment where it is acceptable to not have all the answers are also more likely to agree that if they were to suggest ways to improve processes, their supervisor would take them seriously. A Kendall's tau-c test statistic indicates a moderate-strong positive relationship between the two variables which is significant at 99.9% confidence.

Q60 My supervisor creates an environment where it is acceptable to not have all the answers * Q59 If I were to suggest ways to improve how we do things, my supervisor would take them seriously						
		If I were to suggest ways to improve how we do things, my supervisor would take them seriously				
		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Total
My supervisor creates an environment where it is acceptable to not have all the answers	Strongly Agree	16	7	0	0	23
	Agree	8	22	4	1	35
	Neither Agree nor Disagree	0	3	3	0	6
	Disagree	2	1	0	1	4
	Strongly Disagree	1	0	1	0	2
Total		27	33	8	2	70

(91)

Q60 My supervisor creates an environment where it is acceptable to not have all the answers * Q59 If I were to suggest ways to improve how we do things, my supervisor would take them seriously			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.347	0.000
Nominal by Nominal	Cramer's V	0.416	0.000

(92)

However, some areas of concern exist. Only half of respondents agree that in their absence a colleague could step in to support their activities (50.0%), while 37.1% express a level of disagreement with the statement, and 12.9% neither agree nor disagree.

Q61 If I were unavoidably absent, a colleague could step in to support my activities with relative ease		
	Frequency	Valid Percent
Strongly Agree	3	4.3
Agree	32	45.7
Neither Agree nor Disagree	9	12.9
Disagree	21	30.0
Strongly Disagree	5	7.1
Total	70	100.0

(93)

A full 20% of respondents neither agree nor disagree that their superior encourages innovation as an outcome of risk taking.

Q62 My supervisor encourages innovation as an outcome of risk taking		
	Frequency	Valid Percent
Strongly Agree	17	24.3
Agree	35	50.0
Neither Agree nor Disagree	14	20.0
Disagree	2	2.9
Strongly Disagree	2	2.9
Total	70	100.0

(94)

Only a quarter of respondents (27.2%) express some level of agreement with the statement "My supervisor makes risk management a priority in our unit," while the majority (52.9%) neither agree nor disagree.

Q64 My supervisor makes risk management a priority in our unit		
	Frequency	Valid Percent
Strongly Agree	3	4.3
Agree	16	22.9
Neither Agree nor Disagree	37	52.9
Disagree	12	17.1
Strongly Disagree	2	2.9
Total	70	100.0

(95)

Almost a quarter of respondents (24.3%) neither agree nor disagree that it is important to follow rules when dealing with high risk or emergency situations, while nearly 15% express disagreement (14.3%).

Q66 It is important to follow rules when dealing with high risk/ emergency situations		
	Frequency	Valid Percent
Strongly Agree	11	15.7
Agree	32	45.7
Neither Agree nor Disagree	17	24.3
Disagree	9	12.9
Strongly Disagree	1	1.4
Total	70	100.0

(96)

It appears that respondents who agree that their supervisor trusts them to make good decisions in high risk or emergency situations are more likely to agree that it is important to follow rules when dealing with high risk or emergency situations. There is a moderate positive relationship between these variables, as show by a Kendall's tau-b statistic, which is significant at 95% confidence.

Q65 My supervisor trusts me to make good decisions in high risk/ emergency situations * Q66 It is important to follow rules when dealing with high risk/ emergency situations

		It is important to follow rules when dealing with high risk/ emergency situations					Total
		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	
My supervisor trusts me to make good decisions in high risk/ emergency situations	Strongly Agree	6	12	4	2	0	24
	Agree	4	17	10	7	0	38
	Neither Agree nor Disagree	1	1	0	0	0	2
	Disagree	0	2	2	0	0	4
	Strongly Disagree	0	0	1	0	1	2
Total		11	32	17	9	1	70

(97)

Q65 My supervisor trusts me to make good decisions in high risk/ emergency situations * Q66 It is important to follow rules when dealing with high risk/ emergency situations

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.205	0.047
Nominal by Nominal	Cramer's V	0.399	0.000

(98)

There appears to be a high level of uncertainty as to the value of risk management training; 37.1% of respondents neither agree nor disagree with the statement "Risk management training is a good use of my time."

Q67 Risk management training is a good use of my time

	Frequency	Valid Percent
Strongly Agree	7	10.0
Agree	32	45.7
Neither Agree nor Disagree	26	37.1
Disagree	2	2.9
Strongly Disagree	3	4.3
Total	70	100.0

(99)

While a high percentage of respondents express some level of disagreement with the statement "I sometimes downplay a project's risks in order to ensure the project gets approval," nearly a quarter neither agree nor disagree, while another 10% express agreement. This is an interesting observation when compared to results of question 58, where nearly 100% of respondents claim to never withhold risk information from their superior.

Q68 I sometimes downplay a project's risks in order to ensure the project gets approval		
	Frequency	Valid Percent
Agree	7	10.0
Neither Agree nor Disagree	16	22.9
Disagree	29	41.4
Strongly Disagree	18	25.7
Total	70	100.0

(100)

However, when compared, the relationship between the variables is moderate-strongly negative, at 99.9% confidence. This means that managers who strongly agree that they would never withhold risk information are also likely to strongly disagree that they downplay risk information to ensure project approval. Overall, there is no significant disparity between the variables.

Q58 I never withhold risk information from my superior * Q68 I sometimes downplay a project's risks in order to ensure the project gets approval						
		I sometimes downplay a project's risks in order to ensure the project gets approval				
		Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
I never withhold risk information from my superior	Strongly Agree	2	2	14	13	31
	Agree	4	13	15	5	37
	Neither Agree nor Disagree	0	1	0	0	1
	Disagree	1	0	0	0	1
Total		7	16	29	18	70

(101)

Q58 I never withhold risk information from my superior * Q68 I sometimes downplay a project's risks in order to ensure the project gets approval			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	-0.398	0.000
Nominal by Nominal	Cramer's V	0.340	0.004

(102)

Over a fifth of respondents neither agree nor disagree that knowing how peers have dealt with risk issues is valuable.

Q69 I find it valuable to know how my peers have dealt with risk issues in their work		
	Frequency	Valid Percent
Strongly Agree	13	18.6
Agree	41	58.6
Neither Agree nor Disagree	15	21.4
Strongly Disagree	1	1.4
Total	70	100.0

(103)

It appears that respondents who agree that risk management training is a good use of time also agree it is valuable to know how their peers have dealt with risk issues. Statistical testing with Kendall's tau-c indicates a moderate-strong positive relationship, significant at 99.9% confidence.

Q69 I find it valuable to know how my peers have dealt with risk issues in their work * Q67 Risk management training is a good use of my time							
		Risk management training is a good use of my time					
		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
I find it valuable to know how my peers have dealt with risk issues in their work	Strongly Agree	6	3	3	0	1	13
	Agree	1	27	12	1	0	41
	Neither Agree nor Disagree	0	2	11	1	1	15
	Strongly Disagree	0	0	0	0	1	1
Total		7	32	26	2	3	70

(104)

Q69 I find it valuable to know how my peers have dealt with risk issues in their work * Q67 Risk management training is a good use of my time			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.376	0.000
Nominal by Nominal	Cramer's V	0.543	0.000

(105)

Level 4 Supervisors and Functional Authorities

Due to the low number of Level 4 respondents to the survey, it is not possible to draw definitive conclusions about Level 4 impressions of Risk Management and Accountability within the organization. However, in some cases, these limited responses may indicate areas for further investigation among a more comprehensive sample of Level 4 functional authorities.

Most level 4 respondents report their superior is inconsistent in setting performance objectives (four of seven), and one reports never having objectives set.

Q47 Does your superior set performance objectives for you?			
		Frequency	Valid Percent
Valid	Often	2	28.6
	Sometimes	3	42.9
	Rarely	1	14.3
	Never	1	14.3
	Total	7	100.0

(106)

Most Level 4 respondents report that performance objectives tend to lack measurable standards.

Q48 Do your performance objectives include measurable standards?			
		Frequency	Valid Percent
Valid	Often	1	16.7
	Sometimes	3	50.0
	Rarely	2	33.3
	Total	6	100.0

(107)

Half of Level 4 respondents (three of six) indicate their performance objectives are inconsistent in their support of superior's performance objectives.

Q49 Do your performance objectives support your superior's achievement of their own objectives?			
		Frequency	Valid Percent
Valid	Always	1	16.7
	Often	1	16.7
	Sometimes	3	50.0
	Uncertain/ Don't know	1	16.7
	Total	6	100.0

(108)

Four of six Level 4 respondents indicate that their work progress is only sometimes or rarely compared to organizational plans such as milestones.

Q50 Is your work progress compared to organizational plans (i.e. milestones in CPME)?			
		Frequency	Valid Percent
Valid	Often	1	16.7
	Sometimes	2	33.3
	Rarely	2	33.3
	Never	1	16.7
	Total	6	100.0

(109)

Level 4 respondents report that their performance is most commonly reviewed against general expectations.

Q 51 How does your superior review your performance?		
	Yes	No
against general expectations	71.4%	28.6%
against salary admin system or performance management framework	14.3%	85.7%
against statement of duties	42.9%	57.1%
against agreed performance objectives	28.6%	71.4%
against my PLP	0.0%	100.0%
on an ad hoc basis	14.3%	85.7%
other	0.0%	100.0%

(110)

Level 4 respondents in our survey appear divided in their understanding of their roles, responsibilities and limits on their authority in regards to risk management.

Q52 Do you understand your role in managing risks?			
		Frequency	Valid Percent
Valid	Always	1	14.3
	Often	2	28.6
	Sometimes	2	28.6
	Rarely	1	14.3
	Never	1	14.3
	Total	7	100.0

(111)

Q53 Do you understand your responsibilities for managing risks?			
		Frequency	Valid Percent
Valid	Always	3	42.9
	Often	1	14.3
	Sometimes	3	42.9
	Total	7	100.0

(112)

Q54 Do you understand the limitations on your authority for managing risks?			
		Frequency	Valid Percent
Valid	Always	2	28.6
	Often	2	28.6
	Sometimes	1	14.3
	Rarely	1	14.3
	Never	1	14.3
	Total	7	100.0

(113)

Respondents are also divided in the frequency with which they are consulted for risk related input on projects the outcome of which you have a direct or related stake.

Q55 Are you consulted for risk management input on projects the outcome of which you have a direct or related stake?			
		Frequency	Valid Percent
Valid	Always	1	16.7
	Often	2	33.3
	Sometimes	2	33.3
	Rarely	1	16.7
	Total	6	100.0

(114)

The majority of Level 4 respondents distinguish between ongoing duties and assigned tasks.

Q56 Do you see a distinction between ongoing duties and assigned tasks?			
		Frequency	Valid Percent
Valid	Yes	5	71.4
	No	1	14.3
	Uncertain/ Don't Know	1	14.3
	Total	7	100.0

(115)

General Comments

Themes emerging from the general comments (Q70) section of our survey primarily indicate that respondents see weaknesses in the area of risk management in the organization.

"It was difficult to answer some of the questions on how managers evaluate subordinates with regards to risk management. For Defence Scientists, it is not one of the seven SAS characteristics."

"The main risk to program delivery continues to remain procurement, particularly R&D contracting."

"The authority to manage risk has not been delegated down."

"Currently, our organization doesn't want any risk … we don't manage risk ... instead, we avoid risk."

Many managers seem unclear as to who has responsibilities for risk management; some believe that risk management is implicitly understood to be exclusive to the job of Project Manager.

"Clear roles and responsibilities -with commensurate authority- are needed for Thrust Leads, Thrust Coordinators, and centre Section Heads. This is often the source of tension as we develop and deliver programs."

"PMs are responsible for risk management and it is done within their remit as PM."

"Tous les gestionnaires font de la gestion de risque, de façon implicite. Ce qui nous manque, c'est une méthodologie pour le faire systématiquement dans toutes les initiatives et dans tous les projets scientifiques, organisationnels ou en gestion des capacités."[198]

The need for clearer direction on Risk Management in the organization also extends to training:

"Training would be useful, especially seeing examples of how others manage risk, and what the best practices are."

[198] English translation: "All managers manage risk intuitively, but would benefit from a clear methodology to support systematic risk management of all activities."

7.2 Pilot Survey 3 Results

Survey invitations were sent to 149 email addresses; of those 2 addresses were no longer functional, resulting in 147 total invitations. Of the 147 survey invitations solicited, there were 77 responses, of which 70 were valid; this is a valid response rate of 47.6%.

Response rates by management level were:

L2: 6 valid responses of 11 possible (54.5% return);

L3: 58 valid responses of 106 possible (54.7% return); and,

L4: 6 valid responses of 30 possible (20% return).

Survey responses are organized here by subject matter for the following reasons: level 4 response rates are too low to provide meaningful information on their own; most questions were asked of two or more levels; and level 2 responses need to be reported in non-identifying parameters.

Only Level 3 respondents were asked to identify which DRDC centre they work from. For the purposes of anonymity, the centres have been categorized into two groups: NDHQ Based Centres (CORA, DGMPRA, Security Sciences, S&T Operations, Corporate Services and Chief of Staff) and Traditional research Centres (Atlantic, Valcartier, Ottawa, Toronto and Suffield).

Q4 Type of Centre		
	Frequency	Valid Percent
Traditional Research Centre	43	74.1
NDHQ Based Centre	15	25.9
Total	58	100

(116)

Budgets and Procurement

Nearly seventy percent (69.2%) of Level 3 respondents say their superior set a budget tolerance for last year's fiscal budget; of those, 83.3% kept expenditures within the budget tolerance.

Q6 Did your superior set a budget tolerance for the last fiscal year?			
		Frequency	Valid Percent
Valid	Yes	36	69.2
	No	16	30.8
	Total	52	100.0

(117)

Q6a Were your expenditures within the set budget tolerance for the last fiscal year?			
		Frequency	Valid Percent
Valid	Yes	30	83.3
	No	6	16.7
	Total	36	100.0

(118)

A little over half of Level 3 respondents (53.8%) say their unit has a strategic capital plan which reflects the unit's long term needs. Nearly two-thirds (63.5%) say their unit's capital equipment plan (specifically) is based on budget allocation.

Q7 Does your unit's strategic capital plan reflect long term needs?			
		Frequency	Valid Percent
Valid	Yes	28	53.8
	No	24	46.2
	Total	52	100.0

(119)

Q8 Is local capital equipment plan based on budget allocation?			
		Frequency	Valid Percent
Valid	Yes	33	63.5
	No	19	36.5
	Total	52	100.0

(120)

Level 3 managers who agree that their unit's strategic capital plan reflects long term needs appear more likely to also agree that local capital equipment plans are based on budget allocation. Statistical analysis indicates there is a strong positive relationship between the two variables, and that the relationship is statistically significant at 99.9% confidence.

Q7 Does your unit's strategic capital plan reflect long term needs? * Q8 Is local capital equipment plan based on budget allocation?				
		Is local capital equipment plan based on budget allocation?		
		Yes	No	Total
Does your unit's strategic capital plan reflect long term needs?	Yes	23	5	28
	No	10	14	24
Total		33	19	52

(121)

Q7 Does your unit's strategic capital plan reflect long term needs? * Q8 Is local capital equipment plan based on budget allocation?			
	Value	df	Asymp. Sig. (2-sided)
Phi	0.419		0.003
Pearson Chi-Square	9.131	1	0.003

(122)

One quarter of respondents (25%) report that the number of procurement specialists in their unit is ‘Often’ or ‘Always’ adequate for the level of procurement activity; 44.2% say the number is ‘Never’ or ‘Rarely’ adequate, while 30.8% say it is ‘Sometimes’ adequate.

Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?			
		Frequency	Valid Percent
Valid	Never	4	7.7
	Rarely	19	36.5
	Sometimes	16	30.8
	Often	12	23.1
	Always	1	1.9
	Total	52	100.0

(123)

Opinions about the adequacy of the number of procurement specialists appear to vary by centre, with those based in Traditional Research Centres rating the adequacy more positively than those in NDHQ Based Centres. There is a moderate-strong relationship between these two variables which is significant at 99% confidence.

Q4 Type of Centre * Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?							
		Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?					
		Never	Rarely	Sometimes	Often	Always	Total
Type of Centre	Traditional Research Centre	1	13	11	12	1	38
	NDHQ Based Centre	3	6	5	0	0	14
Total		4	19	16	12	1	52

(124)

Type of Centre * Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.361	0.002
Nominal by Nominal	Cramer's V	0.435	0.043

(125)

Level 3 managers are divided as to the ease of the procurement process. 53.8% say that 'None' or 'Few' of the internal procurement processes are easy to use, while 46.2% say that 'Most' or 'All' are easy to use.

Q11 How many internal procurement processes are easy to use?			
		Frequency	Valid Percent
Valid	None	5	9.6
	Few	23	44.2
	Most	21	40.4
	All	3	5.8
	Total	52	100.0

(126)

Opinions about the ease of use of internal procurement processes appear to vary by centre, with those based in Traditional Research Centres rating more of the processes easy to use than respondents in NDHQ Based Centres. There is a strong relationship between these two variables which is significant at 99% confidence.

Type of Centre * Q11 How many internal procurement processes are easy to use?						
		Q11 How many internal procurement processes are easy to use?				Total
		None	Few	Most	All	
Type of Centre	Traditional Research Centre	2	13	20	3	38
	NDHQ Based Centre	3	10	1	0	14
Total		5	23	21	3	52

(127)

Type of Centre * Q11 How many internal procurement processes are easy to use?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.453	0.000
Nominal by Nominal	Cramer's V	0.487	0.006

(128)

Respondents who say that most or all procurement processes tend to be user-friendly are somewhat more likely to feel there is consistently an adequate number of procurement specialists in their unit. A Kendall's tau-c statistical test shows a moderate-strong positive relationship between the rankings of the two variables at 99.9% confidence.

Q11 How many internal procurement processes are easy to use? * Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?

		Is the number of procurement specialists in your centre adequate for the level of procurement activity?					
		Never	Rarely	Sometimes	Often	Always	Total
How many internal procurement processes are easy to use?	None	0	4	1	0	0	5
	Few	2	12	7	2	0	23
	Most	2	2	7	9	1	21
	All	0	1	1	1	0	3
Total		4	19	16	12	1	52

(129)

Q11 How many internal procurement processes are easy to use? * Q10 Is the number of procurement specialists in your centre adequate for the level of procurement activity?

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.340	0.000
Nominal by Nominal	Cramer's V	0.337	0.125

(130)

Twenty-three percent (23%) of respondents say that it is 'Never' or 'Rarely' easy to determine the progress of a procurement file, 42.3% say it is sometimes easy (and sometimes not), while 34.6% say it is either 'Often' or 'Always' easy to determine the progress of a procurement file.

Q12 Can clients of internal procurement processes easily determine the progress of procurement files?

		Frequency	Valid Percent
Valid	Never	2	3.8
	Rarely	10	19.2
	Sometimes	22	42.3
	Often	15	28.8
	Always	3	5.8
	Total	52	100.0

(131)

Opinions about the ease of determining the progress of a procurement file appear to vary by centre, with those based in Traditional Research Centres rating the ease of determining progress more positively than those in NDHQ Based Centres. There is a strong relationship between these two variables which is significant at 99.9% confidence.

Q4 Type of Centre * Q12 Can clients of internal procurement processes easily determine the progress of procurement files?							
		Q12 Can clients of internal procurement processes easily determine the progress of procurement files?					Total
		Never	Rarely	Sometimes	Often	Always	
Type of Centre	Traditional Research Centre	1	5	14	15	3	38
	NDHQ Based Centre	1	5	8	0	0	14
Total		2	10	22	15	3	52

(132)

Type of Centre Q12 Can clients of internal procurement processes easily determine the progress of procurement files?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.426	0.000
Nominal by Nominal	Cramer's V	0.457	0.028

(133)

There appears to be a relationship between the opinion of using the procurement process and of determining the progress of the procurement request. A Kendall's tau-c test indicates a very strong positive relationship between the two variables, which is statistically significant at 99.9% confidence.

