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A PRIMER ON RECENT CANADIAN DEFENCE BUDGETING TRENDS AND IMPLICATIONS

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SUMMARY

Faced with a dangerous world, the federal government has made recapitalizing and updating Canada's armed forces a priority. Unfortunately, fiscal pressures obliged the government to deviate from its Canada First Defence Strategy, cutting staff and delaying military hardware acquisitions. However, the introduction this year of the Defence Procurement Strategy should allow Ottawa to use improved approaches to buy equipment that would otherwise have been purchased already under the DND's opaque capital expenditure system. At present, DND capital funds are mostly subject to accrual accounting. Capital costs are charged against the defence budget as annual amortization expenses over equipment lifecycles. While this enables multiple capital projects to go ahead simultaneously, not all of the money covering capital costs is treated this way. Traditional A-Base Vote 5 expenses are still charged to the budget the year the expenditure is made — and the DND consistently underspends the Vote 5 funds available by as much as 28 percent. Since 2007/8, an estimated \$6.42 billion wasn't used as intended. While some of this can be carried forward, there are limits. Leftover funds exceeding them are returned to the Treasury and are thereby lost. It's up to the DND to make up losses out of future funding. Just as bad, the accrual method doesn't fully account for inflation, so when schedules slip, project purchasing power diminishes by hundreds of millions of dollars. Ambitious initiatives like the Joint Support Ship and (likely) the Canadian Surface Combatant end up taking hits to reflect harsh budgetary realities; the capabilities of Canada's soldiers suffer. This policy brief draws on research and confidential interviews to highlight the pressing need for reform in Canadian defence procurement.

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The Defence Procurement Strategy introduced in February 2014 aims to both improve the acquisition of defence equipment and better leverage defence purchases for domestic economic benefits. In doing so, the strategy is attempting to take advantage of the recapitalization of the Canadian Armed Forces (CAF) outlined in the Canada First Defence Strategy (CFDS). The 20- year acquisition plan and associated funding framework are an unprecedented indication of the government's intention to pursue long-term defence recapitalization — all the more consequential as it follows a period of minimal major defence purchases. The size and duration of the pledged recapitalization funding present a unique opportunity to change how Canada procures military equipment. Although the CFDS plan remains largely intact, its size and timing have changed significantly since publication in 2008. This presents a series of problems for National Defence, since the defence budget has been cut, the nature of the funding commitment altered, and the capital program delayed.¹

For the government of Canada, capital program delay has given it an opportunity to extend the leveraging of its defence purchases to a much greater extent than would have been possible had the CFDS capital acquisition program proceeded on schedule. Had the original timelines outlined in the CFDS capital plan been followed, many of the most significant procurements would be too far advanced for any of the considered changes to take effect. This policy brief argues that the very delay that has been so problematic for National Defence has afforded the current opportunity to change the way defence goods are procured.

1. THE CFDS FUNDING ENVELOPE OVER TIME

The CFDS pledged “predictable, long-term funding”² for defence and increased the automatic annual escalation of the defence budget from 1.5 to two percent annually. This built on the \$12.8 billion budget increase outlined in 2005 by the Martin government and the 2006 increase by the Harper government, which added an additional \$5.3 billion that has pushed defence spending to \$18.5 billion in 2007/2008. As a result of these combined changes, defence spending rose to approximately \$20 billion in 2009/2010 and remained roughly at that level for the next three years.³ Beginning in 2010, however, several budget adjustments were announced that have reduced or altered this funding.

1.a. Budgetary Reallocations

The first deviation from the CFDS plan was the decision not to honour the pledge to provide the DND with additional funds as needed, to compensate its budget for the impact of negotiated wage increases for defence civil servants and members of the Canadian Armed Forces.⁴ Two operating budget freezes forced the DND to reallocate funds from its operating (Vote 1) account that would otherwise have been spent on operations and maintenance, to increase personnel compensation according to public service labour agreements. The impact of the Budget 2010 freeze as of 2012/2013 was \$355 million. The impact

¹ Capital is defined in the Estimates as follows: “A capital expenditures vote is used when capital expenditures equal or exceed \$5 million. Expenditure items in a capital expenditures vote would include items expected to exceed \$10,000 for the acquisition of land, buildings and works, as well as the acquisition of machinery and equipment, or for purposes of constructing or creating assets, where a department expects to draw upon its own labour and materials, or employs consultants or other services or goods. Different threshold limits may be applied for different capital expenditure classes at the departmental level.” Minister of Public Works and Government Services. *2013-14 Estimates*, Ottawa: 2013.

