

Canadian
Forces
College

Collège
des
Forces
Canadiennes



PERFORMANCE MANAGEMENT IN MATERIEL ACQUISITION AND SUPPORT IN THE DEPARTMENT OF NATIONAL DEFENCE

Cdr P.D. Duffley

JCSP 42

Exercise Solo Flight

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2016.

PCEMI 42

Exercice Solo Flight

Avertissement

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2016.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 42 – PCEMI 42
2015 – 2016

EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

**PERFORMANCE MANAGEMENT IN MATERIEL ACQUISITION AND
SUPPORT IN THE DEPARTMENT OF NATIONAL DEFENCE**

Cdr P.D. Duffley

“This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

Word Count: 2902

“La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.”

Compte de mots: 2902

PERFORMANCE MANAGEMENT IN MATERIEL ACQUISITION AND SUPPORT IN THE DEPARTMENT OF NATIONAL DEFENCE

Measurement is the first step that leads to control and eventually to improvement. If you can't measure something you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it.

- H. James Harrington

INTRODUCTION

Within the Performance Management Framework (PMF) for the Government of Canada (GoC) and under direction from the Treasury Board Secretary (TBS), the Department of National Defence (DND) is focused on measuring the performance of capital acquisition and in-service support in a manner that allows it to assess how effectively government money (i.e. taxpayer money) is being spent.¹ Furthermore, DND assesses and ensures that GoC funding from the taxpayer is being spent in accordance with both TB and GoC policy and within the authorities granted by the financial accountability frameworks and expenditure authority.² However, there are a number of gaps and issues that exist in the Performance Management and Performance Measurement (described collectively as “PMM”) methodologies and processes used. For example, there is no significant validation or confirmation that the original operational requirements set by the Canadian Armed Forces (CAF) in the original project documentation (including the project charter and Statement of Requirements) are being met by the Project delivery. Did the military equipment that was brought in to service, whether it was on time, on

¹ Treasury Board of Canada Secretariat. *Policy Framework for Financial Management* (Ottawa: TBS June 2010), 1-8 and Treasury Board of Canada Secretariat. *Policy on Financial Resource Management, Information and Reporting* (Ottawa: TBS, June 2010), 1-7.

² *Ibid.*, 1-7.

schedule or within the original scope, meet the original intent of the CAF Operational authorities or the user community to which its delivery was targeted?

Performance Management (PfM) of acquisition and support within the DND, and specifically within Assistant Deputy Minister Materiel (ADM (Mat)), is being used to assess how well DND is administering and running the billions of dollars' worth of capital and support projects.³ These projects are used to bring new capability in to service and integral to these projects are related projects that manage the support of the new capability throughout the entire equipment lifecycle. Therefore, PfM in ADM (Mat) is conducted with the intention to assess how DND manages materiel acquisition (i.e capital "Projects") and support throughout the entire equipment lifecycle. This paper will describe and analyze how ADM (Mat) conducts PfM, assess some of the elements currently being measured, detail what gaps or issues in approach exist and will then attempt to propose a number of recommendations for how PfM/PMM can be improved. The epigraph establishes right from the start that the overarching principle in PfM is that measurement must lead to control and then to 'improvement'. In DND, however, it is perhaps the "improvement" aspect, or more specifically the "continuous improvement" that is lacking. Is the PfM/PMM information being used to make decisions or to gain efficiencies or is it only being used for compliance, control and accountability?

³ B.K. Foxton. *Performance Management of the Capital Program: Measuring What Matters*. Exercise Solo Fight. (Toronto, Ont : Canadian Forces College, 2014), 2-3.

PERFORMANCE MANAGEMENT- IN GENERAL

Before delving into the specifics of PFM (PFM and PMM will be used interchangeably throughout this paper) in ADM (Mat) with regards to acquisition and support systems, it is first necessary to define the scope of each term and how it will be applied to this analysis. As defined by A.S. Kohli in “Performance Management”, PFM is defined as a “...methodology and process of managing the performance of an organization and its business processes to achieve a commonly understood set of goals and objectives”.⁴ PFM then is “...a means of getting better results from the organization, teams, and individuals by managing performance in line with organizational strategy.”⁵ PFM could be related to the performance of individuals or the system and processes but this paper will focus on the latter component. Key aspects of PFM are the establishment of clear targets and goals while Performance Measurement would involve the measurement of actual performance and then comparing that to the targets and goals that were previously agreed.⁶ Furthermore, it is essential to identify the measures and performance indicators that will be used to conduct PFM.

TREASURY BOARD REQUIREMENTS

The Treasury Board Secretariat (TBS) uses a number of policies, programs and directives that provide all departments in the Federal government the top-level requirements for managing their departments and agencies. Many of these policy directives provide generic guidance on departmental reporting and performance management. In this section, the Policy on Management, Resources and Results Structures (MRRS) and the Program Alignment

⁴ A. Kohli, A. *Performance Management*. (New Delhi: Oxford University Press, 2008), 60.

⁵ *Ibid.*,60.

⁶ *Ibid.*,60.

Architecture (PAA) will be introduced and discussed in some detail to illustrate the interrelationship between the two and how ADM(Mat) implements both of these policies to complement PfM.

Management, Resources and Results Structures (MRRS)/ Programme Alignment Architecture (PAA)

The MRRS policy, posted by TBS and effective 1 April 2012, supports “...the development of a common government-wide approach to the identification of programs and to the collection, management and reporting of financial and non-financial information relative to those programs”.⁷ The MRRS policy applies to all departments as defined in the Financial Administration Act (FAA) and is integral to the Expenditure Management System (EMS) and therefore represents the Government’s commitment to “...strengthen public sector management and accountability...” consistent with the Management Accountability Framework (MAF).⁸ As part of the mandate to align resources, programs and results, the departmental MRRS ensures that information is collected to support informed decisions and as minimum contains: “clearly defined and measurable strategic outcomes, a detailed Program Alignment Architecture (PAA) that shows how resources are managed and a description of the governance for each program of the PAA.”⁹ Consequences, if the MRRS is not executed satisfactorily to TBS standards and directives, can be severe as TBS could freeze allocations to a department. TBS uses the PAA to identify and group all of the GoC programs and links them to a strategic outcome, namely: “Good Governance and sound stewardship to enable effective and efficient service to Canadians”.¹⁰ The five programs of the secretariat include: 1. Decision-making support and

⁷ Treasury Board of Canada Secretariat. *Policy on Management, Resources and Results Structures* (Ottawa: TBS 2012), 1.

⁸ *Ibid.*, 1.

⁹ *Ibid.*, 3-5.

¹⁰ Treasury Board of Canada Secretariat. *The Programs of the Secretariat* (Ottawa: 2015), 1.

oversight 2. Management Policies Development and Monitoring 3. Government-Wide Programs Design and Delivery 4. Government-wide Funds and Public Service Employer Payments and 5. Internal Services.¹¹ The PAA breakdown of TBS Programs and Subprograms provides the TBS governance mandate to direct PFM throughout all government departments.

Performance Measurement and Management Cycle

It is important to look at the overall PMM cycle to assess how and what data is collected and then use that data in management-level decision making to effect change. Figure 1, which is an adaptation of the PMM cycle as it was applied to improving Health Systems in OECD countries by Jeremy Hurst, can be used to describe how PMM should be conducted in capital procurement/acquisition (of both new equipment and in-service support).¹² At a high level, there is the overall ‘procurement system’ which is made up of a multitude of projects and subprojects. At the first stage are the concepts and measures that are best used to measure changes in performance. At stage 2 there is a level of analysis on the data that helps management (i.e. the decision makers) take the necessary action or management decisions that should then show an overall improvement in performance. However, the impact of the changes must be continuously measured and all impacts assessed so that the strategic goals and objectives are still maintained and there is no resulting negative impact brought on by the change. This cycle, although simplistic in depiction and details, highlights two key aspects of PMM. The first aspect is that the overall process of PMM is continuous and cyclical in nature while the second aspect is that Performance ‘Measurement’ and ‘Management’ are co-dependent and essential to the overall process. As detailed in the epigraph, unless measurements of performance are made and then

¹¹ *Ibid.*, 2.

¹² Huw Davies and Sandra Nutley, *What works? Evidence-based policy and practice in public services* (Bristol: The Policy Press, University of Bristol, 2000) and Jeremy Hurst. *Performance Measurement and Improvement: Issues and Challenges*, Report by the Head of the Health Policy Unit of OECD, 4.

decisions taken to try to improve the outputs, the overall processes and performance will not improve. It is this author's view, as will be discussed later, that this is one of the key failings of the government mandated PMF. The periodicity of the annual reporting cycle is insufficient to make timely and effective change to improve performance in an efficient and continuous manner.

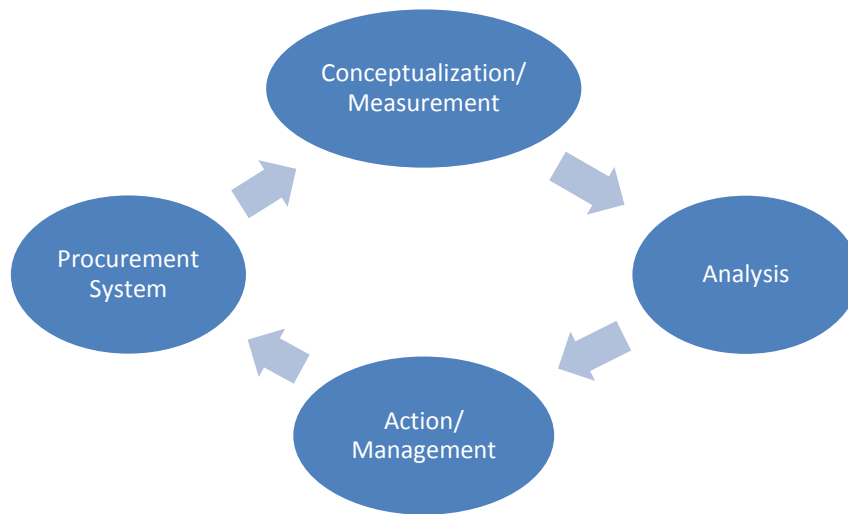


Figure 1- Performance Measurement and Management Cycle –Adapted from Hurst OECD Report¹³

¹³ Jeremy Hurst. *Performance Measurement and Improvement: Issues and Challenges*, Report by the Head of the Health Policy Unit of OECD, 4

PERFORMANCE MANAGEMENT IN ADM (MAT)

In order to assess PFM within ADM (Mat), it is important to first have an overall understanding of PFM in DND and of how it connects to ADM (Mat) on one end and TBS/GoC on the other. As identified above, TBS has 5 programs identified within its PAA. Within DND, however, the Chief of Programme (CProg) as the overall PFM lead, has identified the overall Program Alignment Architecture and Performance Management Framework (PAA-PMF) that must be followed by the Department and includes the following five higher level “Programs” that represent the MRRS levels or categories used by DND:

1. Defence Combat and Support Operations
2. Defence Services and Contributions to Government
3. Defence Ready Force Element Production
4. Defence Capability Element Production
5. Defence Capability Development and Research
6. Internal Services¹⁴

Every L1 is required to report on the Programs and Sub-Programs that have been identified by CProg as being within their related areas of responsibility and within each Program there are a number of PAA Sub-Programs that ADM(Mat) is responsible for reporting on effectiveness and efficiency measures as part of the PAA-PMF.¹⁵ Within Program 4 (Defence Capability Element Production) and 6(Internal Services) listed above, ADM(Mat) is required to report performance on the following Sub-Programs(SP) and Sub-Sub-Programs(SSP):

- PAA 4.2 Materiel Lifecycle
 - PAA 4.2.1 Materiel Portfolio Management
 - PAA 4.2.2 Materiel Acquisition
 - PAA 4.2.3 Materiel Equipment Upgrade and Insertion

¹⁴ Department of National Defence. *Program Alignment Architecture – Performance Management Framework for FY 2015/2016*. Chief of Programme. 2015

¹⁵ Department of National Defence. *Call Letter/ Coordinating Instructions- Materiel Group Year-End Performance Reporting For FY 2015/16* (Ottawa: DMGSP, March 2016), 1-3.