Q12 Can clients of internal procurement processes easily determine the progress of procurement files? * Q11 How many internal procurement processes are easy to use?						
		How many internal procurement processes are easy to use?				Total
		None	Few	Most	All	
Can clients of internal procurement processes easily determine the progress of procurement files?	Never	2	0	0	0	2
	Rarely	2	6	2	0	10
	Sometimes	1	14	7	0	22
	Often	0	3	11	1	15
	Always	0	0	1	2	3
Total		5	23	21	3	52

(134)

Q12 Can clients of internal procurement processes easily determine the progress of procurement files? * Q11 How many internal procurement processes are easy to use?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.519	0.000
Nominal by Nominal	Cramer's V	0.592	0.000

(135)

Most respondents report having a positive relationship with procurement specialists. Sixty-six percent (66%) classify the relationship as ‘Good’ or ‘Excellent’, and 30% as ‘Fair’; only 4% classify the relationship as ‘Poor’.

Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?			
		Frequency	Valid Percent
Valid	Poor	2	4.0
	Fair	15	30.0
	Good	14	28.0
	Excellent	19	38.0
	Total	50	100.0

(136)

Opinions about the quality of the working relationship with procurement specialists appear to vary by centre, with those based in Traditional Research Centres rating the quality of the relationship more positively than those in NDHQ Based Centres. There is a very strong relationship between these two variables which is significant at 99.9% confidence.

Type of Centre * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?						
		Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?				Total
		Poor	Fair	Good	Excellent	
Type of Centre	Traditional Research Centre	0	7	13	18	38
	NDHQ Based Centre	2	8	1	1	12
	Total	2	15	14	19	50

(137)

Type of Centre * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.504	0.000
Nominal by Nominal	Cramer's V	0.620	0.000

(138)

The more positively a respondent rated the procurement relationship the more likely s/he was to also rate determining the progress of the procurement request as consistently easy. Kendall's tau-c testing indicates a very strong positive relationship that is significant at 99.9% confidence.

Q12 Can clients of internal procurement processes easily determine the progress of procurement files? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?						
		How would you rate the quality of your working relationship with your centre's procurement specialists?				
		Poor	Fair	Good	Excellent	Total
Can clients of internal procurement processes easily determine the progress of procurement files?	Never	1	1	0	0	2
	Rarely	1	5	2	1	9
	Sometimes	0	8	9	4	21
	Often	0	1	2	12	15
	Always	0	0	1	2	3
Total		2	15	14	19	50

(139)

Q12 Can clients of internal procurement processes easily determine the progress of procurement files? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.530	0.000
Nominal by Nominal	Cramer's V	0.484	0.000

(140)

Additionally, the more positively a respondent rated the procurement relationship the more likely s/he was to also rate the procurement process as consistently user-friendly. Kendall's tau-c testing indicates a very strong positive relationship that is significant at 99.9% confidence.

Q11 How many internal procurement processes are easy to use? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?						
		How would you rate the quality of your working relationship with your centre's procurement specialists?				
		Poor	Fair	Good	Excellent	Total
How many internal procurement processes are easy to use?	None	1	4	0	0	5
	Few	1	10	7	4	22
	Most	0	1	7	12	20
	All	0	0	0	3	3
Total		2	15	14	19	50

(141)

Q11 How many internal procurement processes are easy to use? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.539	0.000
Nominal by Nominal	Cramer's V	0.429	0.001

(142)

Most respondents report having a positive relationship with their unit's financial specialists. Eighty percent (80.7%) classify the relationship as 'Good' or 'Excellent', and 15.4% as 'Fair'; only 3.8% classify the relationship as 'Poor'.

Q9 How would you rate the quality of your working relationship with your centre's financial specialists?			
		Frequency	Valid Percent
Valid	Poor	2	3.8
	Fair	8	15.4
	Good	19	36.5
	Excellent	23	44.2
	Total	52	100.0

(143)

There is no statistically significant relationship between how a respondent rated his/her relationship with procurement specialists versus the quality of their relationship with financial specialists.

Q9 How would you rate the quality of your working relationship with your centre's financial specialists? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?						
		How would you rate the quality of your working relationship with your centre's procurement specialists?				
		Poor	Fair	Good	Excellent	Total
How would you rate the quality of your working relationship with your centre's financial specialists?	Poor	0	0	0	2	2
	Fair	1	4	1	2	8
	Good	1	6	9	2	18
	Excellent	0	5	4	13	22
Total		2	15	14	19	50

(144)

Q9 How would you rate the quality of your working relationship with your centre's financial specialists? * Q13 How would you rate the quality of your working relationship with your centre's procurement specialists?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.259	0.055
Nominal by Nominal	Cramer's V	0.348	0.034

(145)

Auditing and Inventory

Just over half of respondents (55.2%) agree that an auditor would get sufficient information using files only during an audit. Of those who disagree, 61.5% say that the auditor would need to consult with a manager to a moderate degree to get sufficient information to complete an audit.

Q14 Would an auditor get a complete picture of activities in your unit using only files and other records?			
		Frequency	Valid Percent
Valid	Yes	32	55.2
	No	26	44.8
	Total	58	100.0

(146)

Q15 To what degree would an auditor need to consult with you or a subordinate to get a complete picture of activities in your unit?			
		Frequency	Valid Percent
Valid	Significant	4	15.4
	Moderate	16	61.5
	Minor	6	23.1
	Total	26	100.0

(147)

The majority of respondents (74.4%) responsible for controlling an inventory of accountable items have surveyed those items within the last year.

Q16 When did you or a subordinate last survey the inventory for which you are accountable?			
		Frequency	Valid Percent
Valid	Never	1	2.6
	Within the last 6 months	14	35.9
	Within the last 7 to 12 months	15	38.5
	Within the last 13 to 24 months	5	12.8
	More than 24 months ago	4	10.3
	Total	39	100.0

(148)

Files and Documents

Personnel files appear to be accessible to employees outside of HR staff. Thirty-seven percent (37.1%) of respondents reported that access to personnel files was not restricted to HR staff, while another 22.9% did not know if access was restricted or not.

Q56 In your centre, is access to personnel files restricted to HR staff?			
		Frequency	Valid Percent
Valid	Yes	28	40.0
	No	26	37.1
	Don't Know	16	22.9
	Total	70	100.0

(149)

There is no statistically significant relationship between how respondents answered and the centre from which they work; the following table is for information purposes only.

Q4 Type of Centre * Q56 In your centre, is access to personnel files restricted to HR staff?					
		Q56 In your centre, is access to personnel files restricted to HR staff?			
		Yes	No	Don't Know	Total
Type of Centre	Traditional Research Centre	18	15	10	43
	NDHQ Based Centre	5	8	2	15
Total		23	23	12	58

(150)

All respondents (100%) report that classified correspondence is filed securely (Q58), but a quarter of respondents (25.7%) do not know if classified correspondence is tracked.

Q57 In your centre, is classified correspondence tracked?			
		Frequency	Valid Percent
Valid	Yes	50	71.4
	No	2	2.9
	Don't Know	18	25.7
	Total	70	100.0

(151)

Equipment maintenance and repair

Responsibility for routine maintenance appears to be more likely to be formally assigned in the case of program related equipment (62.5%) than for infrastructure related equipment (52.0%).

Q47 Is routine maintenance of program-related equipment formally assigned to a designated individual in your unit?			
		Frequency	Valid Percent
Valid	Yes	20	62.5
	No	12	37.5
	Total	32	100.0

(152)

Q48 Is routine maintenance of infrastructure-related equipment formally assigned to a designated individual in your unit?			
		Frequency	Valid Percent
Valid	Yes	26	52.0
	No	24	48.0
	Total	50	100.0

(153)

It appears that units which have assigned responsibility for routine maintenance of one type of equipment are more likely to assign responsibility for the other. Fisher's Exact Test and Phi show a very strong relationship between these variables, which is statistically significant at 99% confidence.

Q47 Is routine maintenance of program-related equipment formally assigned to a designated individual in your unit? * Q48 Is routine maintenance of infrastructure-related equipment formally assigned to a designated individual in your unit?

		Is routine maintenance of infrastructure-related equipment formally assigned to a designated individual in your unit?		
		Yes	No	Total
Is routine maintenance of program-related equipment formally assigned to a designated individual in your unit?	Yes	16	4	20
	No	3	9	12
Total		19	13	32

(154)

Q47 Is routine maintenance of program-related equipment formally assigned to a designated individual in your unit? * Q48 Is routine maintenance of infrastructure-related equipment formally assigned to a designated individual in your unit?

	Value	Asymp. Sig. (2-sided)	Exact Sig. (1-sided)	Approx. Sig.
Pearson Chi-Square	9.406(b)	0.002		
Phi	0.542			0.002
Fisher's Exact Test			0.003	

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.88.

(155)

The majority of respondents consistently find the process for requesting special maintenance or repair of equipment easy to use (62.6%).

Q49 When equipment needs special maintenance or repair, is the process for the request easy to use?

		Frequency	Valid Percent
Valid	Never	1	1.6
	Rarely	4	6.3
	Sometimes	19	29.7
	Often	28	43.8
	Always	12	18.8
	Total	64	100.0

(156)

Respondents are divided as to the timeliness of repair requests being addressed; 51.6% report that the repairs are ‘Rarely’ or only ‘Sometimes’ addressed in a timely and effective manner, while the remaining 48.4% report that repairs are ‘Often’ or ‘Always’ addressed in a timely and effective manner.

Q50 Are equipment repairs addressed in a timely and effective manner?			
		Frequency	Valid Percent
Valid	Rarely	4	6.3
	Sometimes	29	45.3
	Often	26	40.6
	Always	5	7.8
	Total	64	100.0

(157)

There appears to be a relationship between a respondent’s assessment of the ease of use of the repair request process and the assessment of the timeliness and effectiveness of the repair. The relationship between the ranking of the two variables is strong and positive, with statistical significance at 99.9% confidence.

Q49 When equipment needs special maintenance or repair, is the process for the request easy to use? * Q50 Are equipment repairs addressed in a timely and effective manner?						
		Are equipment repairs addressed in a timely and effective manner?				
		Rarely	Sometimes	Often	Always	Total
When equipment needs special maintenance or repair, is the process for the request easy to use?	Never	1	0	0	0	1
	Rarely	2	2	0	0	4
	Sometimes	1	13	5	0	19
	Often	0	9	18	1	28
	Always	0	5	3	4	12
Total		4	29	26	5	64

(158)

Q49 When equipment needs special maintenance or repair, is the process for the request easy to use? * Q50 Are equipment repairs addressed in a timely and effective manner?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.455	0.000
Nominal by Nominal	Cramer's V	0.524	0.000

(159)

There are no relationships between having an individual designated as responsible for routine maintenance of equipment and either the ease of use or the timeliness of the repair processes.

Project Management

All respondents were asked to rate how frequently five broad goals are explicitly a factor in the work of their unit. These goals are based on alignment with the Canada S&T Strategy. The two most consistent goals in a unit's work were 'Expansion of the body of knowledge' (71.5%) and 'Mission directed needs for R&D results' (70.0%).

Q55 How frequently are the following broad goals an explicit factor in your unit's work?			
	Never (%)	Inconsistently (%)	Consistently (%)
Expansion of the body of knowledge	2.9	25.7	71.5
Mission directed needs for R&D results	12.9	17.1	70.0
Workforce development	1.4	41.5	57.1
Maintenance of national S&T infrastructure and capacity	14.3	38.6	47.1
Commercialization	21.4	52.9	25.7

(160)

There are moderate to strong, positive relationships among all the broad goal factors, and all are statistically significant with at least 95% confidence, with the following exceptions: there is no statistically significant relationship between how often a unit's work involves 'workforce development' and 'commercialization'; and there is no statistically significant relationship between how often a unit's work involves 'workforce development' and 'mission directed needs for R&D results'.

More than a third (39.6%) of projects managed within a given unit do not utilize a responsibility matrix or equivalent to formally assign responsibilities.

Q18 Does Project Management documentation formally assign responsibilities?			
		Frequency	Valid Percent
Valid	Yes	29	60.4
	No	19	39.6
	Total	48	100

(161)

Two-thirds of respondents say that either Resources (64.6%) or Schedules (64.6%) are likely to play a role in the failure of a project, one third (31.3%) report that Goals are likely to play a role in project failures, while one-quarter (24.9%) say the Quality of Project Milestones are likely to play a role in project failures.

Q19 If a project managed within your unit fails, how likely are the following to have played a role in that failure?			
	Very/ Somewhat Unlikely	Neutral	Very/ Somewhat Likely
Resources	18.8%	16.7%	64.6%
Schedule	14.6%	20.8%	64.6%
Goals	45.8%	22.9%	31.3%
Milestone Quality	43.8%	31.3%	24.9%

(162)

Respondents report making project results available through a number of methods, the most popular being Presentations (77.6%) and Meetings (77.6%).

Q20 How do you make interim or final results available to stakeholders, clients or partners?	
Presentations	77.6
Meetings	77.6
Standard reports	56.9
Briefing Notes	48.3
Demonstrations	46.6
Conference Papers	29.3
Journals	27.6
Other	15.5

(163)

Human Resource Management

Eighty-five percent (85.0%) of respondents report that their subordinates' Personal Learning Plans (PLPs) are linked to the appropriate Knowledge, Skills, and Abilities (KSA) required for current and future roles.

Q24 Are subordinates' PLPs linked to appropriate KSA required for current and future roles?			
		Frequency	Valid Percent
Valid	Sometimes	9	15.0
	Often	35	58.3
	Always	16	26.7
	Total	60	100.0

(164)

Three-quarters (78.3%) of respondents have discussed methods of passing on corporate knowledge with subordinates.

Q25 Have you discussed with subordinates various means of passing on corporate knowledge?			
		Frequency	Valid Percent
Valid	Yes	47	78.3
	No	13	21.7
	Total	60	100.0

(165)

Eighty percent (80%) of respondents report consistently encouraging subordinates to work in teams and cross train when appropriate.

Q26 Do you encourage subordinates to work in teams and cross-train?			
		Frequency	Valid Percent
Valid	Rarely	2	3.3
	Sometimes	10	16.7
	Often	25	41.7
	Always	23	38.3
	Total	60	100.0

(166)

The majority (88.3%) of respondents have considered bringing in a new employee while the incumbent remains in order to facilitate knowledge transfer, while 69.8% have actually done so.

Q27 Have you considered options to bring in a new employee while to incumbent remains in order to facilitate knowledge transfer?			
		Frequency	Valid Percent
Valid	Yes	53	88.3
	No	7	11.7
	Total	60	100.0

(167)

Q27a Have you ever brought in a new employee while to incumbent remained in order to facilitate knowledge transfer?			
		Frequency	Valid Percent
Valid	Yes	37	69.8
	No	16	30.2
	Total	53	100.0

(168)

More than three-quarters of respondents (80%) report that their unit does not have sufficient FTE to fulfill its mandate.

Q28 Does your unit have sufficient FTEs to successful fulfill your unit's mandate?			
		Frequency	Valid Percent
Valid	Yes	12	20.0
	No	48	80.0
	Total	60	100.0

(169)

Many respondents (66.7%) report that key positions are only ‘Rarely’ or ‘Sometimes’ filled quickly.

Q29 Are key positions filled quickly?			
		Frequency	Valid Percent
Valid	Never	1	1.7
	Rarely	13	21.7
	Sometimes	27	45.0
	Often	18	30.0
	Always	1	1.7
	Total	60	100.0

(170)

Eighty percent (80%) of respondents report that new employees in key positions ‘Often’ or ‘Always’ perform effectively within a reasonable timeframe.

Q30 Do new employees in key positions perform effectively in their role within a reasonable timeframe?			
		Frequency	Valid Percent
Valid	Sometimes	12	20.0
	Often	45	75.0
	Always	3	5.0
	Total	60	100.0

(171)

Over eighty percent (83.3%) of respondents say that there are employees in their unit who are ready to compete for key positions and areas.

Q31 Are there qualified employees in your unit ready to compete for key positions and areas?			
		Frequency	Valid Percent
Valid	Yes	50	83.3
	No	10	16.7
	Total	60	100.0

(172)

Almost all respondents (91.7%) say they identify ‘high performing employees for succession planning, despite not having an official DRDC succession plan.

Q32 Do you identify 'high-performing' employees for succession planning?			
		Frequency	Valid Percent
Valid	Yes	55	91.7
	No	5	8.3
	Total	60	100.0

(173)

There are no statistically significant relationships between how quickly key positions are filled (Q29) and the identification of high performing employees (Q32), nor how effectively employees in new roles perform (Q30). There is also no statistically significant relationship between the identification of high performing employees (Q32) and how effectively employees in new roles perform (Q30).

Many respondents (68.8%) report that it is ‘Very Important’ to their job performance to stay abreast of new ideas, methods, and technology in their field.

Q51 How important is it to your job performance to stay abreast of new ideas, methods, and technology in your field?			
		Frequency	Valid Percent
Valid	Very Unimportant	3	4.7
	Somewhat Unimportant	1	1.6
	Somewhat Important	16	25.0
	Very Important	44	68.8
	Total	64	100.0

(174)

Sixty-one percent (61.0%) of respondents expressed some level of satisfaction with the resources and/or opportunities provided by DRDC to stay abreast of new ideas, methods and technology, while the remaining thirty-nine percent were divided between some level of dissatisfaction and neutrality.

Q52 Are you satisfied with the resources and/or opportunities provided by DRDC to stay abreast of new ideas, methods and technology in your field?			
		Frequency	Valid Percent
Valid	Very Dissatisfied	3	4.7
	Somewhat Dissatisfied	10	15.6
	Neither Satisfied nor Dissatisfied	12	18.8
	Somewhat Satisfied	28	43.8
	Very Satisfied	11	17.2
	Total	64	100.0

(175)

There is no relationship between the level of importance a respondent ascribes to staying abreast of new ideas in their field and their level of satisfaction with resources to do so at DRDC. The table below is provided for information purposes only.

Q51 How important is it to your job performance to stay abreast of new ideas, methods, and technology in your field? * Q52 Are you satisfied with the resources and/or opportunities provided by DRDC to stay abreast of new ideas, methods and technology in your field?							
		Q52 Are you satisfied with the resources and/or opportunities provided by DRDC to stay abreast of new ideas, methods and technology in your field?					Total
		Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied	
Q51 How important is it to your job performance to stay abreast of new ideas, methods, and technology in your field?	Very Unimportant	0	0	0	2	1	3
	Somewhat Unimportant	0	0	1	0	0	1
	Somewhat Important	1	0	6	7	2	16
	Very Important	2	10	5	19	8	44
Total		3	10	12	28	11	64

(176)

Nearly three-quarter of respondents (70.3%) have worked with students as a part of their unit in the past. Of these, 40% characterized the experience as ‘Excellent’, and another 53.3% as ‘Good’.

Q53 Have you worked with students in your unit in the past?			
		Frequency	Valid Percent
Valid	Yes	45	70.3
	No	19	29.7
	Total	64	100.0

(177)

Q54 How would you rate your unit's experience working with students?			
		Frequency	Valid Percent
Valid	Fair	3	6.7
	Good	24	53.3
	Excellent	18	40.0
	Total	45	100.0

(178)

Employment Equity

One third of Level 2 respondents believe designated Employment Equity groups are adequately represented in feeder groups for key positions, and marginally more (50%) say their centre offers Professional Development and training opportunities specifically to identify and develop talent among members of designated EE groups.

Q2 Are designated EE groups adequately represented in feeder groups for key positions?			
		Frequency	Valid Percent
Valid	Yes	2	33.3
	No	4	66.7
	Total	6	100.0

(179)

Q3 Does your centre offer PD and training to identify and develop talent among EE groups?			
		Frequency	Valid Percent
Valid	Yes	3	50.0
	No	3	50.0
	Total	6	100.0

(180)

A Fisher's Exact Test indicates no statistically significant relationship between the two variables.

Q2 Are designated EE groups adequately represented in feeder groups for key positions? * Q3 Does your centre offer PD and training to identify and develop talent among EE groups?		
	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Fisher's Exact Test	0.400	0.200

(181)

S&T Peer Reviews

Almost half of level three respondents (46.9%) came from units which are subject to S&T peer review process. Of those which are subject to Peer review, most (46.2%) have had a review within the last year; a significant number (19.2%) either had never had a review or had gone more than 5 years without one.

Q33 Is your unit subject to S&T peer reviews?			
		Frequency	Valid Percent
Valid	Yes	30	46.9
	No	26	40.6
	Don't Know	8	12.5
	Total	64	100.0

(182)

Q34 When was the last peer review of an S&T activity in your unit?			
		Frequency	Valid Percent
Valid	Never	1	3.8
	One year ago	12	46.2
	Two years ago	2	7.7
	Three years ago	3	11.5
	Four years ago	3	11.5
	Five years ago	1	3.8
	More than five years ago	4	15.4
	Total	26	100.0

(183)

Most respondents (91.7%) reported that the outcome of their unit's last peer review was either somewhat or very positive. No one reported negative outcomes.

Q35 Overall, what was the outcome of your last peer review?			
		Frequency	Valid Percent
Valid	Neutral	2	8.3
	Somewhat Positive	9	37.5
	Very Positive	13	54.2
	Total	24	100.0

(184)

Many respondents (70.8%) found the feedback from their last peer review to be valuable.

Q36 Overall, did your last peer review offer valuable feedback?			
		Frequency	Valid Percent
Valid	Not Valuable	2	8.3
	Neutral	5	20.8
	Valuable	17	70.8
	Total	24	100.0

(185)

Seventy percent (70.8%) say that the feedback they received had 'Some Impact' on their unit's capabilities and competencies, and 66.7% characterized that impact as positive.

Q37 In general, how much impact does peer review have on your unit's capabilities and competencies?			
		Frequency	Valid Percent
Valid	No Impact	4	16.7
	Some Impact	17	70.8
	Significant Impact	3	12.5
	Total	24	100.0

(186)

Q38 In general, what kind of impact does peer review have on your unit's capabilities and competencies?			
		Frequency	Valid Percent
Valid	Neutral/ No Impact	8	33.3
	Positive Impact	16	66.7
	Total	24	100.0

(187)

Sixty-six percent (66.7%) say that the feedback they received had 'Some Impact' on their unit's project outcomes, but 58.3% characterized that impact as neutral or non-existent.

Q39 In general, how much impact does peer review have on the outcomes of your projects?			
		Frequency	Valid Percent
Valid	No Impact	7	29.2
	Some Impact	16	66.7
	Significant Impact	1	4.2
	Total	24	100.0

(188)

Q40 In general, what kind of impact does peer review have on the outcomes of your projects?			
		Frequency	Valid Percent
Valid	Neutral/ No Impact	14	58.3
	Positive Impact	10	41.7
	Total	24	100.0

(189)

It appears that the more recently an S&T peer review occurred the more impact the review had on outcomes of projects. There is a strong negative relationship between the rankings of the variables, which is statistically significant at 99% confidence.

Q34 When was the last peer review of an S&T activity in your unit? * Q39 In general, how much impact does peer review have on the outcomes of your projects?					
		In general, how much impact does peer review have on the outcomes of your projects?			
		No Impact	Some Impact	Significant Impact	Total
When was the last peer review of an S&T activity in your unit?	One year ago	1	10	1	12
	Two years ago	0	2	0	2
	Three years ago	2	1	0	3
	Four years ago	1	2	0	3
	Five years ago	0	1	0	1
	More than five years ago	3	0	0	3
Total		7	16	1	24

(190)

Q34 When was the last peer review of an S&T activity in your unit? * Q39 In general, how much impact does peer review have on the outcomes of your projects?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.438	0.001
Nominal by Nominal	Cramer's V	0.536	0.183

(191)

It appears that there is a relationship between how valuable an S&T feedback is and the impact of feedback on a unit's capabilities and competencies; in other words, feedback that is considered valuable tends to be incorporated into the unit's activities. There is a strong positive relationship between the rankings of the variables, which is statistically significant at 95% confidence.

Q36 Overall, did your last peer review offer valuable feedback? *Q37 In general, how much impact does peer review have on your unit's capabilities and competencies?					
		In general, how much impact does peer review have on your unit's capabilities and competencies?			Total
		No Impact	Some Impact	Significant Impact	
Overall, did your last peer review offer valuable feedback?	Not Valuable	1	1	0	2
	Neutral	2	3	0	5
	Valuable	1	13	3	17
Total		4	17	3	24

(192)

Q36 Overall, did your last peer review offer valuable feedback? *Q37 In general, how much impact does peer review have on your unit's capabilities and competencies?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.438	0.018
Nominal by Nominal	Cramer's V	0.344	0.225

(193)

It appears that there is a relationship between how valuable an S&T feedback is and the impact of feedback on a unit's project outcomes; in other words, feedback that is considered valuable tends to be incorporated into the unit's project management. There is a very strong positive relationship between the rankings of the variables, which is statistically significant at 99.9% confidence.

Q36 Overall, did your last peer review offer valuable feedback? * Q39 In general, how much impact does peer review have on the outcomes of your projects?					
		In general, how much impact does peer review have on the outcomes of your projects?			Total
		No Impact	Some Impact	Significant Impact	
Overall, did your last peer review offer valuable feedback?	Not Valuable	1	1	0	2
	Neutral	5	0	0	5
	Valuable	1	15	1	17
Total		7	16	1	24

(194)

Q36 Overall, did your last peer review offer valuable feedback? * Q39 In general, how much impact does peer review have on the outcomes of your projects?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.690	0.000
Nominal by Nominal	Cramer's V	0.596	0.002

(195)

Where there is quantitative impact (*how much...*) on project outcomes, that impact tends to be positive in quality (*what kind...*). There is a very strong and positive relationship between these variables, which is statistically significant at 99.9% confidence

Q39 In general, how much impact does peer review have on the outcomes of your projects? * Q40 In general, what kind of impact does peer review have on the outcomes of your projects?				
		In general, what kind of impact does peer review have on the outcomes of your projects?		
		Neutral/ No Impact	Positive Impact	Total
In general, how much impact does peer review have on the outcomes of your projects?	No Impact	7	0	7
	Some Impact	7	9	16
	Significant Impact	0	1	1
Total		14	10	24

(196)

Q39 In general, how much impact does peer review have on the outcomes of your projects? * Q40 In general, what kind of impact does peer review have on the outcomes of your projects?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.535	0.000
Nominal by Nominal	Cramer's V	0.570	0.020

(197)

Where there is quantitative impact on the unit's capabilities and competencies that impact tends to be positive in quality. There is a moderate-strong positive relationship between these variables, which is statistically significant at 95% confidence.

Q38 In general, what kind of impact does peer review have on your unit's capabilities and competencies? * Q37 In general, how much impact does peer review have on your unit's capabilities and competencies?					
		In general, how much impact does peer review have on your unit's capabilities and competencies?			
		No Impact	Some Impact	Significant Impact	Total
In general, what kind of impact does peer review have on your unit's capabilities and competencies?	Neutral/ No Impact	3	5	0	8
	Positive Impact	1	12	3	16
Total		4	17	3	24

(198)

Q38 In general, what kind of impact does peer review have on your unit's capabilities and competencies? * Q37 In general, how much impact does peer review have on your unit's capabilities and competencies?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.382	0.015
Nominal by Nominal	Cramer's V	0.445	0.093

(199)

Respondents reporting a quantitative impact of S&T reviews on project outcomes tend to also report a quantitative impact on the unit's competencies and capabilities. There is a very strong positive relationship between the ranking of these two variables, which is statistically significant at 99% confidence.

Q37 In general, how much impact does peer review have on your unit's capabilities and competencies? * Q39 In general, how much impact does peer review have on the outcomes of your projects?

		In general, how much impact does peer review have on the outcomes of your projects?			Total
		No Impact	Some Impact	Significant Impact	
In general, how much impact does peer review have on your unit's capabilities and competencies?	No Impact	4	0	0	4
	Some Impact	3	14	0	17
	Significant Impact	0	2	1	3
Total		7	16	1	24

(200)

Q37 In general, how much impact does peer review have on your unit's capabilities and competencies? * Q39 In general, how much impact does peer review have on the outcomes of your projects?

		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.684	0.001
Nominal by Nominal	Cramer's V	0.626	0.001

(201)

Collaborative Relationships

Two-thirds of respondents (66.6%) rate their collaborative working relationship with the private sector as either 'Good' or 'Excellent'; a somewhat lower number (58%) rate their collaborative working relationship with the academic community similarly.

Q41 How would you rate your unit's collaborative working relationship with the private sector S&T community?

		Frequency	Valid Percent
Valid	Poor	8	15.7
	Fair	9	17.6
	Good	22	43.1
	Excellent	12	23.5
	Total	51	100.0

(202)

Q42 How would you rate your unit's collaborative working relationship with the academic community?			
		Frequency	Valid Percent
Valid	Poor	5	10.0
	Fair	16	32.0
	Good	22	44.0
	Excellent	7	14.0
	Total	50	100.0

(203)

There appears to be a relationship between how respondents rate their collaborative relationships with private sector and academic partners. Respondents who report having a positive relationship with one group tend to also have a positive relationship with the other group. There is a moderate-strong positive relationship between the ranking of these two variables, which is statistically significant at 95% confidence.

Q41 How would you rate your unit's collaborative working relationship with the private sector S&T community? * Q42 How would you rate your unit's collaborative working relationship with the academic community?						
		How would you rate your unit's collaborative working relationship with the academic community?				Total
		Poor	Fair	Good	Excellent	
How would you rate your unit's collaborative working relationship with the private sector S&T community?	Poor	5	3	0	0	8
	Fair	0	2	5	2	9
	Good	0	8	11	2	21
	Excellent	0	3	5	3	11
Total		5	16	21	7	49

(204)

Q41 How would you rate your unit's collaborative working relationship with the private sector S&T community? * Q42 How would you rate your unit's collaborative working relationship with the academic community?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.355	0.007
Nominal by Nominal	Cramer's V	0.479	0.000

(205)

Very few respondents (26.3%) were aware of the results of their units most recent client satisfaction survey. However, over half of respondents (52%) claim they ‘Often’ or ‘Always’ receive feedback directly from clients or partners after a product enters service. The degree of candour and the breadth of feedback may be limited in direct feedback.

Q43 Were you informed of the results of the most recent partner/ client satisfaction survey for your unit?

		Frequency	Valid Percent
Valid	Yes	10	26.3
	No	28	73.7
	Total	38	100.0

(206)

Q44 How often do you receive feedback directly from clients or partners after S&T products enter service?

		Frequency	Valid Percent
Valid	Never	1	1.9
	Rarely	7	13.5
	Sometimes	17	32.7
	Often	24	46.2
	Always	3	5.8
	Total	52	100.0

(207)

There is a moderate relationship, which is significant at 95% confidence, between how often a respondent receives direct feedback and if they had been informed of the most recent client survey results. In other words the more often a manager receives feedback directly from a client the more likely that manager is to be aware of the most recent client satisfaction survey results**.**

Q44 How often do you receive feedback directly from clients or partners after S&T products enter service? * Q43 Were you informed of the results of the most recent partner/ client satisfaction survey for your unit?

		Were you informed of the results of the most recent partner/ client satisfaction survey for your unit?		
		Yes	No	Total
How often do you receive feedback directly from clients or partners after S&T products enter service?	Never	0	1	1
	Rarely	0	6	6
	Sometimes	3	8	11
	Often	5	11	16
	Always	1	0	1
Total		9	26	35

(208)

Q44 How often do you receive feedback directly from clients or partners after S&T products enter service? * Q43 Were you informed of the results of the most recent partner/ client satisfaction survey for your unit?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.291	0.038
Nominal by Nominal	Cramer's V	0.399	0.233

(209)

There are no relationships between how often direct feedback is received from clients and the quality of the collaborative relationship with either the private sector or academic communities.

Sixty five percent (65.4%) of respondents report that feedback from clients 'Often' or 'Always' influences the design or delivery of future projects.

Q45 Does feedback from partners and clients influence the design or delivery of future projects?			
		Frequency	Valid Percent
Valid	Rarely	2	3.6
	Sometimes	17	30.9
	Often	24	43.6
	Always	12	21.8
	Total	55	100.0

(210)

There is a moderate positive relationship between how often managers receive direct feedback from clients and how often feedback influences future projects. This relationship is statistically significant at 95% confidence.

Q44 How often do you receive feedback directly from clients or partners after S&T products enter service? * Q45 Does feedback from partners and clients influence the design or delivery of future projects?						
		Does feedback from partners and clients influence the design or delivery of future projects?				Total
		Rarely	Sometimes	Often	Always	
How often do you receive feedback directly from clients or partners after S&T products enter service?	Never	0	1	0	0	1
	Rarely	0	4	3	0	7
	Sometimes	2	6	4	4	16
	Often	0	5	13	6	24
	Always	0	0	2	1	3
Total		2	16	22	11	51

(211)

Q44 How often do you receive feedback directly from clients or partners after S&T products enter service? * Q45 Does feedback from partners and clients influence the design or delivery of future projects?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	0.274	0.002
Nominal by Nominal	Cramer's V	0.305	0.289

(212)

Collaboration on Policy and Programs Development

Most policy and program development done collaboratively would be with other employees of DRDC.

In general, 60.9% respondents describe the frequency of their collaboration specifically on policy and program development as 'Often' or 'Always'; and 31.3% describe the frequency as 'Sometimes' .

Q46 How often do you collaborate with others when developing policies or programs?			
		Frequency	Valid Percent
Valid	Never	1	1.6
	Rarely	4	6.3
	Sometimes	20	31.3
	Often	29	45.3
	Always	10	15.6
	Total	64	100.0

(213)

Nearly twenty percent (19.0%) of respondents describe their overall quality of their collaborative relationships specifically dealing with policy and program development as 'Excellent', and another 68.3% describe it as 'Good'.

Q46a In general, how would you assess the quality of your collaborative relationships?			
		Frequency	Valid Percent
Valid	Fair	8	12.7
	Good	43	68.3
	Excellent	12	19.0
	Total	63	100.0

(214)

Three quarters of respondents (76.2%) report that their collaborative relationships specifically dealing with policy and program development achieved most of the intended goals.

Q46b To what extent did your most recent collaboration achieve its intended goals or requirements?			
		Frequency	Valid Percent
Valid	Achieved some	11	17.5
	Achieved most	48	76.2
	Achieved all	4	6.3
	Total	63	100.0

(215)

It appears that the more positive a collaborative relationship is, the more likely the effort is to have achieved its goals. There is a strong positive relationship between the rankings of the two variables, which is statistically significant at 99% confidence.

Q46a In general, how would you assess the quality of your collaborative relationships? * Q46b To what extent did your most recent collaboration achieve its intended goals or requirements?					
		To what extent did your most recent collaboration achieve its intended goals or requirements?			
		Achieved some	Achieved most	Achieved all	Total
In general, how would you assess the quality of your collaborative relationships?	Fair	7	1	0	8
	Good	3	37	3	43
	Excellent	1	10	1	12
Total		11	48	4	63

(216)

Q46a In general, how would you assess the quality of your collaborative relationships? * Q46b To what extent did your most recent collaboration achieve its intended goals or requirements?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.418	0.006
Nominal by Nominal	Cramer's V	0.498	0.000

(217)

DRDC Mentoring Program

Sixty percent (60%) of respondents have been involved in the DRDC Mentoring Program at some point, most as Mentors (69%).

Q59 Have you been involved in the DRDC Mentoring Program?			
		Frequency	Valid Percent
Valid	Yes	42	60.0
	No	28	40.0
	Total	70	100.0

(218)

Q59a Have you been involved in the DRDC Mentoring Program?	
As a Mentor	69%
As a Mentee	40.5%
As a committee member	9.5%

(219)

Most respondents rated their experience with the Mentoring Program as either 'Good' (40.5%) or 'Excellent' (40.5%)

Q59b How would you rate your satisfaction with the DRDC Mentoring Program?			
		Frequency	Valid Percent
Valid	Poor	2	4.8
	Fair	6	14.3
	Good	17	40.5
	Excellent	17	40.5
	Total	42	100.0

(220)

Managers who had not been involved in the Mentoring Program were asked about their impression of the program; many held 'No Opinion' of the Program (57.1%), while some non-participants have a positive impression of the program (39.3%).

Q59c What is your impression of the DRDC Mentoring Program?			
		Frequency	Valid Percent
Valid	Positive	11	39.3
	No Opinion	16	57.1
	Negative	0	0.0
	Unaware of Program	1	3.6
	Total	28	100.0

(221)

All respondents were asked if they would be interested in participating in the Mentoring Program in the future. Many respondents are unsure (27.1%).

Q60 Are you interested in participating in the DRDC Mentoring Program in the future?			
		Frequency	Valid Percent
Valid	Yes	39	55.7
	No	12	17.1
	Unsure	19	27.1
	Total	70	100.0

(222)

By analyzing future interest in program participation against past participation in the program, it can be concluded that those who participated in the Mentoring program in the past appear more likely to participate in the program in the future. Statistical testing shows a strong relationship between the two variables, which is significant at 99.9% confidence.

Q59 Have you been involved in the DRDC Mentoring Program? * Q60 Are you interested in participating in the DRDC Mentoring Program in the future?				
		Q60 Are you interested in participating in the DRDC Mentoring Program in the future?		Total
		Yes	No/ Unsure	
Q59 Have you been involved in the DRDC Mentoring Program?	Yes	33	9	42
	No	6	22	28
Total		39	31	70

(223)

Q59 Have you been involved in the DRDC Mentoring Program? * Q60 Are you interested in participating in the DRDC Mentoring Program in the future?				
	Value	df	Asymp. Sig. (2-sided)	Approx. Sig.
Pearson Chi-Square	22.233	1	0.000	
Phi	0.564			0.000

(224)

For current and past participants there is a moderate-strong relationship between satisfaction with their experience and their interest in future participation.

Q60 Are you interested in participating in the DRDC Mentoring Program in the future? * Q59b How would you rate your satisfaction with the DRDC Mentoring Program?						
		How would you rate your satisfaction with the DRDC Mentoring Program?				Total
		Poor	Fair	Good	Excellent	
Are you interested in participating in the DRDC Mentoring Program in the future?	Yes	1	3	13	16	33
	No	0	1	0	0	1
	Unsure	1	2	4	1	8
Total		2	6	17	17	42

(225)

Q60 Are you interested in participating in the DRDC Mentoring Program in the future? * Q59b How would you rate your satisfaction with the DRDC Mentoring Program?			
		Value	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-c	-0.243	0.013
Nominal by Nominal	Cramer's V	0.358	0.097

(226)

The majority of respondents interested in participating in the Mentoring Program in the future would elect to participate as Mentors (94.9%), although a significant number are also interested in participating as Mentees (30.8%) or as a member of the Program committee (28.2%).

Q60a Are you interested in participating in the DRDC Mentoring Program in the future?	
As a Mentor	94.9%
As a Mentee	30.8%
As a committee member	28.2%

(227)

There were 22 comments made by respondents concerning the DRDC Mentoring Program. Below is a table summarizing the comments.

Comment	Frequency
General positive experience comment	10
Program is not effectively advertised	4
Not enough time to be in the program	4
Need for better vetting process in selection of participants	2
Unsure who is eligible for the program	2
Participates in DND Mentoring Program	2
Other	1

(228)

General Comments

A number of respondents commented on the design and implementation of the survey. Some of these comments seem to reflect a level of survey fatigue within the organization.

> "This survey was rather long. A progress bar would be appreciated."

> "I am seeing a number of requests for surveys. It is not always clear to me that the reminder notice is for a new survey or one which I have already completed."

Some respondents had difficulty answering questions, often due to their own particular situation, or that of their Centre.

> "I had difficulty applying some of the questions to my particular case, so I adopted a best-fit strategy."

> "Many of the questions were not taking into account the different ways that scientific work is done in DRDC"

There were both positive and negative comments about collaborative relationships with clients and partners. One respondent felt there was a long history of positive collaborative relationships in the organization:

> "We...have extensive experience in working with CF/DND clients and stakeholders [and] we have been doing this well for years."

However, another respondent pointed out the danger of collaborative relationships when the individual becomes aligned with the stakeholder or client at the expense of the organization:

> "Certains des employés sont plus loyaux au client qu'à RDDC."

Some comments addressed the need to formally document policies and duties at DRDC:

> "[Nous sommes] en train de mettre en place des instruments expliquant le rôle et les responsabilités de chacun et pour mieux planifier le programme et l'allocation des ressources." (We are developing explanations of everyone's roles in improving program planning and resource allocation.)

> "We need an accommodation plan ... that is open and transparent to all employees."

> "There should be an open annual report on the progress and success of the DRDC Mentoring Program."

8 Findings

The following findings are based on the analyses of the data from surveys 2 and 3. These findings present base-line organizational information for the six core elements of the MAF, and demonstrate the utility of the MAF for organizational development, as well as the feasibility of the survey instrument for gathering information not readily available elsewhere in the Agency.