² Department of National Defence. *Canada First Defence Strategy*, Ottawa: 2008. The escalator increased to two percent in 2011/2012.

³ This is spending on the modified cash accounting basis used in the Estimates and the Public Accounts of Canada. Minister of Public Works and Government Services Canada. *Public Accounts of Canada* Ottawa: 1970-2013.

⁴ Confidential interview, October 17, 2013; Department of National Defence. DND Public Affairs Official, e-mail to the author. February 1, 2013.

of the Budget 2014 freeze will reach an estimated \$236 million by 2015/2016.⁵ Combined, this has forced a reallocation of almost \$600 million a year from the DND's operations and maintenance towards personnel.

1.b. Budget Re-profiling and Cuts

For reasons discussed below, Budget 2012 declared that, "In order to ensure that funding for major capital equipment procurements is available when it is needed, the government is adjusting the National Defence funding profile to move \$3.54 billion over seven years into the future period in which purchases will be made."⁶ This reflects an attempt by the DND to adjust its procurement initiatives to more realistic timelines following several years of procurement delays.⁷ Similarly, Budget 2014 announced a further re-profiling of \$3.1 billion. In total, \$6.64 billion in capital accrual funds have been deferred into the future.

In addition to these shifts, the government of Canada has announced two defence budget cuts as part of its efforts to combat the deficit. Budget 2011 announced the results of the DND's Strategic Review, which reduced the defence budget by \$1 billion over two years. Budget 2012 announced an additional \$1.12 billion in cuts for the Deficit Reduction Action Plan (DRAP). Thus, by 2015/2016, the DND will have \$2.12 billion a year less funding than planned under the CFDS, removing a total of \$32.2 billion in funding over the life of the CFDS. Combined, the capital re-profiling and the budget cuts have substantially reduced the available defence budgetary funding over the first several years of the CFDS plan, lowering budgeted funding by \$3.6 billion in 2013/2014 (see Figure 1).⁸

One of these budget cuts directly affects the capital program. Through the DRAP, "Defence will rebalance the civilian workforce and Reserve Force to ensure the right people are in the right jobs, in the right places. Defence will also reform how it manages contracting with the goal of reducing the number of contracts, contractors, and resources expended on contracting."⁹ This will cause a significant cut in the Materiel Group, the DND organization responsible for managing the acquisition and through-life support of defence equipment, as the organization's workforce loses 400 of its roughly 4,600 positions — a nearly nine percent loss.¹⁰

⁵ Department of Finance Canada. *Update of Economic and Fiscal Projections*, Ottawa: 2013.

⁶ Department of Finance Canada. *Budget Plan 2012*, Ottawa: 2012.

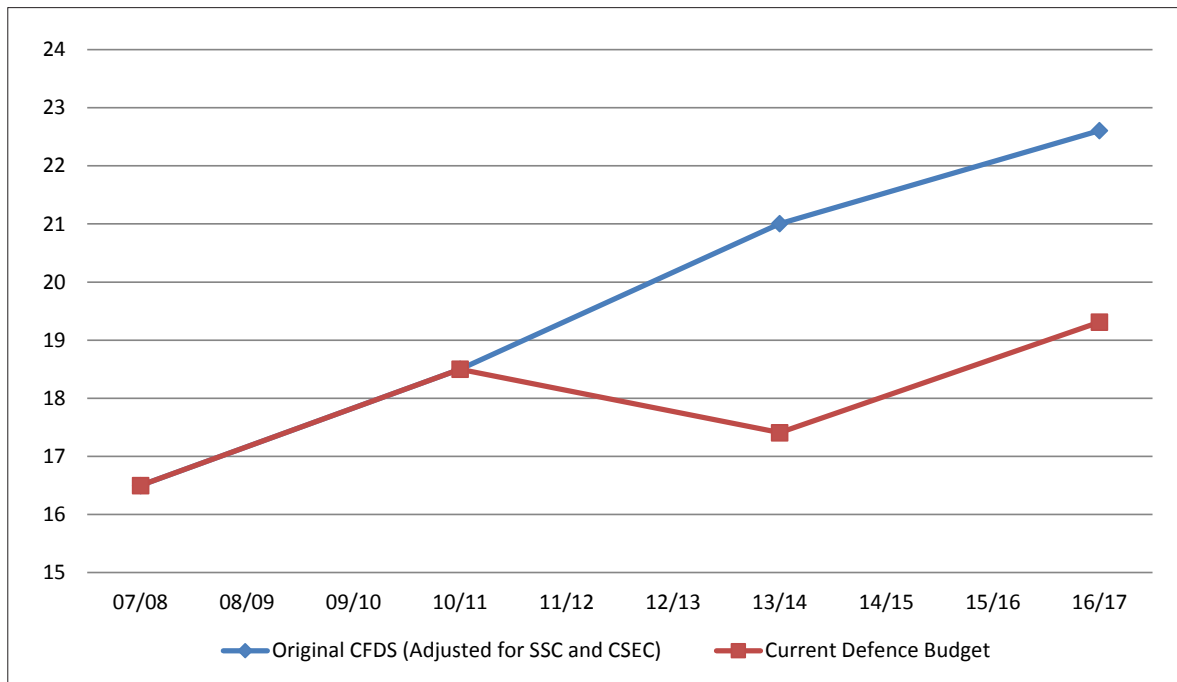
⁷ Donaldson, interview with the author.

⁸ This figure shows the impact of the budget cuts and capital re-profiling in reducing the CFDS budget plan. To provide for an accurate comparison, the original CFDS budget plan was adjusted to account for creation of Shared Services Canada and the Communications Security Establishment Canada as independent agencies. Both perform functions originally budgeted as part of the DND.

⁹ Department of National Defence. *Report on Plans and Priorities 2013-14*, Ottawa: 2013.

¹⁰ Ross, Dan. "Ottawa Conference 2013." Ottawa, CDA Institute, February 21-22, 2013.

FIGURE 1 CFDS ORIGINAL VS. CURRENT (NOMINAL \$B)



Beyond this, the budget cuts have not directly affected the capital program, as they primarily impact the personnel, operations and maintenance (O&M) and grants and contributions components of defence spending, with O&M bearing the brunt.¹¹ Cuts to National Procurement especially will be relevant to the capital program over the long term, as this budget category provides for equipment maintenance, repair and overhaul, and in-service support. Demand for National Procurement funding has always significantly exceeded supply, so these reductions are already reducing equipment availability.¹² By the fall of 2013, the Army was already facing the prospect of parking half of its wheeled vehicle fleet and some air force squadrons have seen their flying hours cut by a quarter.

In sum, there has been a substantial reduction in DND funding; these cuts have largely spared the capital program, but they have significantly reduced O&M funding, which is already limiting the operational readiness of defence equipment, and they have resulted in reductions to the acquisitions workforce.

2. THE CAPITAL BUDGET: CASH VS. ACCRUAL AND THE LINK BETWEEN THE CFDS AND THE CAF BUDGET

The fact that the current budget cuts have protected the capital budget is an historical anomaly, because capital expenditures have often been the “residual”¹³ component of Canadian defence spending. In the event of fiscal pressures, personnel and operations and maintenance funding were prioritized, leading to cuts in the capital budget.¹⁴

¹¹ Perry, David. *Doing Less with Less*. Ottawa: CDA Institute, 2014.

¹² Groves, Major Richard (ret'd) and Lieutenant-Colonel Ross Fetterly. “An Imperfect Storm,” *The Canadian Air Force Journal* 1, no. 1 (June, 2008), 17-29.

¹³ Middlemiss, Danford. “Canadian Defence Funding,” *Canadian Defence Quarterly* 21, no. 2 (October, 1991), 19.

¹⁴ Ibid.

The adoption of accrual budgeting and accounting has significantly changed the budgetary dynamics that previously made capital a residual budget category, while at the same time making it essentially impossible to compare actual defence capital expenditures against budgetary plans using public documents.¹⁵ The DND used to exclusively employ cash accounting principles. Under this system, the DND was provided both Vote 1 and Vote 5 A-Base funding as a cash appropriation through the Estimates. Under this system, all expenses (personnel, operations and maintenance and capital) were charged in full against the DND's budget in the year expenditures were made. Because this method of accounting presents a series of short-term, but very large budgetary charges when major platforms are acquired, the DND procured major equipment projects sequentially. Because of this, cancelling or delaying procurements could significantly reduce the DND's budget in the short term, by avoiding these expenses.

Accrual practices, however, fundamentally changed the management of capital funds. Under accrual, personnel and operations and maintenance costs are still charged against the DND's budget in full in the year costs are incurred. The process is different for capital expenditures, however. When the DND buys capital equipment, it receives investment cash from Parliament in the year required, as part of the DND's overall Estimates, to execute the purchase. This investment cash is not charged in full against the DND's budget in the year it is used, however. Rather, the capital costs of procurements are amortized over the equipment's lifecycle and charged against the DND's budget as an annual amortization expense. Thus, under accrual practices, the DND's capital budget resembles a series of annual mortgage payments, as a series of annual amortization expenses for acquired capital assets are charged against its budget.¹⁶

Complicating matters further, investment cash is supplied in the DND's Estimates as part of the Vote 5 allocation, which also includes traditional A-Base Vote 5 funds, since the DND still has numerous capital projects that do not operate under accrual practices.¹⁷ Traditional A-Base Vote 5 expenses are still charged against the DND's budget in the year expenditures are made. As a result, the DND's Estimates and the Public Accounts reflect both investment cash and A-Base Vote 5 capital funding.¹⁸ Only the A-Base Vote 5 and capital amortization amounts are reported in budget documents, like the CFDS, however.¹⁹ While it is possible to track the DND's capital expenditures on a modified cash basis in the Estimates and Public Accounts, these expenditures include investment cash, which is not reflected in budget documents. It is therefore impossible to compare the DND's annual expenditures against the CFDS 20-year budget, as the latter is depicted in accrual terms. For this reason, the modified cash expenditures of DND capital funding, detailed below, differ from the accrual adjustments discussed earlier. While the switch to accrual accounting has afforded the DND an accounting advantage that has allowed many more projects to proceed simultaneously, this has come at the expense of fiscal transparency. It is simply no longer possible, using public documents, to reconcile defence spending on capital with the defence budget.

¹⁵ This section draws on Fetterly, Lieutenant Colonel Ross and Major Richard Groves, *Accrual Accounting and Budgeting in Defence*, Queen's University, Kingston ON. Defence Management Studies: 2008.

¹⁶ Solomon, Binyam and Craig Stone. "Accrual Budgeting and Defence Funding," *Defence and Peace Economics* 24, no. 3 (2013), 211-227.

¹⁷ *Evidence*, 22.

¹⁸ Minister of Public Works and Government Services. *2013-14 Estimates*, I-1.

¹⁹ Department of National Defence. *Canada First Defence Strategy*

3. THE KEY RISK TO THE CAPITAL BUDGET: SCHEDULE SLIPPAGE AND THE LOSS OF PURCHASING POWER

The shift to accrual practices for capital procurement has permitted the DND to pursue an ambitious recapitalization program, as it permits multiple capital acquisition projects to proceed simultaneously. The Public Accounts show that the Vote 5 capital funding available to the DND has increased markedly, more than doubling in nominal terms between 2007/2008 and 2010/2011. This increase in funding has not been matched by a corresponding ability on the part of the government of Canada to spend all of the Vote 5 capital funds available to it. As Table 1 shows, beginning in 2007/2008, the DND has not spent substantial portions of the Vote 5 authorities available. In nominal terms, a cumulative \$1.49 billion in Vote 5 funds was transferred to other DND spending priorities, or to other departments after the start of the fiscal year. Of the remaining available authorities, \$4.93 billion was not spent in the year intended. By year, since 2007/2008 under-spending of the available Vote 5 authorities alone has ranged from a low of eight percent to a high of 28 percent.²⁰

This indicates either a persistent inability or unwillingness to spend the significantly increased capital funds available to Defence. The DND's planning documents indicate that capacity challenges within the DND are partially to blame for this problem — a situation that will worsen as the Materiel Group absorbs the full impact of the DRAP.²¹ Beyond this, many have pointed to the wider procurement system as a contributing factor in this delay.²² More recently, some have suggested that the under-spending of the DND's Vote 5 authorities has been done deliberately to help improve the government of Canada's fiscal position.²³

This under-spending takes several forms. Investment cash for capital projects operating on an accrual basis that is not spent in the year intended can be re-profiled to future years. These funds are not lost, although this shift represents a major loss of purchasing power, discussed below. The Department's A-Base funding, including Vote 5, can be carried forward subject to defined limits. Any under-spending of A-Base funds that exceeds this limit results in a residual lapse, which means the funds are returned to the Treasury and are subsequently unavailable to the DND. When the DND experiences a residual lapse for equipment projects, as happened in 2010/2011 when \$490 million in funding for projects including the Maritime Helicopter lapsed, it must subsequently find that funding within its allocation in future years. Although the DND reports annually on its spending in its annual Departmental Performance Report, a detailed breakdown of under-spending across these categories was only provided in 2010/2011.²⁴ As a consequence, it is not possible to analyse this under-spending systematically. Nonetheless, these documents suggest that the majority of this under-spending represents re-profiled investment cash or A-Base funds that have been carried forward.

²⁰ Vote 5 includes funds for both equipment and infrastructure, without delineating between the two. In 2010-2011 a new program alignment architecture was adopted that depicts expenditures on both equipment acquisition and disposal and real property acquisition and disposal. In 2010/2011 and 2011/2012, the difference between planned and actual expenditure was 22 and 27 percent respectively, while in 2012/2013 actual expenditures exceeded those planned. Department of National Defence. *Departmental Performance Report 2012-13*, Ottawa: 2013; Department of National Defence. *Departmental Performance Report 2011-12*, Ottawa: 2012; Department of National Defence. *Departmental Performance Report 2010-11*, Ottawa: 2011.

²¹ Department of National Defence. *Report on Plans and Priorities 2013-14*

²² Berthume, Lee. "Former Top Defence Official Dan Ross Defends His Handling of F-35 Fighter Jet controversy," <http://o.canada.com/news/national/former-top-defence-official-dan-ross-defends-his-handling-of-f-35-fighter-jet-controversy/> (accessed January 20, 2013).

²³ Brewster, Murray. "DND Unable to Spend Billions in what Critic Says is Stealth Deficit Cutting," <http://www2.macleans.ca/2013/07/11/dnd-unable-to-spend-billions-in-what-critic-says-is-stealth-deficit-cutting/> (accessed August 10, 2013). Lapsing cash would not improve the government's actual financial position, however, since this is determined on an accrual basis.

²⁴ Department of National Defence. *Departmental Performance Report 2009/2010*, Ottawa: 2010.

3.a. Defence Inflation

After a decade of deferred recapitalization, the government of Canada has attempted a massive defence recapitalization program to provide new fleets to each of its services. Doing so created a bow wave of capital projects. After six years of consistently under-spending its Vote 5 Capital allocations, the DND has essentially pushed a significant portion of this recapitalization several years into the future, leading to the re-profiling of accrual funds in Budgets 2012 and 2014. While this has significantly assisted the government of Canada's efforts to eradicate the deficit, the impact on the DND has been deleterious.

TABLE 1 DND VOTE 5 AUTHORITIES - PUBLIC ACCOUNTS

Year	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Cumulative Total
Authorities (Estimates)	3960	3776	4563	5297	4664	4104	26364
Transfers	4	65	(455)	15	(341)	(781)	(1493)
% