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# Safeguarding The Canadian Forces' Internal Supply Chain

By/par

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## ABSTRACT

The Canadian Forces (CF) has certainly experienced a prolonged period of budgetary pressure. This situation caused the Department of National Defence (DND) to seek out opportunities to reduce costs wherever possible. These efforts often targeted support activities to avoid risking further erosion of combat capabilities. Given this context, the CF's internal supply chain quickly came under scrutiny. In response, numerous projects were initiated to optimize various facets of the supply chain while concurrently reducing costs. Despite good intentions, these initiatives collectively create a potential downside. That downside is that these projects are independent and are being implemented in a piecemeal manner without top-down strategic guidance. This situation threatens to deteriorate the overall integrated functioning of the current internal supply chain. For this reason this paper argues that, in the midst of this change, it is important for the CF to manage its internal supply chain as a strategic asset in order to maintain a viable and highly integrated system capable of supporting operations domestically and internationally. The discussion begins by defining a supply chain and describing its role. This is followed by a review the risks to the current system that these independent efforts are creating. The paper then reviews current supply chain management theory, what industry and our allies are doing in this sector, and where outsourcing has a role to play. The paper concludes by proposing a solution regarding how the CF supply chain can be optimized while ensuring that future decisions affecting it are made with the Department's overall best interests in mind. This solution suggests that the internal supply chain should be treated as a strategic asset and that outsourcing opportunities should be considered only after establishing a strategic vision; one which articulates the role that the internal supply chain will play in support of future CF operations.

There is general acceptance of the fact that the Canadian Forces (CF) has endured a prolonged period of budgetary pressure. In order to deal with this challenging fiscal situation, the Department of National Defence (DND) initiated numerous projects to identify internal opportunities to reduce costs. These efforts frequently targeted support activities to avoid risking any further deterioration of combat capabilities. When the CF's leadership looked to its support sector for savings, the supply chain quite rightly became a targeted area of opportunity. In response, those charged with managing the CF's internal supply chain tried to contribute their share. Leading the way was the Assistant Deputy Minister Materiel (ADM(Mat)), who is the supply chain process owner. Over the past few years ADM(Mat) introduced several concurrent, but arguably not integrated, projects all aimed at optimizing the supply chain while reducing costs.

One of ADM(Mat)'s key projects to reduce supply chain costs is the Materiel Acquisition and Support Optimization Project (MASOP). MASOP's aim is to save money while concomitantly optimizing the overall integration, efficiency, and effectiveness of the CF's internal supply chain. Unlike some efficiency-focused projects, MASOP is not attempting to reduce the number of military supply chain personnel in the system overall. MASOP is however striving to free up some positions through efficiency improvements. Rather than cutting these positions, they will be reinvested by the Vice Chief of the Defence Staff (VCDS) in other support initiatives, such as the National Military Support Capability (NMSC).[1] To reach its savings targets, MASOP's main thrust is to better link key components of the supply chain in order to eliminate wastage, duplication of effort and costly process redundancies. Regarding savings targets, MASOP is currently attempting to save

[1] Material Acquisition and Support Optimization Project, "Business Plan," http://www.forces.gc.ca/admmat/cosmat/masop/docs/03.PDF; Internet; accessed 4 January 2005.

$47.2 Million (recurring) per year by 2006.[2] MASOP actually exceeded its first year's target for fiscal year 2003/2004 and early indications suggest that it will achieve the targets set for subsequent years as well.[3]

ADM(Mat)'s effort to reduce supply chain costs did not stop there. While MASOP was attempting to optimize the internal supply chain, ADM(Mat) also introduced the several initiatives under the Optimized Weapon System Management (OWSM) program. Unlike MASOP, OWSM projects are focused on bundling multiple support contracts for an individual weapon system into one all encompassing contract. The aim of this approach is to achieve cost reductions and improve support by having a contractor assume responsibility for providing full life cycle support for a weapon system based on reimbursement through performance incentives.[4] Under their mandate, OWSM projects can result in the development of a wide variety of platform specific support solutions that can include the Alternate Service Delivery (ASD), or contracting out, of all support services, including those related to the supply chain. In other words, OWSM projects can have a profound effect on the integrated functioning of the current internal CF supply chain.[5]

Since MASOP is focused on integrating and optimizing the overall supply chain and OWSM is focused on potentially dividing up the supply chain into multiple platform specific supply chains, obviously there is a potential disconnect between these two initiatives. That

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[2] Alan Williams, "The Standing Committee on National Security and Defence Evidence," http://www.parl.gc.ca/38/1/parlbus/commbus/senate/Com-e/defe-e/42032-e.htm; Internet; accessed 4 January 2005.

[3] Materiel Acquisition and Support Optimization Project, "Summary of the MASOP Senior Review Board 29 September 2004," http://www.forces.gc.ca/admmat/cosmat/masop/docs/srb_sept29_04_b.pdf; Internet; accessed 21 February 2005.

[4] Williams, "The Standing Committee…,".

[5] Directorate Materiel Acquisition and Support Program, "Draft - Concept of Operations Optimized Weapons System Management," http://admmat.ottawa-hull.mil.ca/masd/english/library/Resources/ConOpsOWSM.pdf; Internet; accessed 5 February 2004.

situation is less than ideal, but arguably the problem goes deeper. The current process for deciding to contract out support for weapons systems under OWSM, at least those systems already in-service, is via the Senior Review Board (SRB)/Program Management Board (PMB) process. Unfortunately, under this decision making approach the possibility exists that SRBs/PMBs will tend to look at proposed support solutions for an individual weapon system in isolation and not as part of an overall corporate strategy. Regrettably, this bottom-up and piecemeal approach can result in the failure to obtain the sign-off of all affected stakeholders. For example, the group of stakeholders should include those charged with responsibility for the health of trades and classifications involved, those responsible for IM/IT integration in support of providing asset visibility, those charged with executing the operational planning process, among others. Further, making decisions affecting the overall supply chain as contracts come up for renewal might mean that effort goes to a less than ideal platform for a contracting out opportunity when another platform coming up later for a support review might have been a better choice. In other words, as the MASOP/OWSM comparison shows, well-intentioned efforts to achieve efficiencies from the supply chain are being implemented from a bottom-up and piecemeal vice top-down and strategically guided approach. This is in clear violation of the principles of business process re-engineering when it comes to optimizing a process.[6] Since decisions on changes to the supply chain are being made in this manner, each successive decision has the potential to make the situation worse and thus further threaten the viability of the overall supply chain when it comes to supporting operations domestically and internationally.

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[6] Geary A. Rummler and Alan P. Brache, *Improving Performance – How to Manage the White Space on the Organization Chart* (San Francisco: Jossy-Bass Inc., Publishers, 1995), 164-178.

Given the piecemeal and bottom-up approach that is being taken to optimize supply chain activities, this paper will argue that the internal CF supply chain should be managed as a strategic asset from a top-down perspective in order to preserve its capability to support operations domestically and internationally. This paper will begin by defining what a supply chain is within a CF context. This definition will be followed by a review of where the CF's internal supply chain should fit in terms of its role in support of operations. That discussion will be followed by an expanded explanation of why the current CF supply chain is potentially at risk given the initiatives mentioned above. Following that, a theoretical analysis of how supply chains should be optimized from a strategic perspective will be presented. This paper will then discuss current commercial and allied military best practices regarding optimizing supply chain efficiency. Following that, the case for contracting out certain specific pieces of the supply chain will be reviewed. Finally, the paper will present a proposed way ahead to ensure that future decisions to contract out parts of the supply chain, including those of an OWSM nature, are in the Department's overall best interests. There is no doubt that there is a place for contracted support within the CF supply chain, but more strategic guidance and rigor is needed in the decision making process when it comes to outsourcing pieces of this highly intricate system. This is true because any system that has parts of it cut away little by little will eventually reach a point of collapse unless there are substantial overarching safeguards placed in the process to eliminate that possibility.

To begin to address the central argument of this paper, it is first necessary to explain what a supply chain is. In a CF context, the internal supply chain is really the process that encapsulates all the steps associated with acquiring materiel in the ADM(Mat) organization through to final consumption of that materiel by the soldier in the field. Key activities

included in the supply chain process include initial procurement, materiel distribution, transportation, warehousing and storage, issues to customers and finally disposal of consumed materiel.[7] Based on this definition, maintaining a viable internal CF supply chain is obviously important for supporting CF operations.

When it comes to supporting operations, the internal CF supply chain executes a core function in that it facilitates the delivery of "essential combat support requirements."[8] Far beyond simply performing a core combat support function, the CF's internal supply chain also serves as the actual framework or backbone upon which all CF foreign and domestic operations are supported from a materiel provision perspective. This means that it serves as the feeder for providing trained military personnel to fill support billets for deployed operations. It also acts as the platform for providing standardized processes, procedures, policies and integrated IM/IT enablers to provide common (joint) support to operations. In other words, it supports the principle of unity of effort when it comes to supporting operations.[9] The result is that it provides commanders with a single point of contact for logistics support and a single individual responsible for supply chain operations. It also provides a core level of expertise when it comes to supporting operations and it provides career paths for those trades and classifications directly engaged. Given that OWSM projects are intended to contract out portions of this integrated system, it is critical to take these factors into consideration. Failure to do so might result in the viability of the current supply chain platform being jeopardized. As it stands, the CF is in the unique and enviable position

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[7] OSD Comptroller iCenter, "Optimizing Logistics Support," http://www.dod.mil.comptroller/icenter/learn/iscmconcept.htm; Internet; accessed 5 January 2005.

[8] Alternate Service Delivery, "Overview," http://admmat.ottawa-Hull.mil.ca/masd/english/library/acqrefovr/alternateservicedelivery; Internet; accessed 11 January 2005.

[9] Department of National Defence, B-GG-005-004/AF-000 *CF Operations Manual* (Ottawa: DND Canada, 2000*)* 2-3.

of having established a common supply chain for all three environments, which is supported by common supply chain processes, policies and IM/IT systems. This is a strong position to be in, as most of our allies have not yet achieved this level of integration.

Having defined the internal CF supply chain and identified where it fits, the next task is to take a deeper look at the risks involved with making decisions to contract out, in a piecemeal manner, facets of the supply chain associated with supporting individual weapons systems. To begin with, this trend causes cumulative disintegration with regard to the overall system, albeit little by little. This matter is pressing, as there are already several cases where the Department has contracted out support to platforms, including supply chain support. For instance, the Griffon, Cormorant, and Maritime (MHP) helicopters as well as the Army's Light Armored Vehicle (LAV) III and the Navy's Maritime Coastal Defence Vessels (MCDVs) all have either complete or partial supply chain support provided by contractors. Further, in each case, the supply chain solutions that the respective contractors have delivered, or will deliver, are different.[10] This means that supply chain personnel can be removed from the system as contractors are doing their work. Contracting out in this manner results in the loss of the internal expertise and skill sets associated with supporting the platform(s) in question. It also reduces the pool of trained supply chain resources available to deploy in support of operations. Often this loss of expertise represents the pool of labor that contractors absorb to provide support to the Department.[11]

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[10] Directorate Materiel Acquisition and Support Program, "Draft - Concept of Operations Optimized…,".

[11] Martin Shadwick, "Development of the Canadian Aerospace Industrial Base," (Lecture, Canadian Forces College, Toronto, ON, January 28, 2005).

The potential loss of trained supply chain personnel is happening at a time when the Environments are already having trouble finding sufficient personnel to deploy in support of operations.[12] In other words, potentially reducing the number of support personnel available to the force generators will not help alleviate that situation. This fact was forcefully driven home by a NATO spokesperson, Brigadier-General Roy Hunstok, who pointed out the lack of logistics personnel and equipment available throughout all NATO countries, including Canada, to support the development of the new NATO Reaction Force (NRF).[13] NATO is not alone on the issue of lacking highly skilled logisticians. The United Nations is also often faced with this predicament. Countries offering to provide the UN with troops frequently are willing to provide combat troops, but many do not have much depth when it comes to providing professional logistics support to missions. Canada could therefore take advantage of this opportunity to exert influence on the world stage if it was to retain these valuable skills in-house and use them to support UN activities.[14] This opportunity might have been recognized if the supply chain was being managed as a strategic asset.

Another risk to consider is the fact that under the current approach to contracting out support for individual weapons systems, contractors are permitted to use their own IM/IT systems to control inventory. This means that contractors can impact on Departmental asset visibility, as contractors' systems do not necessarily transfer information to the central Canadian Forces Supply System (CFSS). This issue can potentially be addressed by

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[12] Canadian Press, "Air Force Under Stress, Underfunded: Senate," http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1107810022725_103219222/?hub; Internet; accessed 8 February 2005.

[13] Brigadier-General Roy Hunstok, "NRF Background, Status & Way Ahead," (Lecture, Canadian Forces College, Mons, Belgium, February 16, 2005).

[14] United Nations, "Enhancement of African Peacekeeping Capacity Report of the Secretary-General," http://daccessdds.un.org/doc/UNDOC/GEN/N04/627/37/PDF/N0462737.pdf?OpenElement; Internet; accessed 24 March 2005.

implementing contract stipulations to meet data transfer requirements. However, in order to do that, the Department would first have to make a strategic decision to determine exactly what data the Department requires from contractors providing platform specific support. Taking this type of strategic approach would also uncover deficiencies in the CFSS should it be found wanting with regard to its ability to handle inventory data. In this way a consolidated system for inventory data collection and data management could be constructed. That is exactly the role that the CFSS is supposed to deliver. If the CFSS cannot deliver on this requirement, the answer is to fix the CFSS and not simply to transfer the requirement to contractors. Taking the latter approach will quickly lead to loss of data control, especially if there are inadequate data transfer standards in place as suggested above. Finally, regarding IM/IT systems, taking a strategic view towards determining information needs would greatly facilitate the delivery of asset visibility information to CF planners in a timely manner. This is true because reducing the number of systems that would have to be integrated to provide asset visibility information makes the task of data synchronization easier to accomplish, not to mention cheaper to deliver.

Beyond personnel and data management issues, without providing proper strategic guidance contracting out supply chain support can have other potentially damaging effects as well. For instance, there are current agreements between countries, such as NATO Standard Agreements, whereby the movement of materiel between nations is facilitated through inter-governmental agreements. These agreements do not necessarily apply to contractors trying to reach remote operating locations. Further, introducing multiple supply chains has an impact on the CF Operational Planning Process (OPP) as it makes deploying through Air Ports Of Embarkation (APOEs) and Sea Ports Of Embarkation (SPOEs) much more difficult

to manage. According to Colonel Bill Legue, the A4 Logistics at 1 Canadian Air Division (1 CAD), this is true because having one system, one set of data and a centralized process to plan, prioritize, and load equipment in combat supportable order is easier to manage than having many contractors vying independently for limited space on military lift. The latter situation could leave military planners out of the loop regarding what equipment is important, what the loading priority should be, and what containers hold what equipment. This problem might actually be manageable if standardized information requirements were stipulated in every contract involved in accordance with a strategic direction to funnel information to a central collection point for incorporation into the planning process.

All of these concerns were supposed to be addressed in the Directorate Materiel Acquisition and Support Program (DMASP) Concept of Operations Manual for Optimized Weapon System Management. However, that document came out in draft and, according to Lieutenant-Colonel Debbie Miller (the Team Leader for supply chain optimization at MASOP), has been rescinded pending further amendments to address these and other issues. Therefore, as the manual is not completed in final and there are contracts for support actually being awarded, the risks to the viability of the central supply chain are evident. This is unacceptable given that the Canadian Forces Operations Manual states clearly that "operational success depends on effective logistics support. Commanders require a clear understanding of the logistics factors that affect their missions."[15] How can logisticians keep commanders apprised of issues that might affect a mission if they are blind to technical usage or parts availability data that is resident in a contractor's IM/IT systems? With contractors in the mix, commanders might theoretically have to look to multiple parties to get information

[15] Department of National Defence, B-GG-005-004/AF-000 *CF Operations…,* 27-1.

on logistics issues. Literally, there could be one point of contact per weapon platform. Certainly this creates the potential for confusion and it is not in line with the operational principle of unity of command mentioned earlier. Further, when there is real danger of combat injury and a contractor decides not to participate because his safety might be threatened, he is not subject to the National Defence Act (NDA) when it comes to unlimited liability.[16] The risk is therefore real that money alone may not always guarantee that contracted support will be there when a commander needs it. On the other hand, the commander will have far fewer issues of this nature with CF personnel. The issue then is that savings potential that applies to routine domestic level support might cause those in power to make decisions that might not be the best fit when it comes to deploying for live operations. In summary, if the Department continues to cut away at its internal supply chain without strategic guidance the overall system might loose the benefits of integration and also become unsustainable. Having looked at the potential risks associated with contracting out facets of the supply chain in a piecemeal manner, this paper will now discuss how Supply Chain Management (SCM) theory might be applied to the problem.