PAA 4.2.4 Materiel Divestment and Disposal
 PAA 4.2.5 Materiel Engineering, Test, Production and Maintenance
 PAA 4.2.6 Materiel Inventory Management and Distribution
 PAA 4.2.7 Materiel Strategic Coordination, Development and Control
 PAA 6.3.3 Internal Services Acquisition¹⁶

Clearly the focus here will not be to look at each of these SP and SSP in detail but rather to look at the overall process and try to critically analyze various aspects. The overall PAA-PMF first identifies a Strategic Outcome for the Program, SPs and SSPs that is then mapped to an expected result (including an output or efficiency), a Performance Indicator (e.g. % CFDS & Non-CFDS materiel acquisition projects on adjusted schedule), target and threshold levels.¹⁷ Within a SP or SSP, the “target” is the level “of performance that an organization desires to achieve” while the “threshold” represents the parameters within which an activity is defined as Red, Yellow, or Green.¹⁸ All of this performance measurement information forms the main input into both the internal Annual Performance Report (APR) and the external Departmental Performance Report (DPR) and the Report on Plans and Priorities (RPP) that both communicate departmental performance to the wider GoC, TBS and PCO.

The overall process and reporting of PAA-PMF and PFM information is initiated annually (near the end of the FY) within DND by a call letter from CProg to all L1s. Each ADM within DND then passes this information with specific direction to L2s to report on specific SP and SSPs within their purview. The PAA-PMF Framework is established by CProg and is in compliance with the PAA established at TBS. It is important to highlight that each element of the PAA-PMF (e.g. PAA 4.2.1) is reported by L2s to CProg via separate tab in an excel file that is

¹⁶ Department of National Defence. *Call Letter/ Coordinating Instructions- Materiel Group Year-End Performance Reporting For FY 2015/16* (Ottawa: DMGSP, March 2016), 1-3.

¹⁷ Department of National Defence. *Program Alignment Architecture – Performance Management Framework (PAA-PMF) for FY 2015/2016*. (Ottawa: Chief of Programme, 2015), 1-5.

¹⁸ *Ibid.*, 1-5.

uploaded to a Sharepoint website. The next sections will identify a number of the positive and negative aspects of how PfM is conducted in DND and ADM(Mat).

Positive Aspects of PfM in ADM (Mat)

Overall, it is evident from comparing the way DND was conducting PfM as assessed by the CRS audit on the “Review of the Implementation of Modern Management within DND” that was conducted in 2010, with the way PfM is conducted by CProg and ADM (Mat) today, that significant improvements and changes have occurred. The CRS audit highlighted that although “performance management, risk management, and accountability and stewardship” are key components of modern management, DND has not yet achieved “...full integration, particularly in the area of performance management.”¹⁹ This audit also highlighted that at the time 2010 DND was working on an initiative to align performance measures with the PAA, and by examining the layout of the current PAA-PMF, it is clear this has been achieved to a much greater extent.²⁰ Reviewing the multitude of Performance indicators used (e.g. % Projects on original schedule, % projects on adjusted schedule, % cost of managing the acquisition program etc.), the reporting structure and the frequency of reporting, it is assessed that PfM in ADM (Mat) is sufficiently comprehensive to ensure compliance but insufficient to effect timely control and effective change.

Negative Aspects of PfM in ADM (Mat)/ Areas for Improvement

As described in the opening sections, for PfM to be done correctly, continuous monitoring and timely decision making are required. The one year review cycle and reporting process does not really allow for the ‘continuous improvement’ as intended for PfM. The 2010

¹⁹ Department of National Defence, *Review of the Implementation of Modern Management within the Department of National Defence* (Ottawa: Chief of Review Services, 2010), ii.

²⁰ Department of National Defence. *Program Alignment Architecture – Performance Management Framework (PAA-PMF) for FY 2015/2016*. (Ottawa: Chief of Programme, 2015), 1-5.

CRS audit indicated that modern management requires a “shift from control and compliance to a framework emphasizing the ethical, efficient achievement of results.”²¹ ADM (Mat) has again made strides in this area and uses many measures beyond strictly financial accountability including for example: “1. Percent cost of managing the material acquisition program compared to total material expenditures 2. Percent of defence material considered suitable for training and operations.”²² However, it is this author’s view, based on recent Project Management (PM) experience, that still more needs to be done to validate and measure to what extent the original user defined requirements have been met. Management and oversight committees, such as Senior Review Boards (SRBs) that generally meet annually, are still focused on whether the Project is on schedule, within scope, and within budget. These three aspects are critical to allow a project to continue, however, they are more focused on control and compliance. With enhanced focus by management and oversight committees in analyzing the user requirements, performance measurements on whether projects are meeting the initial requirements or on whether requirements have evolved and there is a financially prudent way to modify them, could lead to greater effectiveness. That is, if PMTs could be more adaptive to ‘evolving’ user requirements, and PFM was used to enable timely decision making, more ethical and efficient results could be achieved. Is it ethical, for example, to deliver obsolescence just so that a project can remain on “scope” and be closed in a timely fashion?

Another shortcoming highlighted in the 2010 CRS audit, was that various L1s could not adequately demonstrate that “performance information was actually being used to influence

²¹ Department of National Defence, *Review of the Implementation of Modern Management within the Department of National Defence* (Ottawa: Chief of Review Services, 2010), iii.

²² Department of National Defence. *Program Alignment Architecture – Performance Management Framework (PAA-PMF) for FY 2015/2016*. (Ottawa: Chief of Programme, 2015), 1-5.

decision making and resource allocations.”²³ The PfM reporting process and data pull from ADM(Mat) to CProg to DM/MND in order to populate the APR and DPR serves more of the control and compliance function than being indicative of a true desire to improve performance. That said, PfM still provides a critical component of financial stewardship and accountability that is essential to governance where government funding is concerned.

A CRS audit from 2013 recommended that DND should “...conduct performance measurement of cost estimation at each phase of similar projects to generate cost breakdown models and benchmark cost estimation performance.”²⁴ As one of the key areas that projects fail is due to escalation in costs and budgeting issues, PMM could be a useful tool to identify the issues quickly and to take early decisions to improve overall budgeting. Although PfM has improved in DND/ADM(Mat), as recent as June 2015, one of the Equipment Management Programs(EPM) was cited as being deficient in key performance indicators (KPIs) and aligning PfM with the PAA and therefore “...lacked the ability to definitively measure its overall effectiveness and efficiency.”²⁵ In addition, the PfM Strategy Framework was not able to be “...utilized to regularly inform management business decisions at all levels”, again highlighting that compliance and control are adequate but the key output of PMM (i.e. “continuous improvement”) is not achieved.²⁶

CONCLUSION

²³ Department of National Defence, *Review of the Implementation of Modern Management within the Department of National Defence* (Ottawa: Chief of Review Services, 2010), iv.

²⁴ Department of National Defence. *Internal Audit of Capital Project Cost Estimation*. (Ottawa: Chief of Review Services, 2013),12.

²⁵ Department of National Defence. *CRS Audit- Evaluation of the Land Equipment Program*. (Ottawa: Chief of Review Services, 2015), 2-3.

²⁶ Department of National Defence. *CRS Audit- Evaluation of the Land Equipment Program*. (Ottawa: Chief of Review Services, 2015), 3.