Findings are organized by element and are followed in each case by an assessment of the elemental Indicators, based only on survey data and corporate information and documentation already referenced in this report, and modeled on the TB assessment criteria shown in Table 24. This raises an important distinction between the TB and DRDC MAFs. The TB MAF generally examines policies and frameworks, whereas the DRDC MAF, through its survey, examines actual performance. It is important to remember that the survey instrument is only one of possible multiple measurement instruments for each element, thus the results of the survey must be weighed against other element measures appropriately. Our analysis will assess DRDC MAF performance almost exclusively from the perspective of the survey.

While the TB MAF assesses departmental performance based on the existence of policies and frameworks, by utilizing a survey instrument, the DRDC MAF is adding a new dimension to the MAF. Managerial self-reporting reveals how policies and frameworks are actually utilized within the organization. As such, when compared to TB MAF assessment, DRDC MAF assessments will generally be more critical.

The DRDC MAF evaluates the walk, not the talk

Table 24: MAF Assessment Scale - Round IV[199]

Attention Required	• Significant deficiencies, or deficiencies in most of the measures listed for the indicator *and/or* • Inadequate attention to the deficiencies
Opportunity for Improvement	• Moderate deficiencies, or deficiencies in some of the measures listed for the indicator *and* • Evidence of attention to the deficiencies and progress
Acceptable	• No significant deficiencies in any of the measures *and* • Meets Treasury Board Policy expectations
Strong	• No deficiencies in any of the measures *and* • Sustained performance for the indicator that exceeds Treasury Board Policy expectations and suggests continued strong performance
Insufficient Information	• Neither Treasury Board Policy nor the department currently has the information required for the indicator (for example, because the indicator is new or due to very recent organizational changes).
Not Applicable	• Does not apply to the Department / Agency

8.1 Policy and Programs

Indicator: Sustained analytic capacity and culture of consultation, review and challenge

Development of policy capacity, which for DRDC includes S&T capacity, is often problematic in DRDC. Many managers feel that key positions are not filled quickly enough, though once they are, the individual performs effectively in a reasonable timeframe. Additionally, there is no relationship between the identification of high performing employees and how quickly a key position is filled, nor how effectively a new employee in a key position performs. This may be a reflection of lack of succession planning. Generally, despite the lack of a succession plan in the organization, managers are identifying high potential employees in their units and seem to feel that there are employees ready to compete for key positions. As may be expected in an S&T based environment, most managers report that keeping up with new ideas, methods and technology is very important to their job performance; however, there are mixed reports as to the satisfaction with resources available to do so.

[199] Treasury Board of Canada Secretariat, *MAF Assessment Scale - Round IV*, available from: http://www.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2006/scale-echelle-eng.asp.

In terms of planning for future capacity in personnel, there are some encouraging findings. The DRDC Mentoring Program offers an opportunity to support knowledge transfer. Most participants in the mentoring program have had positive experiences, and would participate in the program in the future. Non-participants appear to have limited knowledge about the program, and little desire to participate. Subordinates' Personal Learning Plans (PLP's) are linked to Knowledge, Skill and Abilities (KSA's) for current and future roles; and the number of managers encouraging cross training and knowledge transfer through team work is encouraging. The employment of students appears to be successful in that those who have worked with student employees in the past have had positive experiences, although we have no data on the number of students employed nor the quality of experiences from the students' perspectives.

Peer Review is an important factor in maintaining policy quality. Most S&T peer reviews appear to fall into the five year cycle, although some respondents say their unit has never had a review or that the last review was over 5 years ago. Most report having had positive outcomes and valuable feedback from their review. S&T review is more likely to affect a unit's capabilities and competencies than it affects project outcomes; however, there seems to be little quantity or quality of impact on a unit's projects or capabilities and competencies due to an S&T review, as implementation of review outcomes appears to be optional rather than mandatory.

Few managers are aware of the results of client and partner satisfaction surveys, and few receive direct feedback from clients after a product enters service. This results in an incomplete policy-feedback loop, using Eastman's policy model.

The infrastructure capacity of this element is addressed through the Stewardship Element.

Indicator: Results focused policy and program agendas aligned with government's horizontal priorities

According to survey responses, the strategic goals of Canada's national S&T strategy[200] appear to be adequately represented in DRDC's programs, with most activities addressing multiple national goals. The workforce development goal of the national strategy is one that is not as well represented, largely because DRDC's commercialization and mission directed R&D activities require a level of expertise which is not conducive to many conventional workforce development goals. As such, DRDC will need to make special efforts to support workforce development outside of commercialization and mission directed R&D activities.

Indicator: Social Evaluation of Impacts

A mechanism for identifying stakeholders outside of the partner/client paradigm does not currently exist at DRDC.

Indicator: Confidence of the ADM (S&T), clients and partners

This indicator was not assessed in our survey.

Assessment: Policy and Programs

[200] Industry Canada, *Mobilizing Science and Technology to Canada's Advantage.*

Table 25, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

Table 25: DRDC MAF Assessment, Policy and Programs

Indicator	Assessment
Sustained analytic capacity and culture of consultation, review and challenge	Opportunity for Improvement
Results focused policy and program agendas aligned with government's horizontal priorities	Strong
Social Evaluation of Impacts	Attention Required
Confidence of the ADM (S&T), clients and partners	Insufficient Information
OVERALL	**Opportunity for Improvement**

8.2 People

Although the Public Service Employee Survey[201] is the preferred survey instrument for the People element of the DRDC MAF, several relevant questions were asked of Level 2 managers during the third pilot survey under the guise of the Policy and Programs element. Also, a number of relevant People Element conditions are addressed through the Policy and Programs element, as workforce planning and capacity are integral components of that element.

Indicator: Workforce is sufficient in numbers and abilities while reflecting the Canadian population

Neither the population nor the response rate for Level 2 managers support confidence in the results; nonetheless, only one-third of the six Level 2 respondents felt that employment equity groups were adequately represented in feeder groups for key positions. This is consistent with statistics on employment equity group representation reported in DRDC's Annual Report.[202] Half of the Level 3 respondents reported offering developmental opportunities specifically for employment equity groups.

This indicator was also addressed through policy capacity issues in the Policy and Programs Element (see above). Also, our survey showed that 80% of Level 3 managers report that their unit does not have sufficient FTE to fulfill its mandate. This is not necessarily cause for alarm in and of itself; an audit of workload slippage and other unit performance criteria would provide a better indication of adequate staffing levels.

The lack of an Agency-wide Succession Plan has been noted in this report. Defence R&D Canada's mentoring program offers one component of a successful succession plan.

[201] TBS, *2008 Public Service Employee Survey Results*.
[202] DRDC, *Annual Report for the year ending 31 March 2008,* p. 61.

Indicator: Workplace is a supportive and respectful environment, including respect for official language requirements

This indicator was not assessed in our survey.

Indicator: All levels of management demonstrate effective leadership

This indicator was not assessed directly in our survey.

Indicator: Employees are engaged in their work and have opportunities to learn and grow

This indicator was addressed through policy capacity issues in the Policy and Programs Element. In that element we discovered that DRDC needs to make special efforts to support workforce development outside of commercialization and mission directed R&D activities. Some efforts by the Agency to address this inherent deficiency include the Mentoring program, Personal Learning Plans, cross training, secondment opportunities and team-based work.

Assessment: People

Table 26, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

Table 26: DRDC MAF Assessment, People

Indicator	Assessment
Workforce is sufficient in numbers and abilities while reflecting the Canadian population	Insufficient Information
Workplace is a supportive and respectful environment, including respect for official language requirements	Insufficient Information
All levels of management demonstrate effective leadership	Insufficient Information
Employees are engaged in their work and have opportunities to learn and grow	Acceptable
OVERALL	**Insufficient Information**

8.3 Service

Indicator: Monitored, continuously improved service quality

It is concerning that so many managers appear to be unaware of the results of the most recent client satisfaction surveys, although this may be in part due to suspension of such activities during stand-up of Defence S&T Enterprise processes.[203] Overview Group or Thrust Advisory Group records can supplant missing client surveys, but cannot replace the candor of responses available from anonymous client surveys. In absence of such information, managers' own perception of service quality may be misaligned with client or partners' perceptions, to the detriment of client/partner satisfaction. Our survey finds that when managers are aware of client feedback, it does influence the design and delivery of future projects.

On a positive note, the EXPEDITION series of organizational change initiatives are themselves indicative of an organization whose leadership is committed to transformation and service improvement.

Indicator: Leading advice on technology exploitation

This indicator was not assessed in our survey.

Indicator: Proactive engagement of clients and partners

This indicator was touched on by asking about how project results are communicated. The most common communication methods were presentations, meetings and standard reports. This is in line with the publications and presentations data found in the most recent DRDC Annual Report.[204]

Indicator: Effective relationships with clients & partners

There is room for improvement in the quality of collaborative relationships with both the private sector and academic communities. The correlation between the quality of these two relationships suggests that individual attitude is a factor in the success of these collaborative relationships. There seems to be better quality collaborative relationships within the Agency than with external collaborators. This seems reasonable considering the individuals are all coming from the DRDC environment. Our survey results also indicate that higher quality collaborative relationships lead to increases in goal achievement.

Assessment: Service

Table 27, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

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[203] Karim Dahel, private communication.

[204] DRDC, "Appendix 4: Publications and Conference Presentations" in *Annual Report for the year ending 31 March 2008*, p. 60.

Table 27: DRDC MAF Assessment, Service

Indicator	Assessment
Monitored, continuously improved service quality	Opportunity for Improvement
Leading advice on technology exploitation	Insufficient Information
Proactive engagement of clients and partners	Insufficient Information
Effective relationships with clients & partners	Opportunity for Improvement
OVERALL	**Opportunity for Improvement**

8.4 Risk Management

Indicator: Risk is managed within the context of the DND Corporate Risk Profile

Risk management has been problematic for DND in the TB MAF, and must necessarily be so for DRDC in its own MAF. A departmental Corporate Risk Profile is the cornerstone of the TBS Risk Management element. The Department of National Defence has not had a Corporate Risk Profile, although one is reportedly close to approval and release.

Indicator: Risk Management is integrated with planning and operations structures throughout all levels of the Agency

There appears to be no comprehensive DRDC risk management profile, which should be no surprise in absence of a DND Corporate Risk Profile.[205] There is neither a process in place to identify risk management stakeholders, nor a communication plan to communicate with stakeholders. Stakeholder identification appears to be based on corporate memory of past consultations rather than any data system or structured process.

Weakness in documenting project risks, coupled with weakness in risk reassessment during projects is a major concern. It is commonly held that risk management is the purview of project managers, rather than a pervasive responsibility in the organization. This project manager-centric view is consistent with concentration of risk management activities in the TDP program. Outside of the TDP program, the main forum for consultation about risk issues related to projects is TAG meetings.

Level 3 Managers do not appear to consistently have confidence that their subordinates understand their roles, responsibilities, or limitations on authority when managing risks. In each case, over half of survey respondents either have inconsistent or no confidence that their subordinates understand these risk management duties. Statistical testing supports the assumption that managers who make their risk management priorities and tolerances clear to subordinates are more likely to have confidence in their subordinates' understanding of their roles in managing risks.

[205] An examination of *Descartes* revealed neither a policy statement nor an SOP.

Managers who report that project plans consistently identify the likelihood and impact of risks appear more likely to revisit risk assessments during the delivery of the project. Mangers who report always or often comparing progress to established project milestones also appear somewhat more likely to report always or often identifying the likelihood and impact of project risks.

Indicator: Capacity exists to support a Risk Management Culture

The Agency needs to change the perception that Risk Management is solely the responsibility of project managers, so that each individual sees his/her own accountabilities in RM. Managers who consistently consider RM as a factor when assessing the performance of subordinates are more likely to have confidence in their subordinates' understanding of their roles, responsibilities and authorities for managing risks and have more frequent interaction with subordinates about RM issues. Integrating RM into Performance Management expectations should lead to increased delegation of Risk Management responsibilities and authorities to subordinates.

Assessment: Risk Management

Table 28, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

Table 28: DRDC MAF Assessment, Risk Management

Indicator	Assessment
Risk is managed within the context of the DND Corporate Risk Profile	Attention Required
Risk Management is integrated with planning and operations structures throughout all levels of the Agency	Opportunity for Improvement
Capacity exists to support a Risk Management Culture	Attention Required
OVERALL	**Attention Required**

8.5 Stewardship

The third pilot survey (S3) revisited areas of interest from the first pilot survey (S1). Areas which garnered incomplete or unsatisfactory responses in the first pilot were of particular interest. Overall, there was little change in responses from S1 to S3, which is not unexpected since there was no organizational response to the first pilot survey, as there would be for an operational MAF.

Indicator: Management systems provide relevant information and effective feedback on resources, results and controls

The first pilot survey indicated that over half of respondents with budgeting responsibilities had budget tolerances set by their superior, and that of those, all but one individual successfully managed their budget within that tolerance. The third pilot survey investigated the significance of setting budget tolerances, and found that there appears to be benefits to the organization. By setting budget tolerances and supporting employees efforts to work within those tolerances, managers are encouraging delegation and a culture of accountability.

As in the first pilot survey, respondents in S3 indicate that too few units have long term capital plans, which are necessary for building and maintaining capacity. Those which do have capital investment plans based on long term needs appear to be working towards future capacity needs incrementally. In S1, response trends suggested that many managers view capital planning as a frustrating exercise, particularly when Vote 5 funding is generally in short supply. There is room for improvement in the areas of equipment repair and special maintenance, and in terms of ease of use of the request process, and the timeliness and effectiveness of the service.

The first pilot survey found that there was substantial dissatisfaction with the procurement processes, while S3 also determined that there appear to be too few procurement specialists for the level of procurement activity in many centres. The first pilot survey found that the majority of respondents generally or always had sound working relationships with procurement functional authorities; survey 3 investigated further and found that, overall, the procurement process and the relationships with procurement specialists appear to be better at traditional research centres[206] than at NDHQ-based centres. Traditional research centres were also clearly better than NDHQ-based centres at making progress of procurement files visible to clients, and responses indicate that of those, DRDC's Atlantic and Valcartier may be a source of best practices.[207]

Additionally, in Survey 2, a respondent noted that ineffective procurement practices lead to significant risk management issues in terms of project and program delivery.

Indicator: Effective, efficient and economical project management

There continues to be a tendency to attribute project failures primarily to schedule and resource issues. In the third pilot survey, as in the first, it was noted that documentation for projects managed within a manager's unit did not include a responsibility matrix or some other formal assignment of responsibilities.

Project management was also reviewed in Survey2 as a component of the Risk Management element.

Indicator: Established internal audit function

Both pilot surveys found an overall good level of accountability for inventory items. Both identified areas of weakness in record keeping in general and in securing HR documents in particular. In both surveys, records were reported as not being sufficiently complete for the purposes of an audit, and in

[206] Atlantic, Valcartier, Ottawa, Toronto, and Suffield.
[207] D.C. Oxford, Private communication: "DRDC Atlantic and DRDC Valcartier are the only centres using ORACLE-based applications to support local administrative functions, such as procurement."

both surveys, personnel files are accessible to non-HR staff. [208] Survey 3 followed up on the security and tracking of classified documentation, and found some improvement over survey 1, which may be due to clarification of the question; however, there is still room for improvement in the tracking of classified correspondence.

Promoting results of activities through presentations, meetings, and publications appears to support the DRDC goals for reporting as described in the 2008 Annual Report, appendix 4[209].

Indicator: Compliance with policies, regulations, and legislation

This indicator was not assessed in our survey.

Assessment: Stewardship

Table 29, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

Table 29: DRDC MAF Assessment, Stewardship

Indicator	Assessment
Management systems provide relevant information and effective feedback on resources, results and controls	Opportunity for Improvement
Effective, efficient and economical project management	Opportunity for Improvement
Established internal audit function	Acceptable
Compliance with policies, regulations, and legislation	Insufficient Information
OVERALL	**Opportunity for Improvement**

8.6 Accountability

Indicator: Clear accountabilities and responsibilities for due process and results

There is a clear recognition of the principles of accountability by DRDC managers, but execution of accountability relationships is often inadequate. Objective setting is generally based upon the

[208] Note of caution: the surveys asked managers "if access to HR files was restricted to HR personnel only". Did managers respond based on personal experience of access refused or granted, did they have incorrect understandings of policy, or did their interpretation of 'access to files' differ from that of the survey designers? An example of misconception became apparent during focus group-based testing of S3, when a new manager was surprised to learn that personnel files would not be available to him directly; instead, he would have to obtain information from personnel files through HR staff. An example of differing interpretations would be that obtaining information via HR personnel was tantamount to 'access', which was not the survey designers' understanding.

[209] DRDC, "Appendix 4: Publications and Conference Presentations" in *Annual Report for the year ending 31 March 2008*, p. 60.

requirements of superiors and corporate objectives, but those objectives frequently lack measurable performance standards, so that it is difficult to hold subordinates to account. Level 3 managers who do set measurable performance standards for their subordinates also report receiving measurable performance standards from their superiors. This reinforces the important role of Level 2 managers in establishing effective accountability. Level 2 managers are role models for their subordinates.

There is a problem with Project documentation: few projects formally assign responsibilities. DRDC should utilize a project responsibility matrix for all projects, as a responsibility of the PM.

Indicator: Delegations consistent with capabilities

Most managers appear to follow Performance Management guidelines when dealing with poor performance by subordinates, ranging from consultation, through developmental training, to engagement of HR staff; however there are areas of concern, most notably the practice of changing goals to meet performance.

Level 3 managers appear to be better at distinguishing between duties and tasks for their subordinates, than their superior Level 2 managers are in distinguishing between duties and task for Level 3s.[210] Those managers who do make a distinction between duties and tasks appear to have more effective working relationships with their subordinates.

Indicator: Subordinates' goals reflect those assigned to their supervisors

Most Level 3 managers base subordinates' objectives on their own performance objectives and their superior's expectations for the unit's performance, which is supportive of the Accountability element and of PAA's 'roll-up' format. Accountability is enhanced when subordinates' performance objectives support their superiors' performance objectives, in part because superiors are more likely to include measurable standards in those situations. Only half of the superiors set performance objectives for their subordinates using milestones in CPME.

Assessment: Accountability

Table 30, below, shows the assessment rating of each Indicator and the overall assessment for the element, based on survey findings.

Table 30: DRDC MAF Assessment, Accountability

Indicator	Assessment
Clear accountabilities and responsibilities for due process and results	Opportunity for Improvement
Delegations consistent with capabilities	Acceptable
Subordinates' goals reflect those assigned to their supervisors	Strong
OVERALL	**Acceptable**

[210] The TB MAF speaks of accountabilities for process (here, 'duties') and results (here, 'tasks').

9 Recommendations

Due to the interdependent nature of the MAF elements, a single recommendation can offer improvement to multiple elements simultaneously; therefore, our recommendations are not grouped by element. Instead, recommendations are presented in the context in which they would have greatest effect on DRDC.

Based on the cyclic development of the proposed DRDC MAF, supported by three operational pilot studies, it is recommended that:

I. Defence R&D Canada should adopt the Management Accountability Framework proposed in this report;

1. This will require that DGMPRA implement a DRENet-based (or DRENet-accessible) on-line survey capability;
2. Note the utility of the Public Service Employee Survey and the availability of raw survey data for customized analysis in support of the DRDC MAF;
3. Note the potential utility of the Defence Ethics Survey, were members of ADM (S&T) group to be identified in the survey, and were the survey availability to be extended to the DRENet.

II. The degree of adoption of those recommendations of other WBEs of EXPEDITION 09 that are adopted by DRDC should be assessed through use of future DRDC MAF managers' surveys.

III. Defence R&D should use the findings of the EXPEDITION 09 operational pilots for the proposed DRDC MAF, to provide a starting point for the first operational MAF cycle, and particularly:

1. **Design and Implement a DRDC Succession Plan.**

   a. Note that without a formal succession plan, identification of high performing employees is restricted to the unit level and may both limit the potential for an individual to progress to higher levels, and reduce the pool of candidates for key positions;

   b. Continue to improve efforts to increase representation of designated Employment Equity groups across the Agency, particularly within the management cadre and its feeder groups. As a par t of these efforts, encourage specialized professional development opportunities and training to identify and encourage talent among designated group members;

   c. Develop and implement an Agency-wide Corporate Knowledge Plan. The number of managers encouraging cross training and knowledge transfer is encouraging; however, a strategic, organizational plan for knowledge transfer is necessary. The DRDC mentoring program is a positive example of one component of a successful Corporate Knowledge Plan;

d. It would be useful for recruitment purposes to survey past student employees to determine the level of satisfaction with their employment experience, and also to see what career paths they have taken since working at DRDC. Results of such a survey could help gauge the corporate image being promoted to student population.