SCM theory suggests that integration and information sharing is the key to optimizing supply chains, not fragmenting in the manner discussed above. According to the SCM theory of integration, "every step in the process, from identifying a customer need to final consumption, is an opportunity to save money, extend longevity, and enhance the effectiveness of goods and services."[17] In other words, the key to success is to integrate the process and then look for opportunities to reengineer activities to reduce redundancies and

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[16] Consolidated Statutes and Regulations, "National Defence Act," http://laws.justice.gc.ca/en/N-5/84606.html; Internet; accessed 4 January 2005.

[17] OSD Comptroller iCenter, "Optimizing Logistics Support…,".

thus drive costs out. That is fundamentally different than contracting out the central integrated supply chain into many little supply chains, each designed uniquely for individual platforms. The benefits of supply chain integration include the streamlining of both information and material flows. This facilitates the provision of asset visibility, which enhances the ability of an organization to forecast usage and thus optimize the front-end acquisition piece.[18] Integration also enables the acquisition, transportation and warehousing components of the supply chain to interoperate in such a manner as to properly position material so that it does not have to be moved several times, thus incurring unnecessary double-handling costs.[19] Finally, integrating supply chain activities should include closer collaboration with contractors. By bringing contracted suppliers to the planning table and/or sharing usage data directly with these vendors, they will be better able to plan their inventories and production runs and thus become more efficient.

The notion that supply chain integration is the key to success is not just limited to theory; our allies as well as those involved in the commercial sector are embracing this concept in practice. During the 1990s industry realized that it was the integration of suppliers to the businesses they support, in terms of information sharing, that netted the best results. This is true because all parties are trying to predict usage, calculate requirements, determine optimal inventory levels, etc. By sharing information directly with suppliers, businesses benefited both in terms of the quality of support received and the costs paid for that support. These benefits occurred because their suppliers were better able to predict requirements and thus reduce their stock on-hand, thereby decreasing the carrying costs they

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[18] *Ibid*.

[19] Material Acquisition and Support Optimization Project, "Business Plan…,".

had to pass on to their clients. Collaborating in this manner created a win-win scenario that represents optimization at its best in real practice.[20]

The fore mentioned approach is fundamentally different than transferring the entire management of the supply chain to an outside party, often known as a Third Party Logistics (3PL) provider, and simply deciding to manage a 3PL contract. Outsourcing activities in this manner represents an increase in risk across the spectrum of supply chain activities from procurement to inventory control to customer service.[21] In DND's case, it can be argued that there is a strong possibility of a breakdown of information flows from the Department's point of view. This potentially creates a situation where the CF cannot be sure it is making optimum decisions on acquisition as the information to base decisions on could be resident outside the Department's databases. This scenario also allows for a contractor to have a decided advantage when the time comes for renewing contracts. This advantage exists because contractors may be privy to, or at least more conversant with, information that other contenders may not be.[22] On the other hand, the CF has initiated a project called Distribution Resource Planning (DRP), which is aimed directly at using the information flows from the CFSS to forecast usage in the manner described above.[23] How can the Department gain the full benefit of this tool if the data is unavailable to it? Other Defence Departments have followed industry's lead and recognized the need to develop integrated supply chains. The

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[20] Keah Choon Tan, "Supply Chain Management: Practices, Concerns, and Performance Issues," *Journal of Supply Chain Management*, Vol 38 Iss 1 (Winter 2002): 2.

[21] David J. Closs, "What's a 3PL? How Does My Firm Decide if we Need One?" *Logistics Quarterly,* Vol 10 Iss 4 (November 2004): 11.

[22] Shadwick, "Development of the Canadian Aerospace…,".

[23] Material Acquisition and Support Optimization Project, "Business Plan…,".

United States (U.S.) Department of Defence (DoD) is one such Defence Department that is moving in this direction.

Within the DoD, the U.S. Air Force (USAF) is moving towards integrating or fusing information from various supply chain components, such as transportation and supply, to provide an agile, systemically transparent and tailored level of support to the USAF.[24] The DoD's Defence Logistics Agency (DLA) is also undertaking similar efforts with its Business Systems Modernization (BSM) project.[25] Finally, the DoD itself has recognized that it needs to streamline in order to achieve logistics integration and thus avoid the wasting of resources.[26] One example is the DoD's effort to implement a total asset visibility system called EPC to provide visibility of all inventory across the system with the aim of enhancing readiness through supply chain optimization.[27] DoD has also collaborated with industry and its allies to study opportunities to optimize its supply chain. The conclusion from these consultations reaffirms the need for collaboration between all supply chain actors to gain the benefits available from SCM theory. In particular, it is the successful integration of the military force structure, acquisition processes and supplier relations that leads to optimal supply chains from a military point of view.[28]

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[24] James C. Rainey, Beth F. Scott, and Captain Scott M. Cornette, "Introduction Logistics and Warfighting: Thinking About Agile Combat Support," *Air Force Journal of Logistics* (April 2003): 8.