An in-depth study of recent Office of the Auditor General (OAG) and Chief of Review Services (CRS) Reports yields mixed results for DND capital acquisition projects. Performance of these projects and the Project Management Teams (PMT) that manage them, is assessed on a very macro level by schedule, project scope and budgets. Oversight committees and personnel, including the Project Leader, Project Director, Defence Management Committee (DMC), and Senior review Boards (SRB), assess projects by confirming that they are on schedule, that the funding being used is for the work and scope that was approved during the initial phases of the project and that the overall project is operating within the approved budget. All of these 3 pillars of Project Management are critical to governance and financial accountabilities frameworks, and if done correctly, represent the minimal level of performance that is acceptable by government and the broader public (i.e. taxpayer). To assess overall performance, however, strategic oversight must be more invested in the capability gap that is being addressed by the acquisition and to what extent the initial project operational requirements are being met.

Overall, it has been assessed that DND and specifically ADM (Mat) have a ‘relatively rigorous’ and effective PfM process that can be improved to focus on additional elements that would validate that the original Operational Requirements established in the project approvals and original project documentation are being met. Compliance with TBS policy and CProg direction, and the ‘control’ of the project schedule, budget and scope, remains the key focus of PfM. In addition, much of the data and information collection serves more of a reporting or accountability function as opposed to a validation of the capability being delivered. APRs, DPRs and the PAA are focused on accountability while the overarching principle from the epigraph that “measurement leads to control and then to improvement” becomes of secondary importance. That said, the recently released Project Approval Directive (dated 11 March 2015) is

encouraging as it highlights in the introduction that there should be “greater emphasis on the achievement of a “capability” rather than simply focusing on an acquisition”.²⁷ Simply buying a platform is not in itself a success unless the capability gap is addressed by the acquisition.

DND/ADM (Mat) still have to improve how the PfM information is used to make timely decisions to improve processes and therefore outcomes. The “continuous improvement” aspect of PfM is still lacking in DND, however much progress has been made in the last six years as evidenced by various OAG and CRS reports. Further improvements could be obtained to PfM in DND and ADM (Mat) by enhancing the granularity of performance measures to look at the various phases of a project (i.e. Identification, Options Analysis, Definition, Implementation and Closeout) and assess where issues are arising so that decisions can be taken to improve overall project performance within specific project phases.

²⁷Department of National Defence. *Project Approval Directive 2015*. (Ottawa: VCDS/Director Defence Programme Coordination 6, 2015), i.

Bibliography

- Bourgoin, G. "Performance Management in the RCAF" Exercise Solo Fight. Toronto, Ont : Canadian Forces College, 2014.
- Canada. Department of National Defence. "Annual Performance Review (APR) and Departmental Performance Report (DPR)". CProg. March 2016.
- Canada. Department of National Defence. "Call Letter- Materiel Group Year-End Performance Reporting For FY 2015/16". DMGSP. March 2016.
- Canada. Department of National Defence. "CRS Audit- Evaluation of the Land Equipment Program." June 2015. <http://www.crs-csex.forces.gc.ca/reports-rapports/2015/248p1258-211-eng.aspx> Internet; accessed 21 Apr 2016.
- Canada. Department of National Defence. "CRS Audit-Follow-up on Internal Audit: Halifax-class Modernization/Frigate Equipment Life Extension (HCM/FELEX) Project." Dec 2013. <http://www.crs-csex.forces.gc.ca/reports-rapports/2013/207p1014F-eng.aspx>; Internet; accessed 21 Apr 2016.
- Canada. Department of National Defence. "CRS Audit- Review of the Implementation of Modern Management within the Department of National Defence." Jan 2010. <http://www.crs.forces.gc.ca/reports-rapports/2010/128P0866-eng.aspx> Internet; accessed 2 May 2016.
- Canada. Department Of National Defence. "Department Of National Defence And The Canadian Armed Forces Report On Plans And Priorities 2014-15". 2014
- Canada. Department of National Defence. "Internal Audit of Capital Project Cost Estimation." May 2013. <http://www.crs-csex.forces.gc.ca/reports-rapports/2013/195p0972-eng.aspx> Internet; accessed 4 May 2016.
- Canada. Department of National Defence. "Program Alignment Architecture – Performance Management Framework for FY 2015/2016". Chief of Programme. 2015.
- Canada. Department of National Defence. "Project Approval Directive 2015". Available from VCDS/Director Defence Programme Coordination 6; 11 March 2015.
- Canada. Office of the Auditor General of Canada. "2004 November Report of the Auditor General of Canada- Upgrading the CF-18 Fighter Aircraft". http://www.oag-bvg.gc.ca/internet/English/parl_oag_200411_03_e_14907.html Internet; accessed 18 April 2016.
- Canada. Office of the Auditor General of Canada. "2009 Spring Report of the Auditor General of Canada- Financial Management and Control".

- http://www.oag.ca/internet/English/parl_oag_200905_05_e_32518.html; Internet; accessed 18 April 2016.
- Canada. Office of the Auditor General of Canada. “2011 Fall Report of the Auditor General of Canada- Maintaining and Repairing Military Equipment”.
http://www.oag.gc.ca/internet/English/parl_oag_201111_05_e_35937.html; Internet; accessed 18 April 2016.
- Canada. Office of the Auditor General of Canada. “Opening Statement to The Standing Committee on National Defence- Procurement and Associated Processes.”
http://www.oag-bvg.gc.ca/internet/English/osh_20070301_e_23486.html; Internet; accessed 11 April 2016.
- Canada. Treasury Board of Canada Secretariat. “Policy Framework for Financial Management”; June 2010. <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18790§ion=HTML>; Internet; accessed 2 May 2016.
- Canada. Treasury Board of Canada Secretariat. “Policy on Financial Resource Management, Information and Reporting ”; June 2010. <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18796>; Internet; accessed 2 May 2016.
- Canada. Treasury Board of Canada Secretariat. “Policy on Management, Resources and Results Structures”; 1 April 2012 <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18218§ion=HTML>; Internet; accessed 14 April 2016.
- Canada. Treasury Board of Canada Secretariat. “The Programs of the Secretariat”; 19 Oct 2015. <https://www.tbs-sct.gc.ca/ip-pi/paa-aap-eng.asp>; Internet; accessed 2 May 2016.
- Davies, Huw T.O. and Nutley, Sandra M. *What works? Evidence-based policy and practice in public services*. Bristol: The Policy Press, University of Bristol, 2000.
- Foxton, B.K. “Performance Management of the Capital Program: Measuring What Matters.” Exercise Solo Fight. Toronto, Ont : Canadian Forces College, 2014.
- Garrett, Gregory A. and Rendon, Rene. *U.S. Military Program Management : Lessons Learned and Best Practices*. Vienna, VA: Management Concepts, 2007.

Hurst, Jeremy. "Performance Measurement and Improvement: Issues and Challenges." Report by the Head of the Health Policy Unit of OECD. <http://www.oecd.org/els/health-systems/1959863.pdf>; Internet; Accessed 18 Apr 2016.

Kaplan, Robert and Norton, David. *The Balanced Scorecard : Translating Strategy into Action*. Boston: Business School Press, 1996.

Kohli, A. *Performance Management*. New Delhi: Oxford University Press, 2008.

Wood, T.L. "Shortening the Department of National Defence's Acquisition Cycle : Performance Measurement and Acquisition Staff Competence". Exercise New Horizons. Toronto, Ont : Canadian Forces College, 2006.

United States. Dept. of Defense. 2008 Strategic Management Plan(SMP) plan. Corporate Publication Information: Washington, D.C. : Dept. of Defense, 2008.

Zycus Brings Out in-Depth Look into State of Procurement Performance Management." Food and Beverage Close - Up (Sep 15, 2015). <http://search.proquest.com/docview/1712126700?accountid=9867>.