2. Increase Support for and Awareness of Professional Development Options

a. There is a need to improve awareness and image of the DRDC mentoring program, including its intent, who is eligible, and the time commitment required. A comparison of the DRDC and DND Mentoring Program may provide a framework for improvement. A survey of current and past participants to determine areas of strength to continue and weakness to address would be beneficial. Weaknesses identified in our survey include limited time to participate and lack of vetting and support for participants;

b. Develop informal opportunities, such as social networking events, to allow managers with similar challenges to come together to brainstorm and offer mutual support;

c. Offer professional development and training in managing collaborative relationships, with emphasis on developing communication and interpersonal skills. This training should also highlight the appropriate boundaries that need to be maintained between the client/ partner and the Agency;

d. Track training courses and professional development opportunities undertaken by each employee at DRDC in a central database (PeopleSoft) which moves with the individual through the Agency, and from which training and professional development data can easily be extracted for MAF reporting.

3. Design and Implement a Corporate Risk Profile

a. Develop an Agency level corporate risk profile based on DND corporate risk profile, including risk management roles, responsibilities, and authority limitations for each level or generic role in DRDC;

b. Note the need for stronger risk management competency and practices in DRDC and initiate the inculcation of risk management practices outside the TDP program;

c. There is a problem with project documentation, where few projects formally assign responsibilities. DRDC should adopt the DND project responsibility matrix for all projects, as a responsibility of the Project Manager. This is necessary for both Accountability and Risk Management effectiveness;

d. Mandatory RM training (from CSPS or DND) for all Level 3 managers;

e. Adopt the DND impact/ likelihood matrix for project risk management and ensure it is diligently completed by project managers;

f. Develop informal opportunities, such as social networking events, to allow managers with similar challenges to come together to brainstorm and offer mutual support;

g. Create a ‘best practices’ database where lessons learned from past experiences can be shared.

4. Increase Stakeholder Engagement

a. Development and implementation of Social Impact Assessment Policy, to identify non-traditional stakeholders, and determine possible program impacts on these stakeholders;

b. Develop a Social Impact Checklist[211] which can be used at different stages of policy development to anticipate possible impacts on selected stakeholders and society in general;

c. Undertake a review of best practices in citizen engagement for military and scientific organizations and incorporate findings that are applicable to DRDC. The Defence Research Advisory Board or Defence Science Advisory Board might offer an avenue for this work.

5. Make Improvements to Performance Management Criteria

a. Make Risk Management performance a mandatory factor in managers’ performance appraisals. Integrating RM into Performance Management expectations should lead to increased delegation of Risk Management responsibilities and authorities to subordinates;

b. Performance objectives with measurable standards should be set for all managers and supervisors, and performance against these used for performance review. Our findings note the positive effect of measureable performance standards on organizational performance; encouraging use of such standards will strengthen accountability within the management cadre;

c. Note the need for greater linkage between performance objectives and CPME milestones for staff who report to level 3 managers;

d. Note benefit of distinguishing between tasks and duties;

e. Make use of PLPs as a performance review tool. This supports both Accountability and People elements of the MAF;

f. Develop and implement a comprehensive approach to setting realistic performance objectives and timelines for task completion, and for addressing failure to meet objectives.

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[211] See International Association for Impact Assessment (www.iaia.org) for useful information.

6. Make Improvements to Stewardship

a. Continue to ensure delegations are consistent with capabilities;

b. Note the need for strengthening of project management practices, particularly with respect to definition of responsibilities of project staff;

c. Note the variation in client satisfaction and file performance across DRDC with respect to procurement and take advantage of best practices where possible;

d. Note reported deficiencies in protection of information, whether perceived or real. Conduct an investigation to see if Personnel files are truly at risk; if so, educate personnel on privacy legislation and enforce policy to protect and restrict access to information

e. Improve the processes for recording and tracking confidential documents for the purposes of auditing, and for restricting access to personnel files;

f. Note the benefits of stronger budgeting and forecasting practices within the management cadre;

g. Our survey findings indicate that resource and scheduling issues are most likely to contribute to project failures, thus we recommend conducting an audit of milestone failures to look at the impact of resources and schedule slippage on outcomes.

7. Make Improvements to Capital Planning

a. Note the need for improved capital planning practices, within the constraints of limited Vote 5 resources;

b. DRDC is currently in the process of a ten year plan to renew infrastructure in its centres in order to better support the need for S&T capacity as identified in the 2006 Defence S&T Strategy. As a part of this initiative, the Agency should review equipment repair processes and make necessary improvements to increase satisfaction with the process itself and the resulting effectiveness and timeliness of repairs;

c. Consider assigning routine maintenance of equipment to individual positions within a unit. This would not only support the stewardship element but also policy capacity by providing valuable information and feedback for capital planning.

8. Make Improvements to Policy Process

a. According to our survey, the strategic goals of *Canada Advantage* appear to be adequately represented in the work of DRDC's units. This should be followed up with an audit for more objective results; also, explicit identification of how each project supports the Strategic goals may prove helpful for MAF reporting purposes;

b. Examine the S&T peer review program for performance and effectiveness. For example, is there follow up from reviews? Do units need to incorporate recommendations from reviews?

c. Note the need for partner or client satisfaction surveys to enhance DRDC's understanding of the quality of its S&T services to external clients and partners;

d. Report results of client and partner satisfaction surveys to each centre, along with an overall aggregate report for the Agency. This feedback can be used to refine elements of program and project delivery as a part of a successful policy process.

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Annex A English Surveys

A.1 Survey 2

EXPEDITION 09 SURVEY FOR MANAGERS

Confidentiality

We thank-you for your time and interest in participating in this survey. Please note that all answers will remain confidential and no one will be personally identified in the reporting of results. Please take the time to read the following Section on Consent for Research Participation.

Consent for Research Participation

I hereby consent to participate as a subject in the DRDC MAF Survey.

I understand that the purpose of this survey is to support ADM(S&T)'s role in the TB MAF process and to simplify the lives of managers by providing clarity in their roles and responsibilities, and a framework with which to execute them. The results of analysis of this survey will be reported to RDEC in September 2009, and will be included in a DRDC Atlantic Contract Report describing the development of the DRDC MAF.

I understand that my participation is completely voluntary, and that I am free to withdraw from the survey at any time.

I understand that the raw data associated with this survey will be coded in such a way that my identity will not be attached to the final data and reports that are produced.

I understand that all reports, whether published or internal, from this survey will be combined as an aggregate result, such that my identity cannot be revealed in any way.

- ❑ I accept, and will continue with the survey *(Go to Section A)*
- ❑ I do not accept and will not complete the survey *(Go to Section I)*

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Section A

ALL RESPONDENTS

1. In what DRDC Centre do you work?

- ❑ Atlantic
- ❑ Valcartier
- ❑ Ottawa
- ❑ Toronto
- ❑ Suffield
- ❑ CORA
- ❑ DGMPRA
- ❑ Security Science
- ❑ S & T Operations
- ❑ Corporate Services
- ❑ Chief of Staff

2. What type of position do you occupy in DRDC?

- ❑ Level Two (Director General or Chief of Staff) *Go to Section B*
- ❑ Level Three (Deputy Director General, Director, Chief Scientist, Section Head, Manager or equivalent) *Go to Section C1*
- ❑ Level Four (Supervisor, Functional Specialist or equivalent) *Go to Section G*
- ❑ None of the above (**LEAVE SURVEY**) *Go to Section I*

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Section B
LEVEL 2 MANAGERS

3. Does the organizational chart of your centre accurately reflect the centre's reporting structure?

   ❑ Yes *(go to 4)* ❑ No *(go to 3a)*

*****************SCREEN BREAK**

   a. What impact does the inaccuracy of the organizational chart have on your centre?

   _(textbox)____
   ____
   ____*(Proceed to 4)*

*****************SCREEN BREAK**

4. Do you have confidence that your subordinates understand their roles?

   ❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

5. Do you have confidence that your subordinates understand their responsibilities?

   ❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

6. Do you have confidence that your subordinates understand their authority?

   ❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

7. Do you set performance objectives for your immediate subordinates, either as part of the annual performance review process or as stand-alone objectives?

   ❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never *(go to Section I)*

*****************SCREEN BREAK**

8. How do you set performance objectives for your subordinates? (Check all that apply)

   - ❑ Based on milestones in CPME or project plans
   - ❑ Based on my own superior's expectations for me
   - ❑ Based on my subordinates' Personal Learning Plans
   - ❑ Based on past years' performance
   - ❑ Based on corporate initiatives
   - ❑ Based on their work description or statement of duties
   - ❑ Other (text box)____

9. Do your subordinates' performance objectives include measurable standards?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

10. Do your subordinates' performance objectives support performance objectives given to you by your superior?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

Proceed to Section I
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Section C1

LEVEL 3 MANAGERS

The following survey questions relate to the management of your unit. For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

11. How does your superior review your performance? (Check all that apply)

- ❑ Against general expectations
- ❑ Against a salary administration system or a performance management framework
- ❑ Against the elements of my work description or statement of duties
- ❑ Against my Personal Learning Plan
- ❑ Against agreed performance objectives
- ❑ On an ad hoc basis
- ❑ Other ___(text box)____

12. Does your superior set performance objectives for you, whether inside a performance management agreement, or as stand-alone management objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never *(Go to C2)*

****************SCREEN BREAK***

13. Do your performance objectives include measurable standards?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

14. Do your performance objectives support your superior's achievement of his or her own objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ Uncertain/ Don't Know

Proceed to Section C2

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Section C2

The following questions relate to Risk and Risk Management. For your reference, The Treasury Board of Canada Secretariat defines these as:

Risk: "the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives."

Risk Management: "a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues."

15. Did you receive risk management training in this fiscal year or last?

❑ Yes ❑ No

16. How often are you consulted for risk management input on projects the outcome of which you have a direct or related stake?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

17. Do you understand your role in managing risks?

❑ Yes ❑ No ❑ Uncertain/ Don't know

18. Do you understand your responsibilities for managing risks?

❑ Yes ❑ No ❑ Uncertain/ Don't know

19. Do you understand the limitations on your authority for managing risks?

❑ Yes ❑ No ❑ Uncertain/ Don't know

20. How often is risk management discussed at Thrust Advisory Group meetings?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ Uncertain/ Don't Know

The following questions relate to Project Management. For your reference, Treasury Board of Canada Secretariat defines this as:

Project Management: "the systematic planning, organizing and control of allocated resources to accomplish identified project objectives and outcomes."

21. Do you or your subordinates manage projects?

- ❑ Yes *Go to Section D* ❑ No *Go to Section E*

*****************SCREEN BREAK***

Section D

22. Do you compare reports of progress on projects to organizational plans, for example by reference to milestones in CPME?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

23. Do project plans explicitly identify specific risks in terms of both likelihood and impact?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

24. Are project risk assessments revisited during the delivery of projects?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

25. Where do you or your staff document identified project risks? (Select all that apply)

- ❑ In the CPME database
- ❑ In project documentation
- ❑ In a personal document (journal, organizer, PC file)
- ❑ Risks are not documented
- ❑ Other ____(text box)______________________________

26. When do you or your staff consult with project stakeholders about risk issues that may affect them? (Select all that apply)

- ❑ When planning a project
- ❑ During a scheduled project review
- ❑ As risk-related events occur
- ❑ Never
- ❑ Other ____(text box)__________________________________

Proceed to Section E

****************SCREEN BREAK***

Section E

In the following question, 'duties' are those day-to-day responsibilities that would be defined in your job description or statement of duties, such as delegated authorities under the Financial Administration Act, or responsibilities for things such as occupational health and safety. 'Tasks' are specific work items that have been assigned by your supervisor, together with specific expectations of performance (such as milestones).

27. Do you see a distinction between your ongoing duties and specific tasks assigned to you by your superior?

❑ Yes ❑ No ❑ Uncertain/ Don't know

28. Do you make progress reports of work in your unit to your superior during a formal program review?

❑ Yes ❑ No ❑ Uncertain/ Don't know

29. Do you have direct subordinates?

❑ Yes *Go to Section F1* ❑ No *Go to Section H*

*****************SCREEN BREAK**

Section F1

30. Do you require reports of progress from subordinates in preparation for or during a formal program review? *If you have not been through a full annual cycle in your current position please answer N/A unless your previous position was also at Level 3; in the latter case, answer based on your previous position.*

❑ Yes ❑ No ❑ N/A

31. Do you distinguish (either explicitly or implicitly) between ongoing duties and specific tasks that you assign to your subordinates?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

32. Do you set performance objectives for your immediate subordinates, either as part of the annual performance review process or as stand-alone objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never *(Go to Section F2)*

****************SCREEN BREAK***

33. How do you set performance objectives for your subordinates? (Check all that apply)

❑ Based on milestones in CPME or project plans
❑ Based on my own superior's expectations of my unit
❑ Based on my subordinates' Personal Learning Plans
❑ Based on past years' performance
❑ Based on corporate initiatives
❑ Based on their work description or statement of duties
❑ Other ____(text box)________________________________

34. Do your subordinates' performance objectives support your own performance objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

35. Do your subordinates' performance objectives include measurable standards?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

36. How often do you communicate with your subordinates about ongoing duties?

❑ Weekly ❑ Monthly ❑ 2-4 times per year ❑ Annually ❑ Never

37. How often do you communicate with your subordinates about assigned tasks?

❑ Weekly ❑ Monthly ❑ 2-4 times per year ❑ Annually ❑ Never

38. In general, how do you deal with situations where subordinates fail to meet performance objectives you have set?
_______(text box) _______________________________*Proceed to Section F2*

****************SCREEN BREAK**

Section F2

The following questions relate to *Risk and Risk Management by your subordinates*. For your reference, The Treasury Board of Canada Secretariat defines these as:

Risk: "the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives."

Risk Management: "a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues."

39. How many of your subordinates received risk management training in this fiscal year or last?

❑ All ❑ Some ❑ None

40. Do you make your risk management priorities and tolerances clear to your subordinates?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

41. Do you have confidence that your subordinates understand their roles in managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

42. Do you have confidence that your subordinates understand their responsibilities for managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

43. Do you have confidence that your subordinates understand the limitations on their authority for managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

44. On average, how often do subordinates bring risk issues to your attention?

❑ Weekly ❑ Monthly ❑ 2-4 times per year ❑ Annually ❑ Never

45. Do subordinates with responsibility for managing risks have the required authority to do so effectively?

❑ All ❑ Some ❑ None

46. Is risk management given consideration when assessing the performance of subordinates?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

Proceed to Section H
****************SCREEN BREAK**

Section G
FOR LEVEL 4 FUNCTIONAL AUTHORITIES OR SUPERVISORS

47. Does your superior set performance objectives for you, whether inside a performance management agreement, or as stand-alone management objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never *(Go to 50)*

****************SCREEN BREAK**

48. Do your performance objectives include measurable standards?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never

49. Do your performance objectives support your superior's achievement of his or her own objectives?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ Uncertain/ Don't Know

****************SCREEN BREAK**

50. Are reports of your work progress compared to organizational plans, for example by reference to milestones in CPME?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

51. How does your superior review your performance? (Check all that apply)

- ❑ Against general expectations
- ❑ Against a salary administration system or a performance management framework
- ❑ Against the elements of my work description or statement of duties
- ❑ Against agreed performance objectives
- ❑ Against my Personal Learning Plan
- ❑ On an ad hoc basis
- ❑ Other________(text box)____

The following questions relate to Risk and Risk Management. For your reference, The Treasury Board of Canada Secretariat defines these as:

Risk: "the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives."

Risk Management: “a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues.”

52. Do you understand your role in managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

53. Do you understand your responsibilities for managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

54. Do you understand the limitations on your authority for managing risks?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

55. Are you consulted for risk management input on projects the outcome of which you have a direct or related stake?

❑ Always ❑ Often ❑ Sometimes ❑ Rarely ❑ Never ❑ N/A

In the following question, 'duties' are those day-to-day responsibilities that would be defined in your job description or statement of duties, such as delegated authorities under the Financial Administration Act, or responsibilities for things such as occupational health and safety. 'Tasks' are specific work items that have been assigned by your supervisor, together with specific expectations of performance (such as milestones).

56. Do you see a distinction between your ongoing duties and specific tasks assigned to you by your superior?

❑ Yes ❑ No ❑ Uncertain/ Don’t Know

Proceed to Section H

*****************SCREEN BREAK**

Section H
FOR LEVEL 3 AND LEVEL 4
For each of the following statements, please indicate your level of agreement by circling the appropriate number.

	Strongly agree		Neither agree nor disagree		Strongly disagree
57. I can disagree with my supervisor on work-related issues without fear of reprisal	1	2	3	4	5
58. I never withhold risk information from my supervisor	1	2	3	4	5
59. If I were to suggest ways to improve how we do things, my supervisor would take them seriously	1	2	3	4	5
60. My supervisor creates an environment where it is acceptable to not have all the answers	1	2	3	4	5
61. If I were unavoidably absent, a colleague could step in to support my activities with relative ease	1	2	3	4	5
62. My supervisor encourages innovation as an outcome of risk taking	1	2	3	4	5
63. In my work unit, we learn from our mistakes and do what it takes to correct them.	1	2	3	4	5
64. My supervisor makes risk management a priority in our unit	1	2	3	4	5
65. My supervisor trusts me to make good decisions in high-risk/ emergency situations	1	2	3	4	5
66. It is important to follow rules when dealing with high-risk/ emergency situations	1	2	3	4	5

67. Risk management training is a good use of my time	**1**	**2**	**3**	**4**	**5**
68. I sometimes downplay a project's risks in order to ensure the project gets approval	**1**	**2**	**3**	**4**	**5**
69. I find it valuable to know how my peers have dealt with risk issues in their work	**1**	**2**	**3**	**4**	**5**

Proceed to Section I

*****************SCREEN BREAK***

Section I
ALL RESPONDENTS

Those are all the questions we have for you today. If you have any additional comments concerning this survey, please leave them here:

(text box)

Thank you for completing this survey. Your input is appreciated.

A.2 Survey 3

EXPEDITION 09 SURVEY FOR MANAGERS

Confidentiality

We thank-you for your time and interest in participating in this survey. The survey should take no longer than 30 minutes. Please note that all answers will remain confidential and no one will be personally identified in the reporting of results. Please take the time to read the following Section on Consent for Research Participation.

Informed Consent

I hereby consent to participate as a subject in the DRDC MAF Survey.

I understand that the purpose of this survey is to support ADM(S&T)'s role in the TB MAF process and to simplify the lives of managers by providing clarity in their roles and responsibilities, and a framework with which to execute them.

I understand that my participation is completely voluntary, and that I am free to withdraw from the survey at any time.

I understand that the raw data associated with this survey will be coded in such a way that my identity will not be attached to the final data and reports that are produced.

I understand that all reports, whether published or internal, from this survey will be combined as an aggregate result, such that my identity cannot be revealed in any way.

- ❑ I accept, and will continue with the survey (go to Section A)
- ❑ I do not accept and will not complete the survey (Go to Section Q)

************************SCREEN BREAK ******************************

Section A – ALL LEVELS

1. What type of position do you occupy in DRDC?

- ❑ Level Two (Director General or Chief of Staff) *Go to Section B*
- ❑ Level Three (Deputy Director General, Director, Chief Scientist, Section Head, Manager or equivalent) *Go to Section C*
- ❑ Level Four (Supervisor, Functional Specialist or equivalent) *Go to Section O*
- ❑ None of the above (**LEAVE SURVEY**) *Go to Section Q*

*****************SCREEN BREAK**

Section B – Level 2

The following survey questions relate to the management of designated employment equity groups, as identified in the *Employment Equity Act* . The four designated groups are women, Aboriginal peoples, persons with disabilities, and visible minorities.

2. To your knowledge, are designated group members adequately represented among feeder groups for key positions and areas in your centre?

   ❑ Yes ❑ No ❑ Don't Know

3. Does your centre offer professional development and training opportunities to identify and develop talent among designated groups?

   ❑ Yes ❑ No ❑ Don't Know

Go to Section J

*****************SCREEN BREAK***

Section C – Level 3

4. In what DRDC Centre do you work?

- ❑ Atlantic
- ❑ Valcartier
- ❑ Ottawa
- ❑ Toronto
- ❑ Suffield
- ❑ CORA
- ❑ DGMPRA
- ❑ Security Science
- ❑ S & T Operations
- ❑ Corporate Services
- ❑ Chief of Staff

For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

5. Are you responsible for managing a budget in your unit?

❑ Yes *go to Section D* ❑ No *go to Section E*

*****************SCREEN BREAK**

Section D

The following questions relate to budget management in your unit. For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

6. In the last fiscal year, did your supervisor set a tolerance for your end-of-year expenditures relative to your budget and/or expenditure forecasts?

   ❑ Yes (go to 6a) ❑ No (go to 7)

*****************SCREEN BREAK**

   a. Were your end-of-year expenditures within the budget or forecast tolerance set by your supervisor?

      ❑ Yes ❑ No

Proceed to question 7

*****************SCREEN BREAK**

7. Does your unit have a strategic capital plan that reflects long-term needs?

   ❑ Yes ❑ No

8. Does your unit have a local capital equipment plan that is based upon your budget allocation?

   ❑ Yes ❑ No

9. Overall, how would you rate the quality of your working relationship with your centre's financial specialists?

   ❑ Poor ❑ Fair ❑ Good ❑ Excellent ❑ N/A

The following questions relate to procurement activities in your unit.

10. Is the number of procurement specialists in your centre adequate for the level of procurement activity?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

11. How many of the internal procurement processes in your organization are easy to use?

    ❑ None ❑ Few ❑ Most ❑ All

12. Can clients of the internal procurement process in your centre easily determine progress of procurement files?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

13. Overall, how would you rate the quality of your working relationship with your centre's procurement specialists?

❑ Poor ❑ Fair ❑ Good ❑ Excellent ❑ N/A

Proceed to Section E

*****************SCREEN BREAK***

Section E – Information and Asset Management

14. Suppose a typical unit or activity under your authority was selected for an audit by DRDC or DND auditors. Would the auditor get a 'complete picture' by utilizing only files and other records?

❑ Yes *go to Section F2* ❑ No *go to Section F1*

*****************SCREEN BREAK**

Section F1

15. Suppose a typical unit or activity under your authority was selected for an internal audit. In order to have the 'complete picture', to what degree would the auditor have to consult with you or your subordinates for additional input?

    - ❑ A significant amount of input would be required
    - ❑ A moderate amount of input would be required
    - ❑ A minor amount of input would be required

Proceed to Section F2
*****************SCREEN BREAK**

Section F2

16. When did you or a responsible subordinate last survey the inventory for which you are accountable (If you are a Corporate Services manager, this question refers to the inventory in your unit, not the whole organization).

    ❑ Within the last 6 months

    ❑ Within the last 7 to 12 months

    ❑ Within the last 13 to 24 months

    ❑ More than 24 months ago

    ❑ Never

    ❑ I do not control an inventory of accountable items

17. Do you or your subordinates manage projects?

    ❑ Yes *Go to Section G*　　❑ No *Go to Section H*

****************SCREENBREAK**

Section G – Project Management

The following questions relate to Project Management. For your reference, Treasury Board of Canada Secretariat defines Project Management as "the systematic planning, organizing and control of allocated resources to accomplish identified project objectives and outcomes."

18. For projects managed within your unit, does the project management documentation include a responsibility matrix or some other formal equivalent assigning responsibilities?

    ❑ Yes ❑ No

19. If a project managed within your unit should fail to meet planned milestones, in general, how likely are each of the following to have played a role in that failure?

	Very Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Very Likely
Resources	**1**	**2**	**3**	**4**	**5**
Schedule	**1**	**2**	**3**	**4**	**5**
Goals	**1**	**2**	**3**	**4**	**5**
Quality of milestones	**1**	**2**	**3**	**4**	**5**

20. How do you make the interim or final project results available to stakeholders, clients and/or partners? [choose all that apply]

    ❑ Presentations
    ❑ Demonstrations
    ❑ Conference papers
    ❑ Journal papers
    ❑ Standard reports
    ❑ Meeting
    ❑ Briefing notes
    ❑ Other

21. Does your staff publish papers or reports for all project WBEs?

❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

Proceed to Section H

*****************SCREEN BREAK***

Section H – Subordinates

For the purposes of this Section, “S&T professionals” includes occupational groups such as Engineers, Chemists or Computer Scientists who directly support S&T programs; occupational groups such as Technologists are not included.

22. Do you have direct subordinates?

- ❑ Yes, and some are defence scientists or S&T professionals *go to Section I*
- ❑ Yes, but none are defence scientists or S&T professional *go to Section J*
- ❑ No *go to Section K*

*****************SCREEN BREAK***

Section I – Subordinates

For the purposes of this Section, S&T professionals includes occupational groups such as Engineers, Chemists or Computer Scientists who directly support S&T program; occupational groups such as Technologists are not included. For the purposes of this question, collaboration implies face-to-face interaction between your subordinates and external stakeholders, not simply participation in international projects.

23. How many of your subordinates are defence scientists or S&T professionals? Use authorized staffing level rather than a headcount of incumbents. NUMBER

    b. How many of your subordinate defence scientists or S&T professionals collaborate with DND, CF or Public Safety Canada stakeholders? NUMBER

    c. How many of your subordinate defence scientists collaborate with external Canadian stakeholders (including contractors) NUMBER

    d. How many of your subordinate defence scientists collaborate with foreign partners under the auspices of TTCP, NATO or other international agreements? NUMBER

    e. How many of your subordinate defence scientists or S&T professionals collaborate with external partners on a fee-for-service or cost-recovery basis?

        i. Canadian partners: NUMBER

        ii. Foreign partners : NUMBER

Proceed to Section J
*****************SCREEN BREAK***

Section J – Level 2 and Level 3

The following survey questions relate to management of subordinates in your unit. For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

24. Are subordinates' personal learning plans (PLP's) linked to the appropriate knowledge, skills, and abilities required for current and future roles?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

25. Have you had discussions with your subordinates regarding the various possible means of passing on their corporate knowledge

    ❑ Yes ❑ No

26. When appropriate, do you encourage subordinates to work in teams and cross-train to foster knowledge transfer and broaden skill sets?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

27. Have you considered options that would allow you to bring in a new employee while the incumbent remained in the organization in order to facilitate knowledge transfer?

    ❑ Yes *go to 27a* ❑ No *go to 28*

****************SCREEN BREAK***

a. Have you ever brought in a new employee while the incumbent remains in the organization in order to facilitate knowledge transfer?

   ❑ Yes ❑ No

****************SCREEN BREAK***

28. Does your unit have sufficient FTEs to successfully fulfill your unit's mandate?

    ❑ Yes ❑ No

29. Are key positions filled quickly?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

30. Do new employees in key positions perform effectively in their role within a reasonable timeframe?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

31. Are there qualified employees in your unit who are ready to compete for key positions and areas?

❑ Yes ❑ No

32. Do you identify 'high-performing' employees for succession planning?

❑ Yes ❑ No

Proceed to Section K

*****************SCREEN BREAK**

Section K – Level 2, Level 3

The following survey questions relate to the peer review process.

33. Is your unit subject to S&T peer reviews?

- ❑ Yes *go to Section L*
- ❑ No *go to Section N*
- ❑ Don't know *go to Section N*

*****************SCREEN BREAK**

Section L – Level 2, Level 3

34. When was the last peer review of an S&T activity in your unit?

- ❑ One year ago
- ❑ Two years ago
- ❑ Three Years ago
- ❑ Four years ago
- ❑ Five years ago
- ❑ More than 5 years ago
- ❑ Never
- ❑ Unknown ***Go to section N***

Others Proceed to Section L2

****************SCREEN BREAK***

Section L2 – Level 2, Level 3

35. Overall, what was the outcome of your last peer review?

❑ Very Negative	❑ Somewhat Negative	❑ Neutral	❑ Somewhat Positive	❑ Very Positive	❑ Don't Know ***Go to section N***

-------------------***Go to Section M***---

*****************SCREEN BREAK***

Section M – Level 2, Level 3

36. Overall, did your last peer review offer valuable feedback?

- ❑ Not Valuable ❑ Neutral ❑ Valuable

37. In general, *how much impact* does peer review have on your **unit's capabilities and competencies**?

- ❑ No Impact ❑ Some Impact ❑ Significant Impact

38. In general, *what kind of impact* does peer review have on your **unit's capabilities and competencies**?

- ❑ Negative Impact ❑ Neutral/ No Impact ❑ Positive Impact

39. In general, *how much impact* does peer review have on the outcomes of your **projects**?

- ❑ No Impact ❑ Some Impact ❑ Significant Impact

40. In general, *what kind of impact* does peer review have on the outcomes of your **projects**?

- ❑ Negative Impact ❑ Neutral/ No Impact ❑ Positive Impact

Proceed to Section N
*****************SCREEN BREAK***

Section N – Level 2, Level 3

The following questions relate to working and collaborative relationships with partners, clients, and contractors. For the purposes of this survey, collaborative means 'to work jointly on an initiative to achieve a common purpose, while sharing accountabilities'.

41. How would you rate your unit's collaborative working relationship with the private sector S&T community?

    ❑ Poor ❑ Fair ❑ Good ❑ Excellent ❑ N/A

42. How would you rate your unit's collaborative working relationship with the academic community?

    ❑ Poor ❑ Fair ❑ Good ❑ Excellent ❑ N/A

43. Were you informed of the results of the most recent partner/client satisfaction survey for your unit?

    ❑ Yes ❑ No ❑ N/A

44. How often do you receive feedback directly from clients or partners after S&T products enter service?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always ❑ N/A

45. Does feedback from partners and clients (includes both direct and survey feedback) influence the design or delivery of future projects?

    ❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always ❑ N/A

46. How often do you collaborate with others when developing policies or programs?

❑ Never ***Level 2- Go to Section P*** ***Level 3- Go to Section O***	❑ Rarely ❑ Sometimes ❑ Often ❑ Always ------------------***Go to question 46a***-------------------------------------

*****************SCREEN BREAK***

b. In general, how would you assess the quality of your collaborative relationships?
   ❑ Poor ❑ Fair ❑ Good ❑ Excellent

c. To what extent did your most recent collaboration achieve its intended goals or requirements?

❑ Achieved none	❑ Achieved some	❑ Achieved most	❑ Achieved all

Level 2- Proceed to Section P
Level 3- Proceed to Section O
******************SCREEN BREAK***

Section O – Level 3 and Level 4

The following questions relate to maintenance of equipment utilized in your unit. For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

47. Is daily/routine maintenance of program-related equipment (e.g. calibration, etc) formally assigned to a designed individual in your unit?

❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always ❑ N/A

48. Is daily/routine maintenance of infrastructure-related equipment (e.g. toner replacement, etc) formally assigned to a designed individual in your unit?

❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always ❑ N/A

49. When equipment needs special maintenance or repair, is the process used for the request easy to use?

❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

50. Are equipment repair requests addressed in a timely and effective manner?

❑ Never ❑ Rarely ❑ Sometimes ❑ Often ❑ Always

The following questions relate your experiences in your work unit.

51. How important is it to your job performance to stay abreast of new ideas, methods and technology in your field?

❑ Very Unimportant ❑ Somewhat Unimportant ❑ Somewhat Important ❑ Very Important

52. Are you satisfied with the resources and/or opportunities provided by DRDC to stay abreast of new ideas, methods and technology in your field?

❑ Very Dissatisfied ❑ Somewhat Dissatisfied ❑ Neither Satisfied nor Dissatisfied ❑ Somewhat Satisfied ❑ Very Satisfied

53. Has your unit worked with students in your unit in the past? (FSWEP, co-op, internships, etc.)

❑ Yes *go to Section O2* ❑ No *go to Section P*

*****************SCREEN BREAK**

Section O2 – Level 3 and Level 4

54. How would you rate your unit’s experience working with students?

❑ Poor ❑ Fair ❑ Good ❑ Excellent

Proceed to Section P
*****************SCREEN BREAK***

Section P – ALL

The following question relates to broad strategic goals. For the purposes of this survey, 'your unit' represents the personnel and resources that you manage or supervise.

55. In general, how frequently are the following broad goals an explicit factor in your unit's work?

	Never	Rarely	Sometimes	Often	Always
Workforce development	**1**	**2**	**3**	**4**	**5**
Maintenance of national scientific and technical infrastructure and capacity	**1**	**2**	**3**	**4**	**5**
Expansion of the body of knowledge	**1**	**2**	**3**	**4**	**5**
Commercialization	**1**	**2**	**3**	**4**	**5**
Mission directed needs for R&D results	**1**	**2**	**3**	**4**	**5**

The following questions relate to information management in your centre.

56. In your centre, is access to personnel files restricted to human resources staff only?

❑ Yes ❑ No ❑ Don't know

57. In your centre, is classified correspondence tracked? (e.g. unique user ID, document log, etc)

❑ Yes ❑ No ❑ Don't know

58. In your centre, is classified correspondence filed securely?

❑ Yes ❑ No

The following questions relate to the DRDC Mentoring Program.

59. Have you been involved in the DRDC Mentoring Program?

❑ Yes *go to 59a* ❑ No *go to 59c*

****************SCREEN BREAK***

a. In what capacity were you involved? Check all that apply

❑ Mentor

❑ Mentee

❑ Member of mentoring program team

b. How would you rate your satisfaction with the DRDC Mentoring Program?

❑ Poor ❑ Fair ❑ Good ❑ Excellent

Go to question 60
****************SCREEN BREAK***

c. **If no**, what is your impression of the DRDC Mentoring Program?

❑ Positive ❑ Negative ❑ No Opinion ❑ Unaware of Program

Go to question 60
****************SCREEN BREAK***

60. Are you interested in participating in the DRDC Mentoring Program in the future?

❑ Yes *go to 60a* ❑ No *go to 61* ❑ Unsure *go to 61*

*****************SCREEN BREAK**

a. In what capacity would you be interested in participating in the Mentoring Program?

❑ Mentor

❑ Mentee

❑ Member of mentoring program team

Proceed to question 61
*****************SCREEN BREAK***

61. Please note any comments on the DRDC Mentoring Program here:

(textbox)

____
____
____
____

Proceed to Section Q
*****************SCREEN BREAK***

Section Q

Those are all the questions we have for you today. If you have any additional comments concerning this survey, please leave them here:

(text box)

Thank you for completing this survey. Your input is appreciated.

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Annex B French Surveys

B.1 Sondage 2

SONDAGE À L'INTENTION DES GESTIONNAIRES POUR EXPÉDITION 09

Anonymat
Nous remercions de l’intérêt que vous avez manifesté pour cette enquête et du temps que vous voudrez bien y consacrer. Veuillez noter que toutes les réponses resteront confidentielles et que personne ne sera identifié personnellement dans la présentation des résultats. Veuilliez lire a section suivante au sujet de consentement.

Consentement
Je consens, par la présente, à participer à l’enquête sur le CRG pour RDDC.
J’ai bien compris que la fonction de cette enquête est de soutenir le rôle du SMA(S et T) dans le processus du CRG du Conseil du Trésor et de simplifier la vie des gestionnaires en leur fournissant des rôles et des responsabilités clairs ainsi qu’un outil qui les aidera à mettre ceux-ci en œuvre. On donnera les resultats du sondage pemièrement au comité exécutif de rddc en septembre 2009 et deuxièmement dans un rapport de contracteur de rddc Atlantique.

J’ai bien compris que ma participation à cette enquête se fait à titre purement volontaire et que je suis libre de me retirer à tout moment.

J’ai bien compris que les données brutes de cette enquête seront encodées de façon à ce que mon identité ne soit pas associée aux données de synthèse et aux rapports qui seront produits à partir de ces données.

J’ai bien compris que tous les rapports, qu’ils soient publics ou internes, produits à partir de cette enquête seront des documents de synthèse qui ne révéleront pas mon identité de quelque façon que ce soit

- ❑ Je consens à participer *(continue with survey)*
- ❑ Je ne consens pas à participer *(Go to Section I)*

*************************[SCREEN BREAK]*********************************

Section A

À TOUS LES RÉPONDANTS

1. À quel centre de RDDC travaillez-vous?

- ❑ Atlantique
- ❑ Valcartier
- ❑ Ottawa
- ❑ Toronto
- ❑ Suffield
- ❑ CARO
- ❑ DGRAPM
- ❑ Sciences pour la sécurité
- ❑ Opérations S & T
- ❑ Services généraux
- ❑ Chef d'état-major

2. Quel type de poste occupez-vous à RDDC?

- ❑ Niveau deux (directeur général ou chef d'état-major) *Go to Section B*
- ❑ Niveau trois (directeur général adjoint, directeur, scientifique en chef, chef de section, gestionnaire ou l'équivalent) *Go to Section C1*
- ❑ Niveau quatre (superviseur, expert fonctionnel ou l'équivalent)*Go to Section G*
- ❑ Aucun de ce qui précède (**QUITTER LE SONDAGE**) *Go to Section I*

****************SCREEN BREAK***

Section B

GESTIONNAIRES DE NIVEAU 2

3. L'organigramme de votre centre témoigne-t-il fidèlement de la structure hiérarchique du centre?

❑ Oui *(go to 4)* ❑ Non *(go to 3a)*

****************SCREEN BREAK***

a. Quel effet l'inexactitude de l'organigramme exerce-t-elle sur votre centre?

(textbox)____
____*(Proceed to 4)*

****************SCREEN BREAK***

4. Êtes-vous persuadé que vos subordonnés comprennent leurs rôles?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

5. Êtes-vous persuadé que vos subordonnés comprennent leurs responsabilités?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

6. Êtes-vous persuadé que vos subordonnés comprennent leurs pouvoirs?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

7. Fixez-vous des objectifs de rendement à l'intention de vos subordonnés immédiats, soit dans le cadre du processus annuel d'examen du rendement, soit en tant qu'objectifs indépendants?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais *(Go to Section I)*

****************SCREEN BREAK***

8. Comment établissez-vous les objectifs de rendement de vos subordonnés? (Cocher tous les points pertinents)

- ❑ d’après les jalons du SCPG ou les plans des projets
- ❑ en fonction des attentes de mon supérieur à mon égard
- ❑ en fonction de leur plan d’apprentissage personnel
- ❑ en fonction du rendement des années antérieures
- ❑ selon les initiatives de l’organisation
- ❑ en fonction de leur description de travail ou de l’énoncé de mes fonctions
- ❑ autre ____

9. Les objectifs de rendement de vos subordonnés intègrent-ils des normes mesurables?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

10. Les objectifs de rendement de vos subordonnés soutiennent-ils vos propres objectifs de rendement?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

Proceed to Section I
*****************SCREEN BREAK**

Section C1

GESTIONNAIRES DE NIVEAU 3

Les questions qui suivent se rapportent à la gestion de votre unité. Pour les besoins du sondage, « votre unité » désigne le personnel et les ressources que vous gérez ou supervisez.

11. Comment votre supérieur évalue-t-il votre rendement? (Cocher tous les points pertinents)

    - ❑ par rapport aux attentes générales
    - ❑ en fonction d'un système d'administration de la rémunération ou d'un cadre de gestion du rendement
    - ❑ par rapport aux éléments de ma description de travail ou mon énoncé des fonctions
    - ❑ en fonction de mon plan d'apprentissage personnel
    - ❑ par rapport aux objectifs convenus
    - ❑ de façon aléatoire
    - ❑ autre ____

12. Votre supérieur établit-il des objectifs de rendement qui intègrent des normes mesurables pour vous, soit dans le contexte d'une entente de gestion du rendement, soit en tant qu'objectifs indépendants de gestion?

    ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais *(Go to C2)*

****************SCREEN BREAK**

13. Vos propres objectifs de rendement intègrent-ils des normes mesurables?

    ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

14. Vos objectifs de rendement soutiennent-ils la réalisation par votre supérieur de ses propres objectifs?

    ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ Incertain/ Ne sais pas

Proceed to Section C2

****************SCREEN BREAK**

Section C2

Les questions suivantes se rapportent au risque et à la gestion du risque. À titre de référence, voici les définitions du Secrétariat du Conseil du Trésor à ces sujets :

Le risque se rapporte à l'incertitude qui entoure des événements et des résultats futurs. Il est l'expression de la probabilité et de l'incidence d'un événement susceptible d'influencer l'atteinte des objectifs de l'organisation.

La gestion du risque est une approche systématique servant à déterminer la meilleure voie à prendre en cas d'incertitude en identifiant, en évaluant, en comprenant, en communiquant les questions liées aux risques et en prenant des mesures à leur égard.

15. Avez-vous reçu une formation en gestion des risques au cours de cette année financière ou de la dernière année financière?

    ❑ Oui ❑ Non

16. À quelle fréquence est-ce qu'on vous consulte relativement à la gestion des risques de projets dont les résultats vous sont directement ou indirectement imputables?

    ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

17. Comprenez-vous vos rôles en fait de gestion des risques?

    ❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

18. Comprenez-vous vos responsabilités en fait de gestion des risques?

    ❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

19. Comprenez-vous les limites de vos pouvoirs en fait de gestion des risques?

    ❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

20. À quelle fréquence la gestion des risques fait-elle l'objet de discussions aux réunions du Groupe consultatif sur les vecteurs?

    ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ Incertain/ Ne sais pas

Les questions suivantes se rapportent à la gestion de projet. À titre de référence, voici la définition du Conseil du Trésor à ce sujet :
La gestion de projet désigne la planification, l'organisation et la surveillance systématiques des ressources attribuées pour atteindre certains objectifs et résultats des projets.

21. Est-ce que vous-même ou vos subordonnés gérez des projets?

❑ Oui *Go to Section D* ❑ Non *Go to Section E*

****************SCREEN BREAK**

Section D

22. Les comptes rendus de l’avancement des projets se font-ils comparativement aux plans organisationnels, par exemple par rapport aux jalons du SCPG?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

23. Les plans des projets sont-ils explicites pour ce qui est de l’identification et de l’évaluation des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

24. Les évaluations des risques des projets sont-elles réexaminées au moment de la livraison des projets?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

25. Par quel moyen vous-même ou votre personnel consignez-vous les risques reconnus des projets? (Cocher tous les points pertinents)

❑ Dans la base de données du SCPG
❑ Dans la documentation concernant le projet
❑ Dans un document personnel (journal de bord, organiseur, dossier informatique)
❑ Les risques ne sont pas documentés
❑ Autre ____(text box)______________________________

26. À quel moment vous-même ou votre personnel consultez-vous les intervenants des projets au sujet des risques pouvant les toucher?

❑ Lors de la planification d’un projet
❑ Lors des étapes prévues d’examen du projet
❑ À mesure que surviennent les événements liés aux risques
❑ Jamais
❑ Autre occasion ____

Proceed to Section E

****************SCREEN BREAK***

Section E

Dans le contexte des questions ci-après, le terme « fonctions » désigne les responsabilités quotidiennes qui seraient énoncées dans votre description de travail ou énoncé des fonctions, tels les pouvoirs délégués en vertu de la *Loi sur la gestion des finances publiques*, ou les responsabilités à l'égard entre autres de la santé et sécurité au travail. Les « tâches » s'entendent des éléments de travail que vous confie votre superviseur, ainsi que des attentes précises de rendement (comme les jalons).

27. Percevez-vous une distinction entre vos fonctions et les tâches que vous attribue votre supérieur?

❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

28. Présentez-vous des rapports d'avancement sur le travail de votre unité à votre supérieur dans le contexte d'un examen formel des programmes?

❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

29. Avez-vous des subordonnés qui relèvent directement de vous?

❑ Yes *Go to Section F1* ❑ No *Go to Section H*

****************SCREEN BREAK**

Section F1

30. Exigez-vous de vos subordonnés des rapports d'avancement en prévision ou dans le cadre d'un examen formel des programmes? *Si vous n'avez pas encore accompli un cycle annuel complet dans votre poste actuel, veuillez répondre d'après votre expérience antérieure au même niveau professionnel à RDDC, ou selon ce que vous comptez faire.*

❑ Oui ❑ Non ❑ S.O.

31. Faites-vous une distinction (explicitement ou implicitement) entre les fonctions et les tâches que vous confiez à vos subordonnés?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

32. Fixez-vous des objectifs de rendement à l'intention de vos subordonnés immédiats, soit dans le cadre du processus annuel d'examen du rendement, soit en tant qu'objectifs indépendants?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais *(Go to Section F2)*

****************SCREEN BREAK***

33. Comment établissez-vous les objectifs de rendement de vos subordonnés? (Cocher tous les points pertinents)

❑ d'après les jalons du SCPG ou les plans des projets
❑ en fonction des attentes de mon supérieur à l'égard de mon unité
❑ en fonction de leur plan d'apprentissage personnel
❑ en fonction du rendement des années antérieures
❑ selon les initiatives de l'organisation
❑ en fonction de leur description de travail ou de l'énoncé de mes fonctions
❑ autre ____

34. Les objectifs de rendement de vos subordonnés soutiennent-ils vos propres objectifs de rendement?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

35. Les objectifs de rendement de vos subordonnés intègrent-ils des normes mesurables?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

36. À quelle fréquence communiquez-vous avec vos subordonnés au sujet des fonctions exécutées?

❑ Une fois par semaine ❑ Une fois par mois ❑ 2-4 fois par année ❑ Une fois par année ❑ Jamais

37. À quelle fréquence communiquez-vous avec vos subordonnés au sujet des tâches qui sont attribuées?

❑ Une fois par semaine ❑ Une fois par mois ❑ 2-4 fois par année ❑ Une fois par année ❑ Jamais

38. En règle générale, comment réagissez-vous lorsque des subordonnés n’atteignent pas les objectifs que vous fixez?

(text box)

Proceed to Section F2

****************SCREEN BREAK***

Section F2

Les questions suivantes se rapportent au *Risque et à la gestion du risque par vos subordonnés*. À titre de référence, voici les définitions du Secrétariat du Conseil du Trésor à ces sujets

Le risque se rapporte à l'incertitude qui entoure des événements et des résultats futurs. Il est l'expression de la probabilité et de l'incidence d'un événement susceptible d'influencer l'atteinte des objectifs de l'organisation.
La gestion du risque est une approche systématique servant à déterminer la meilleure voie à prendre en cas d'incertitude en identifiant, en évaluant, en comprenant, en communiquant les questions liées aux risques et en prenant des mesures à leur égard.

39. Combien de vos subordonnés ont reçu une formation en gestion des risques au cours de cette année financière ou de la dernière année financière?

❑ Tous ❑ Certains ❑ Aucun

40. Présentez-vous clairement à vos subordonnés vos priorités et vos seuils de tolérance en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

41. Êtes-vous persuadé que vos subordonnés comprennent leurs rôles en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

42. Êtes-vous persuadé que vos subordonnés comprennent leurs responsabilités en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

43. Êtes-vous persuadé que vos subordonnés comprennent les limites de leurs pouvoirs en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

44. En moyenne, à quelle fréquence vos subordonnés portent-ils des problèmes [en matière de gestion des risques] à votre attention?

❑ Une fois par semaine ❑ Une fois par mois ❑ 2-4 fois par année ❑ Une fois par année ❑ Jamais

45. Les subordonnés responsables de la gestion des risques détiennent-ils les pouvoirs leur permettant de s’acquitter de ce rôle avec efficacité?

- ❑ Tous ❑ Certains ❑ Aucun

46. La gestion des risques est-elle prise en considération lors de l’évaluation du rendement de vos subordonnés?

- ❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

Proceed to Section H
*****************SCREEN BREAK**

Section G
Responsables fonctionnels ou superviseurs de niveau 4

47. Votre supérieur établit-il des objectifs de rendement qui intègrent des normes mesurables à votre égard, sous forme d'entente de gestion du rendement ou en tant qu'objectifs de gestion indépendants?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais *(Go to 50)*

****************SCREEN BREAK***

48. Vos propres objectifs de rendement intègrent-ils des normes mesurables?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais

49. Vos objectifs de rendement soutiennent-ils la réalisation des objectifs de votre supérieur?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ Incertain/ Ne sais pas

****************SCREEN BREAK***

50. Les comptes rendus de vos progrès se font-ils comparativement aux plans organisationnels, par exemple par rapport aux jalons du SCPG?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

51. Comment votre supérieur évalue-t-il votre rendement? (Cocher tous les points pertinents)

❑ par rapport aux attentes générales
❑ en fonction d'un système d'administration de la rémunération ou d'un cadre de gestion du rendement
❑ par rapport aux éléments de ma description de travail ou mon énoncé des fonctions
❑ par rapport aux objectifs convenus
❑ en fonction de mon plan d'apprentissage personnel
❑ de façon aléatoire
❑ autre ____

Les questions suivantes se rapportent au risque et à la gestion du risque. À titre de référence, voici les définitions du Secrétariat du Conseil du Trésor à ces sujets :

Le risque se rapporte à l'incertitude qui entoure des événements et des résultats futurs. Il est l'expression de la probabilité et de l'incidence d'un événement susceptible d'influencer l'atteinte des objectifs de l'organisation.

La gestion du risque est une approche systématique servant à déterminer la meilleure voie à prendre en cas d'incertitude en identifiant, en évaluant, en comprenant, en communiquant les questions liées aux risques et en prenant des mesures à leur égard.

52. Comprenez-vous vos rôles en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

53. Comprenez-vous vos responsabilités en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

54. Comprenez-vous les limites de vos pouvoirs en matière de gestion des risques?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

55. Est-ce qu'on vous consulte relativement à la gestion des risques de projets dont les résultats vous sont directement ou indirectement imputables?

❑ Toujours ❑ Souvent ❑ Parfois ❑ Rarement ❑ Jamais ❑ S.O.

Dans le contexte de la question ci-après, le terme « fonctions » désigne les responsabilités quotidiennes qui seraient énoncées dans votre description de travail ou énoncé des fonctions, tels les pouvoirs délégués en vertu de la *Loi sur la gestion des finances publiques*, ou les responsabilités à l'égard entre autres de la santé et sécurité au travail. Les « tâches » s'entendent des éléments de travail que vous confie votre superviseur, ainsi que des attentes précises de rendement (comme les jalons).

56. Percevez-vous une distinction entre vos fonctions et les tâches que vous attribue votre supérieur?

❑ Oui ❑ Non ❑ Incertain/ Ne sais pas

Proceed to Section H
****************SCREEN BREAK***

Section H
RESPONSABLES DE NIVEAU 3 OU 4
Pour chacun des énoncés qui suivent, veuillez indiquer votre degré d'accord en encerclant le chiffre approprié.

	Fortement d'accord		Ni d'accord ni en désaccord		Fortement en désaccord
57. Je peux être en désaccord avec mon superviseur en ce qui concerne le travail sans crainte de représailles.	1	2	3	4	5
58. Je n'épargne jamais mon superviseur de renseignements concernant les risques.	1	2	3	4	5
59. Si je proposais des moyens d'améliorer nos façons de procéder, mon superviseur les prendrait au sérieux.	1	2	3	4	5
60. Mon superviseur crée un climat dans lequel il est acceptable de ne pas avoir toutes les réponses.	1	2	3	4	5
61. Si je devais être inévitablement absent, un collègue pourrait me remplacer assez aisément dans mes activités.	1	2	3	4	5
62. Mon superviseur encourage l'innovation en tant que résultat de la prise de risques.	1	2	3	4	5
63. Dans mon unité de travail, nous apprenons de nos erreurs et nous prenons les mesures qui s'imposent pour les corriger.	1	2	3	4	5
64. Mon superviseur fait de la gestion du risque une priorité de notre unité.	1	2	3	4	5
65. Mon superviseur me fait confiance pour prendre de bonnes décisions dans des situations à haut risque/d'urgence.	1	2	3	4	5

66. Le respect des règles est important lorsqu'on traite des situations à haut risque/d'urgence.	**1**	**2**	**3**	**4**	**5**
67. J'ai trouvé le temps passé à la formation sur la gestion du risque bien utile.	**1**	**2**	**3**	**4**	**5**
68. Je minimise parfois les risques liés à un projet pour m'assurer que le projet est approuvé.	**1**	**2**	**3**	**4**	**5**
69. Je trouve très utile le fait que mes pairs aient eu à traiter des questions de risque dans leur travail.	**1**	**2**	**3**	**4**	**5**

Proceed to Section I
*****************SCREEN BREAK***

Section I

Si vous souhaitez faire d’autres commentaires au sujet de ce sondage-ci, notez vos commentaires ci-dessous.

(text box)

Merci d’avoir pris le temps de remplir le questionnaire. Nous vous sommes reconnaissants de votre collaboration.

B.2 Sondage 3

SONDAGE À L'INTENTION DES GESTIONNAIRES POUR EXPÉDITION 09

Confidentialité

Nous vous remercions de l'intérêt que vous manifestez envers ce sondage et du temps que vous y consacrerez. Vous devriez avoir besoin de __ minutes tout au plus pour répondre aux questions. Veuillez noter que toutes les réponses demeureront confidentielles, et que l'identité des participants ne sera en aucun cas dévoilée lorsque les résultats seront présentés. Nous vous prions de lire la section suivante, qui porte sur le consentement des participants.

Consentement éclairé

J'accepte, par la présente, de participer au sondage sur le CRG pour RDDC.

J'ai bien compris que le sondage vise à soutenir le rôle que joue le SMA(S et T) dans le processus lié au CRG du CT, de même qu'à simplifier la vie des gestionnaires en établissant clairement leurs rôles et leurs responsabilités ainsi qu'en leur fournissant un cadre qui les aidera à remplir leurs fonctions.

J'ai bien compris que ma participation est purement volontaire et que je suis libre de cesser de répondre au sondage à tout moment.

J'ai bien compris que les données brutes obtenues au moyen du sondage seront codées de façon que ni les données définitives ni les rapports qui seront produits ne reflèteront mon identité.

J'ai bien compris que tous les rapports produits à la suite du sondage, qu'ils soient publics ou internes, seront combinés afin de constituer un tout, et qu'en aucune façon mon identité ne sera révélée.

❑ J'accepte ces conditions et je souhaite participer au sondage.
❑ Je n'accepte pas ces conditions et je ne souhaite pas participer au sondage.

************************SCREEN BREAK ******************************

Section A – TOUS LES NIVEAUX

1. Quel est le niveau du poste que vous occupez au sein de RDDC?

- ❑ Niveau 2 (directeur général ou chef d'état-major) *Go to Section B*
- ❑ Niveau 3 (directeur général adjoint, directeur, scientifique en chef, chef de section, gestionnaire ou équivalent) *Go to Section C*
- ❑ Niveau 4 (superviseur, expert fonctionnel ou équivalent) *Go to Section O*
- ❑ Aucun des niveaux susmentionnés *Go to Section Q*

************************SCREEN BREAK ******************************

Section B – Niveau 2

Les questions suivantes ont trait à la gestion des groupes désignés visés par l'équité en matière d'emploi, telle que définie dans la *Loi sur l'équité en matière d'emploi*. Les quatre groupes désignés sont les suivants : les femmes, les Autochtones, les personnes handicapées et les minorités visibles.

2. À votre connaissance, les membres des groupes désignés sont-ils représentés de manière adéquate au sein des groupes de base des postes et des domaines clés de votre centre?

   ❑ Oui ❑ Non ❑ Je ne sais pas

3. Est-ce que votre centre offre des possibilités de perfectionnement professionnel et de formation permettant de déceler et de développer les talents au sein des groupes désignés?

   ❑ Oui ❑ Non ❑ Je ne sais pas

Go to Section J
****************SCREEN BREAK**

SECTION C – Niveau 3

4. Dans quel centre de RDCC travaillez-vous?

- ❑ Atlantique
- ❑ Valcartier
- ❑ Ottawa
- ❑ Toronto
- ❑ Suffield
- ❑ Centre d'analyse et de recherche opérationnelle
- ❑ Directeur général – Recherche et analyse (Personnel militaire)
- ❑ Centre des sciences pour la sécurité
- ❑ Opérations S et T
- ❑ Services généraux
- ❑ Chef d'état-major

Aux fins du présent sondage, « votre unité » fait référence au personnel et aux ressources dont vous assurez la gestion ou la supervision.

5. Êtes-vous responsable de la gestion d'un budget au sein de votre unité?

❑ Oui *go to Section D* ❑ Non *go to Section E*

****************SCREEN BREAK***

Section D

Les questions suivantes ont trait à la gestion budgétaire au sein de votre unité. Aux fins du présent sondage, « votre unité » fait référence au personnel et aux ressources dont vous assurez la gestion ou la supervision.

6. Au cours du dernier exercice financier, votre superviseur a-t-il imposé un seuil limite pour vos dépenses de fin d'année relativement à votre budget et à vos prévisions de dépenses?

❑ Oui (go to 6a) ❑ Non (go to 7)

****************SCREEN BREAK***

a. Vos dépenses de fin d'année correspondaient-elles au budget ou au seuil limite prévu par votre superviseur?

❑ Oui ❑ Non

Proceed to question 7

****************SCREEN BREAK***

7. Votre unité possède-t-elle un plan stratégique d'immobilisations qui prend en compte les besoins à long terme?

❑ Oui ❑ Non

8. Votre unité dispose-t-elle d'un plan local d'immobilisations sous forme d'équipement basé sur votre allocation budgétaire?

❑ Oui ❑ Non

9. De manière générale, comment évalueriez-vous la qualité de votre relation professionnelle avec les spécialistes financiers de votre centre?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente ❑ S.O.

Les questions suivantes ont trait aux activités de passation des marchés au sein de votre unité.

10. Le nombre de spécialistes des marchés de votre centre vous semble-t-il adéquat par rapport au niveau d'activité?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

11. Combien parmi les processus internes d'approvisionnement au sein de votre organisation vous semblent simples d'utilisation?

❑ Aucun ❑ Quelques-uns ❑ La plupart ❑ Tous

12. Est-ce que les clients qui ont à faire avec le processus interne d'approvisionnement de votre centre sont facilement en mesure de déterminer les progrès réalisés?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

13. De manière générale, comment évalueriez-vous la qualité de votre relation professionnelle avec les spécialistes des marchés de votre centre?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente ❑ S.O.

Proceed to Section E

*****************SCREEN BREAK**

Section E – Gestion de l’information et des ressources

14. Imaginons qu’une unité ou une activité dont vous êtes normalement responsable est choisie pour faire l’objet d’une vérification menée par les vérificateurs de RDDC ou du ministère de la Défense nationale (MDN). Le vérificateur pourrait-il avoir une vision globale en consultant uniquement les fichiers et d’autres dossiers?

    ❑ Oui *go to Section F2* ❑ Non *go to Section F1*

*****************SCREEN BREAK**

Section F1

15. Imaginons qu’une unité ou une activité dont vous êtes normalement responsable est choisie pour faire l’objet d’une vérification interne. Afin d’obtenir une vision globale de la situation, dans quelle mesure le vérificateur devrait-il vous consulter ou consulter vos subordonnés pour obtenir des renseignements supplémentaires?

- ❑ Une quantité importante de renseignements supplémentaires serait nécessaire
- ❑ Une quantité modérée de renseignements supplémentaires serait nécessaire
- ❑ Une faible quantité de renseignements supplémentaires serait nécessaire

Proceed to Section F2
****************SCREEN BREAK**

Section F2

16. Quelle est la dernière fois où vous, ou un subordonné responsable, avez inspecté l'inventaire dont vous êtes responsable? Si vous êtes gestionnaire des services généraux, cette question porte sur l'inventaire de votre unité et non sur l'inventaire de l'organisation au complet.

- ❑ Au cours des 6 derniers mois
- ❑ Au cours des 7 à 12 derniers mois
- ❑ Au cours des 13 à 24 derniers mois
- ❑ Il y a plus de 24 mois
- ❑ Jamais
- ❑ Je ne suis pas responsable d'un inventaire

17. Est-ce que vous, ou vos subordonnés, gérez des projets?

❑ Oui *Go to Section G* ❑ Non *Go to Section H*

****************SCREENBREAK**

Section G – Gestion de projet

Les questions suivantes portent sur la gestion de projet. À titre informatif, le Secrétariat du Conseil du Trésor du Canada définit la gestion de projet comme « la planification, l'organisation et la surveillance systématiques des ressources attribuées pour atteindre certains objectifs et résultats des projets ».

18. En ce qui concerne les projets gérés au sein de votre unité, la documentation de gestion de projet comprend-elle une matrice des responsabilités ou toute autre forme d'attribution des responsabilités

   ❑ Oui ❑ Non

19. Si un projet géré au sein de votre unité ne respecte pas les étapes prévues, quels sont en général les éléments responsables de cet échec?

	Très peu probable	**Peu probable**	**Neutre**	**Probable**	**Très probable**
Ressources	**1**	**2**	**3**	**4**	**5**
Calendrier	**1**	**2**	**3**	**4**	**5**
Objectifs	**1**	**2**	**3**	**4**	**5**
Qualité des étapes	**1**	**2**	**3**	**4**	**5**

20. De quelle manière présentez-vous aux intervenants, aux clients et aux partenaires les résultats provisoires ou finaux d'un projet? [choisissez toutes les réponses qui s'appliquent]

   ❑ Exposés
   ❑ Démonstrations
   ❑ Conférences
   ❑ Articles de journaux
   ❑ Rapport standard
   ❑ Réunion
   ❑ *Briefing notes*
   ❑ *Other*

21. Les membres du personnel publient-ils des articles ou des rapports pour tous les éléments de répartition du travail des projets?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

Proceed to Section H

*****************SCREEN BREAK**

Section H – Subordonnés

Aux fins de la présente section, « professionnels des sciences et technologies (S et T) » comprend les groupes professionnels tels que les ingénieurs, les chimistes ou les informaticiens qui appuient directement les programmes des S et T; les groupes professionnels tels que les technologues n'en font pas partie.

22. Avez-vous des subordonnés directs?

- ❑ Oui, et certains d'entre eux sont des scientifiques de la Défense ou des professionnels des S et T *go to Section I*
- ❑ Oui, mais aucun d'entre eux ne sont des scientifiques de la Défense ou des professionnels des S et T *go to Section J*
- ❑ Non *go to Section K*

*****************SCREEN BREAK***

Section I – Subordonnés

Aux fins de la présente section, « professionnels des S et T » comprend les groupes professionnels tels que les ingénieurs, les chimistes ou les informaticiens qui appuient directement le programme des S et T; les groupes professionnels tels que les technologues n'en font pas partie. Aux fins de la présente question, la collaboration suppose une interaction en face-à-face entre vos subordonnés et les intervenants externes, et pas simplement une participation dans le cadre de projets à l'échelle internationale.

23. Parmi vos subordonnés, combien d'entre eux sont des scientifiques de la Défense ou des professionnels des S et T? Utilisez le niveau de dotation autorisé plutôt qu'un nombre de poste. NOMBRE

    a. Parmi vos subordonnés scientifiques de la Défense et professionnels des S et T, combien collaborent avec des intervenants du MDN, des Forces canadiennes ou de Sécurité publique Canada? NOMBRE

    b. Parmi vos subordonnés scientifiques de la Défense, combien collaborent avec des intervenants canadiens externes (y compris les fournisseurs)? NOMBRE

    c. Parmi vos subordonnés scientifiques de la Défense, combien collaborent avec des partenaires étrangers sous l'égide du Programme de coopération technique, de l'Organisation du traité de l'Atlantique Nord ou d'autres accords internationaux? NOMBRE

    d. Parmi vos subordonnés scientifiques de la Défense et professionnels des S et T, combien collaborent avec des partenaires de l'extérieur selon le régime de la rémunération des services ou le principe de recouvrement intégral des coûts?

        i. Partenaires canadiens : NOMBRE

        ii. Partenaires étrangers : NOMBRE

Proceed to Section J
*****************SCREEN BREAK**

Section J – Niveaux 2 et 3

Les questions suivantes ont trait à la gestion des subordonnés de votre unité. Aux fins du présent sondage, « votre unité » fait référence au personnel et aux ressources dont vous assurez la gestion ou la supervision.

24. Les plans d'apprentissage personnel des subordonnés sont-ils en rapport avec les connaissances, les compétences et les capacités appropriées requises pour les fonctions actuelles ou à venir?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

25. Avez-vous discuté avec vos subordonnés des différents moyens possibles de transmettre leurs connaissances relatives au Ministère?

    ❑ Oui ❑ Non

26. Encouragez-vous, s'il y a lieu, les subordonnés à travailler en équipe et à fournir une formation polyvalente pour favoriser le transfert des connaissances et élargir les ensembles de compétences?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

27. Avez-vous examiné les possibilités qui vous permettraient d'embaucher un nouvel employé alors que le titulaire du poste demeure toujours au sein de l'organisation afin de faciliter le transfert des connaissances?

    ❑ Oui ❑ Non

*****************SCREEN BREAK**

a. Avez-vous déjà embauché un nouvel employé alors que le titulaire du poste se trouvait toujours au sein de l'organisation afin de faciliter le transfert des connaissances?

   ❑ Oui ❑ Non

*****************SCREEN BREAK**

28. Votre unité possède-t-elle assez d'équivalents temps plein pour remplir son mandat avec succès?

    ❑ Oui ❑ Non

29. Les postes clés sont-ils pourvus rapidement?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

30. Les nouveaux employés affectés aux postes clés assument-ils leur rôle de manière efficace et dans un délai raisonnable?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

31. Y a-t-il, au sein de votre unité, des employés qualifiés prêts à se présenter à des postes clés et dans des secteurs clés?

❑ Oui ❑ Non

32. Ciblez-vous les employés dont le rendement est élevé en vue de la planification de la relève?

❑ Oui ❑ Non

Proceed to Section K
*****************SCREEN BREAK**

Section K – Niveaux 2 et 3

Les questions suivantes ont trait au processus d'examen par les pairs.

33. Votre unité est-elle soumise à l'examen par les pairs du S et T?

❑ Oui *go to Section L* ❑ Non *go to Section N* ❑ Je ne sais pas *go to Section N*

****************SCREEN BREAK***

Section L – Niveaux 2 et 3

34. À quand remonte le dernier examen par les pairs pour une activité des S et T organisée au sein de votre unité?

- ❑ Un an
- ❑ Deux ans
- ❑ Trois ans
- ❑ Quatre ans
- ❑ Cinq ans
- ❑ Plus de cinq ans
- ❑ Jamais
- ❑ Date inconnue ***Go to section N***

Others Proceed to Section L2

****************SCREEN BREAK***

Section L2 – Niveaux 2 et 3

35. Globalement, quel était le résultat de votre dernier examen par les pairs?

❑ Très négatif	❑ Plutôt négatif	❑ Neutre	❑ Plutôt positif	❑ Très positif	❑ Je ne sais pas ***Go to section N***

-------------------*Go to Section M*----------------------------------

*****************SCREEN BREAK**

Section M – Niveaux 2 et 3

36. Globalement, votre dernier examen par les pairs vous a-t-il permis d'obtenir une rétroaction utile?

❑ Non ❑ Neutre ❑ Oui

37. En général, *quelle est l'incidence* d'un examen par les pairs sur **les capacités et les compétences de votre unité**?

❑ Aucune incidence ❑ Faible incidence ❑ Grande incidence

38. En général, *quel est le type d'incidence* d'un examen par les pairs sur **les capacités et les compétences de votre unité**?

❑ Négative ❑ Neutre/Aucune incidence ❑ Positive

39. En général, quelle est l'*incidence de l'examen par les pairs* sur les résultats des **projets**?

❑ Aucune incidence ❑ Faible incidence ❑ Grande incidence

40. En général, quel est le type d'*incidence de l'examen par les pairs* sur les résultats des **projets**?

❑ Négative ❑ Neutre/Aucune incidence ❑ Positive

Proceed to Section N
*****************SCREEN BREAK**

Section N – Niveaux 2 et 3

Les questions suivantes ont trait aux relations de travail et de collaboration que vous entretenez avec des partenaires, des clients et des fournisseurs. Aux fins du présent sondage, on entend par collaboration le fait, pour deux parties ou plus, de travailler conjointement afin d'atteindre un but commun, tout en partageant les responsabilités.

41. Comment évalueriez-vous la relation de travail et de collaboration avec la collectivité des S et T du secteur privé?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente ❑ S.O.

42. Comment évalueriez-vous la relation de travail et de collaboration avec le milieu de l'enseignement?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente ❑ S.O.

43. Avez-vous été informé des résultats du dernier sondage sur la satisfaction de vos clients et de vos partenaires à l'égard de votre unité?

❑ Oui ❑ Non ❑ S.O.

44. À quelle fréquence recevez-vous de la rétroaction directement de la part de vos clients et de vos partenaires, après la mise en fonction de produits de S et T?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours ❑ S.O.

45. La rétroaction provenant de vos clients et de vos partenaires (y compris la rétroaction directe et le sondage) a-t-elle une incidence sur l'élaboration ou l'exécution de projets à venir?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours ❑ S.O

46. À quelle fréquence collaborez-vous à l'élaboration de politiques ou de programmes avec d'autres intervenants?

❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

Level 2- Go to Section P ------------------***Go to question 46a***------------------------------------
Level 3- Go to Section O

*****************SCREEN BREAK**

a. De façon générale, comment évalueriez-vous la qualité de vos collaborations?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente

b. Dans quelle mesure votre dernière collaboration vous a-t-elle permis d'atteindre les objectifs visés ou de satisfaire à vos exigences?

❑ Aucun objectif atteint ou aucune exigence respectée
❑ Certains objectifs ont été atteints ou certaines exigences ont été respectées
❑ La plupart des objectifs ont été atteints ou la plupart des exigences ont été respectées
❑ Tous les objectifs ont été atteints ou toutes les exigences ont été respectées

Level 2- Proceed to Section P
Level 3- Proceed to Section O
*****************SCREEN BREAK***

Section O – Niveaux 3 et 4

Les questions suivantes ont trait à l'entretien de l'équipement utilisé au sein de votre unité. Aux fins du présent sondage, « votre unité » fait référence au personnel et aux ressources dont vous assurez la gestion ou la supervision.

47. Est-ce qu'une personne de votre unité est affectée officiellement à l'entretien quotidien ou courant de l'équipement utilisé dans l'exécution de vos programmes (p. ex., le calibrage)?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours ❑ S.O.

48. Est-ce qu'une personne de votre unité est affectée officiellement à l'entretien quotidien ou courant de l'équipement relatif à l'infrastructure (p. ex., le remplacement du toner)?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours ❑ S.O.

49. Lorsqu'un équipement doit faire l'objet de travaux d'entretien ou de réparation particuliers, la procédure visant à faire une demande à cet effet est-elle facile à suivre?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

50. Les demandes de réparation d'équipement sont-elles traitées rapidement et efficacement?

    ❑ Jamais ❑ Rarement ❑ Parfois ❑ Souvent ❑ Toujours

Les questions suivantes ont trait à vos expériences au sein de votre unité de travail.

51. Est-il important pour votre rendement au travail de vous tenir au courant des idées, des méthodes et des technologies nouvelles dans votre domaine?

    ❑ Pas du tout important ❑ Peu important ❑ Assez important ❑ Très important

52. Êtes-vous satisfait des ressources ou des occasions fournies par RDDC afin de vous tenir au courant des idées, des méthodes et des technologies nouvelles dans votre domaine?

    ❑ Très insatisfait ❑ Quelque peu insatisfait ❑ Ni satisfait, ni insatifait ❑ Assez satisfait ❑ Très satisfait

53. Votre unité a-t-elle travaillé avec des étudiants auparavant? (Programme fédéral d'expérience de travail étudiant, Alternance travail-études, stages, etc.)

    ❑ Oui *go to Section O2* ❑ Non *go to Section P*

****************SCREEN BREAK***

Section O2 – Niveaux 3 et 4

54. Comment évalueriez-vous l'expérience de votre unité relativement au travail avec des étudiants?

❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente

Proceed to Section P
*****************SCREEN BREAK**

Section P – TOUS

La question suivante a trait aux objectifs stratégiques généraux. Aux fins du présent sondage, « votre unité » fait référence au personnel et aux ressources dont vous assurez la gestion ou la supervision.

55. En général, à quelle fréquence les objectifs généraux suivants représentent-ils un facteur explicite dans le travail de votre unité?

	Jamais	Rarement	Parfois	Souvent	Toujours
Perfectionnement des effectifs	**1**	**2**	**3**	**4**	**5**
Maintien des infrastructures scientifiques et techniques nationales et de leur capacité	**1**	**2**	**3**	**4**	**5**
Accroissement de l'ensemble de connaissances	**1**	**2**	**3**	**4**	**5**
Commercialisation	**1**	**2**	**3**	**4**	**5**
Résultats en Recherche et développement axés sur les besoins d'une mission	**1**	**2**	**3**	**4**	**5**

Les questions suivantes ont trait à la gestion de l'information dans votre centre.

56. Dans votre centre, l'accès aux dossiers du personnel est-il restreint au personnel du Service des ressources humaines?

❑ Oui ❑ Non ❑ Je ne sais pas

57. Dans votre centre, la correspondance classifiée fait-elle l'objet d'un suivi? (p. ex., identificateur d'utilisateur unique, registre de documents, etc.)

❑ Oui ❑ Non ❑ Je ne sais pas

58. Dans votre centre, la correspondance classifiée est-classée dans un endroit sûr?

❑ Oui ❑ Non

Les questions suivantes ont trait au Programme de mentorat de RDDC

59. Avez-vous participé au Programme de mentorat de RDDC?

❑ Oui *go to 59a* ❑ Non *go to 59c*

*****************SCREEN BREAK***

a. Quel était votre rôle? Cochez toutes les réponses qui s’appliquent.
   - ❑ Mentor
   - ❑ Mentoré
   - ❑ Membre de l’équipe du Programme de mentorat

b. Comment évalueriez-vous votre satisfaction quant au Programme de mentorat de RDDC?

   ❑ Mauvaise ❑ Moyenne ❑ Bonne ❑ Excellente

Go to question 60

*****************SCREEN BREAK***

c. **Si vous avez répondu non**, quelle impression avez-vous du Programme de mentorat de RDDC?

❑ Positive ❑ Négative ❑ Pas d’opinion ❑ Je ne connais pas ce programme

Go to question 60

*****************SCREEN BREAK***

60. Êtes-vous intéressé à participer au Programme de mentorat de RDDC à l'avenir?

❑ Oui *go to 60a* ❑ Non *go to 61* ❑ Incertain *go to 61*

*****************SCREEN BREAK**

a. À quel titre seriez-vous intéressé à participer au Programme de mentorat?

- ❑ Mentor
- ❑ Mentoré
- ❑ Membre de l'équipe du Programme de mentorat

Proceed to question 61
*****************SCREEN BREAK***

61. Veuillez noter ci-dessous vos commmentaires sur le Programme de mentorat de RDDC :

(textbox)

Proceed to Section Q
*****************SCREEN BREAK***

Section Q

Nous avons fait le tour des questions que nous voulions vous poser aujourd'hui. Si vous avez d'autres commentaires à formuler au sujet de ce sondage, veuillez les inscrire ici :

(text box)

Merci d'avoir répondu à ce sondage. Votre participation est appréciée.

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List of abbreviations and acronyms

ADM	Assistant Deputy Minister
ADM(S&T)	Assistant Deputy Minister (Science and Technology)
ARP	Applied Research Program
ATI	Access to Information
BERD	Business Expenditure on Research and Development
CANDID	Canadian Defence Information Database
CORA	Centre for Operational Research and Analysis
COSO	Committee of Senior Officials
CPME	Collaborative Program Management Environment
CPSA	Canada Public Service Agency
CR	Contract Report
CRG	Cadre de Responsabilisation
CRP	Corporate Risk Profile
CRS	Chief Review Services
CRTI	CBRN (Chemical, Radiological, Nuclear and Biological) Research and Technology Initiative
CSPS	Canada School of Public Service
CT	Conseil du Trésor
DAOD	Defence Administrative Orders and Directives
DGMPRA	Director General Military Personnel Research and Analysis
DGRDCS	Director General R&D Corporate Services
DGSTO	Director General Science and Technology Operations
DIRP	Defence Industrial Research Program
DM	Deputy Minister
DND	Department of National Defence
DPR	Departmental Performance Report
DRDC	Defence Research and Development Canada
DRDKIM	Director R&D Knowledge and Information Management
DRENet	Defence Research Network
DSAR	Departmental Staffing Accountability Report
DSTEA	Director Science and Technology Enterprise Affairs
DSTER	Director Science and Technology External Relations
DWAN/DIN	Defence Wide Area Network/Defence IntraNet
EAP	Employee Assistance Program
EE	Employment Equity
FAA	Financial Administration Act
FMAS	Financial Management System
GERD	Gross Expenditure on Research and Development
HERD	Higher Education Expenditure on Research and Development
HR	Human Resources
HRM	Human Resource Management
HRO	High Reliability Organization Theory
ICMS	Informal conflict management system
IRM	Integrated Risk Management

LMCC	Labour Management Coordination Committee
LMRC	Labour Management Relations Committee
MAF	Management Accountability Framework
MCI	Modern Comptrollership Initiative
MDN	Ministère de la défense nationale
MRRS	Management, Resources, and Results Structure
NDHQ	National Defence Headquarters
OL	Official Languages
OPI	Office of Primary Interest
PAA	Program Activity Architecture
PD	Professional Development
PER	Performance Evaluation Report (for the Defence Scientist occupational group)
PGA	Partner Group Agreement (a service level agreement on planned S&T activities)
PLP	Personal Learning Plan
PMA	Personal Management Agreement (for the Executive Group and other groups receiving performance pay or 'pay at risk')
PRR	Personnel Review Report (an annual performance review and goal setting report for most federal public servants)
PS	Public Service
PSC	Public Service Commission
PSES	Public Service Employee Survey
PSMA	Public Service Modernization Act
R&D	Research and Development
RDDC	Recherche et développement pour la défense Canada
RDEC	Research and Development Executive Committee
RM	Risk Management
RPP	Report on Plans and Priorities
RTA	Research Technology and Analysis Program
S&T	Science and technology
SCT	Secrétariat du Conseil du Trésor
SMAF	Staffing Management Accountability Framework
SOP	Standard Operating Procedure
SSRRB	Social Science Research Review Board
TAG	Thrust Advisory Group
TB	Treasury Board
TBS	Treasury Board Secretariat
TDP	Technology Demonstration Program
TOS	Taken on Strength (date of an employee's appointment)
WEDC	Western Economic Diversification Canada

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Defence Research and Development Canada (DRDC), a special operating agency of the Department of National Defence, contracted Dalhousie University to support the development of a management accountability framework (MAF) as part of DRDC's EXPEDITION 09 organizational change project. The DRDC MAF used the Treasury Board Secretariat MAF as a model, with Expectations, Indicators and Measures tiers. In Cycle 2 of the contract, full Indicator and Measures tiers were developed, and the Expectations tier developed in Cycle 1 was refined. In Cycle 2, two pilot studies were conducted using web-based surveys of the DRDC management cadre. The first pilot of Cycle 2 evaluated the Risk Management and Accountability elements. The second pilot of Cycle 2 evaluated Policy and Programs and Service elements, and re-evaluated the Stewardship element from Cycle 1. The results of the pilot studies confirm the feasibility of the survey-based approach and provide a partial first assessment of DRDC's organizational performance against indicators for the elements of the proposed DRDC MAF.

Recherche et développement pour la défense Canada (RDDC), organisme de service spécial du ministère de la Défense, a embauché l'université Dalhousie pour l'aider à élaborer un cadre de responsabilisation de gestion (CRG) pour EXPEDITION 09, projet de changement organisationnel. Le CRG de RDDC s'inspire du CRG du Conseil du Trésor comme modèle et de ses paliers Attentes, Indicateurs et Mesures. Le cycle 2 du contrat a permis une élaboration complète des paliers Indicateurs et Mesures et un peaufinage du palier Attentes, élaboré pendant le cycle 1. Le cycle 2 a été marqué par la réalisation de deux études pilotes par voie de sondage sur Internet auprès des gestionnaires de RDDC. La première étude pilote du cycle 2 a évalué les éléments Gestion des risques et Responsabilisation. La deuxième étude pilote du cycle 2 a évalué les éléments Politique et programmes, et Service, puis réévalué l'élément Gérance du cycle 1. Le résultat des études pilotes a confirmé la faisabilité de l'approche par sondage et fourni une première évaluation partielle du rendement organisationnel de RDDC au vu des indicateurs pour les éléments du CRG de RDDC proposé.

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Management Accountability Framework; Accountability; Risk Management; Service; Stewardship; Human Resource Management; Policy and Programs; Survey

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