[25] Defense Logistics Agency, "Business Systems Modernization delivering 21st Century Logistics," http://www.dla.mil/j-6/bsm/library/briefing/index.htm; Internet; accessed 27 January 2005.

[26] Jeffrey A. Jones, "Logistics – A Core DoD Competency? Training, reorganization, Representation Key to Future of DoD Logistics," *Logistics Management* (July – August 1997): 19.

[27] Daniel W. Engels, Ph.D., Robin Kih, Elaine M. Lai, and Edmund W. Schuster, "Improving Visibility in the DoD Supply Chain," http://www.almc.army.mil/alog/issues/mayJun04/alog_supple%20chain.htm; Internet; accessed 4 January 2005.

[28] Industrial College of the Armed Forces, "Strategic Supply," http://www.ndu.edu/icaf/industry/IS2002/2002%20Strategic%20Supply.htm; Internet; accessed 27 January 2005.

The United Kingdom (U.K.) is also modernizing its supply chain with the aim of fostering better integration. This will be achieved by creating Integrated Project Teams (IPTs) to better integrate the customers' needs with the functions of procurement and follow-on warehousing and distribution. Under this initiative, multiple business units will be removed to create a common services approach.[29] This effort will help inculcate the lessons of OP TELIC where the concept of a strong central process owner for logistics across the Ministry of Defence (MoD) was proven.[30] Once again, integration is being targeted as the way forward. This does not mean that contractors will not be engaged in new ways of doing business with regard to providing weapon systems support, including OWSM, or with sharing the associated risks. However, it does suggest that the MoD will retain strategic control over where contractors do have a role to play. In the end, the goal will be to produce a seamless end-to-end supply chain involving improved information flows, whole life planning and optimized sustainment planning.[31]

To this point, the risks to the CF supply chain have been discussed, as have the theoretical aspects of optimizing supply chains in general. In addition, the activities of two of our closest allies in this area were also discussed in light of theoretical teachings being put into practice. This discussion might lead one to assume that Canada is not doing it correctly when it comes to the manner in which contracted solutions are being applied. That is not true. Some contracted solutions in support of aspects of the supply chain have been highly

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[29] Defence Logistics Organization, "Restructuring the Defence Logistics Organization," http://www.mod.uk/dlo/news/newsarticles/Restructuring.htm; Internet; accessed 27 January 2005.

[30] Defence Logistics Organization, "Developing a Defence Logistics Solution," http://www.mod.uk/dlo/news/features/Logistics_Solution.htm; Internet; accessed 27 January 2005.

[31] *Ibid*.

successful. Clothing Online is a great example because delivering dress uniforms is not an essential activity in terms of providing support to the war-fighter. The NATO Flying Training in Canada (NFTC) program in Moose Jaw and Cold Lake is another example. This was a win-win scenario as the CF was not funded for new trainer aircraft to do static training in Canada and industry had an opportunity to provide the assets while benefiting from a market potential that existed to expand upon this initiative. This venture also helped maintain a capability to train pilots in Canada.[32] There are other cases where a contracted solution is also a perfect fit. Contracting for air and sealift is such a case. Another is the use of commercial trucking to augment the CF 'Green Fleet' for materiel distribution in Canada. Even the OWSM concept of fully contracting out supply chain activities for individual weapon platforms might be very beneficial so long as this process is undertaken in such a way as to consider the strategic fit with the overall supply chain.

Having identified a problem affecting the internal supply chain, it is appropriate to make some recommendations regarding how to safeguard the future of this Departmental asset. To begin with, SCM theory suggests that an organization should manage its supply chain as part of its overall strategy.[33] That is also consistent with the principle of business process re-engineering.[34] In other words, decisions affecting the strategy best suited for managing the CF's internal supply chain should be made only after the Department has decided where the supply chain fits with its vision. The difficulty here is that the Department's vision will most likely talk about operations without making the connection

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[32] Shadwick, "Development of the Canadian Aerospace…,".

[33] Industrial College of the Armed Forces, "Strategic Supply…,".

[34] Materiel Acquisition and Support Information System (MASIS) Project, "Naval MASIS/SAP Update," http://navy.dwan.dnd.ca/english/dgmfd/dmscr/mmap/repository/Naval%20MASIS.doc; Internet; accessed 6 April 2005.

between operations and how the CF's internal supply chain supports operations. For instance, terms like expeditionary combat support are becoming common among our allies, but there is a connection to be made between that concept and the activities in the background that make it happen.[35]

Given that planning should start at the strategic level, and accepting that strategic guidance will be slow coming, the CF should consider using the Joint Capability Requirement Board (JCRB) process to provide senior direction when it comes to formulating supply chain strategy. This process would determine where the CF's internal supply chain fits as a Departmental asset, how much activity it needs to remain viable and integrated, and which platforms should be supported by that entity. Following that review, those platforms that could be contracted out for support could be identified and processed accordingly. In this way, decisions to contract out support would be made from a strategically focused perspective and would fit within the overall best interests of the CF. It should be noted that the JCRB process is aimed at ensuring that the CF works toward providing multi-purpose capabilities including via long-term capital plans and future capabilities planning. This process essentially looks at new acquisition, but should also consider in-service assets as well. This makes sense, as part of the Board's mandate is to consider both sustainability and personnel related issues associated with fielding equipment.[36] Therefore, if equipment is to be considered from a strategic perspective, this effort should also encapsulate all aspects of equipment support as well. This approach would ensure that the CF fields the right

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[35] United States Air Force, AFDD 1 *Air Force Basic Doctrine* (Colorado Springs: USAF Chief of Staff, 2003), 48.

[36] Joint Capability Requirement Board, "Terms of Reference," http://www.vcds.forces.gc.ca/dgsp/pubs/commit/jcrb_e.asp; Internet; accessed 5 January 2005.

equipment and that this kit is delivered complete with the necessary support infrastructure to support it.

By using the JCRB approach, the entire fleet might be considered from a strategic perspective and then those platforms best suited for contracted support could be selected, while those that are best suited for support from the internal supply chain could be set aside with a view to keeping their support organic. At the same time, the overall health and vitality of the internal supply chain could be taken into consideration so that the long-term viability of the system could be ensured. In this way, the best combination of contracted and organic resources could be achieved. Further, this approach would facilitate the efforts currently underway within the internal supply chain to bring in planning tools to optimize acquisition efforts, plan distribution, and so forth. In other words, those platforms remaining within the sphere of the internal system could receive more focus, while those selected for contracting out could be addressed in terms of how best to manage such contracts in the future.

This paper has argued that the current piecemeal and bottom-up approach being used to optimize supply chain activities is putting the supply chain at risk. The paper further argued that to rectify this situation the internal CF supply chain should be managed as a strategic asset from a top-down perspective in order to preserve its capability to support operations domestically and internationally. The discussion began by defining the internal CF supply chain and explaining its role within a CF context. Themes such as force generation, IM/IT support, trade viability, standardized processes and unity of command were portrayed in such a way as to highlight the fact that it is the integration of the overall system that best serves the commander in the field. Arguments were then raised to suggest that some well-intentioned initiatives, such as those of an OWSM nature, might be putting

the current system at risk. The paper then went on to point what the theory says about a supply chain's place in corporate strategy and what industry and our allies are doing to optimize the performance of their respective supply chains. The theme of integration being the best way ahead recurred throughout the entire discussion. At the end of the day, the supply chain is a complex and intricate system that needs to be well understood before major process changes are made. There is no doubt; the supply chain was created to support commanders in the field domestically and internationally. No commander can function optimally without having subject matter experts and single points of responsibility as direct reports. The present route that OWSM is taking potentially threatens that; both in terms of commanders getting immediate answers to logistics support issues for individual weapon systems and in terms of threatening the future viability and overall integration of the CF's supply chain itself. As was mentioned, there are places for OWSM initiatives just as there are for other initiatives. The key is to find them by first taking a strategic approach to supply chain management. In this area, the paper suggested a way ahead. By taking a strategic approach, the supply chain can be safeguarded while contract opportunities can concurrently be pursued with the confidence that they are optimal choices for the Department and consistent with a vision and strategy for the future.

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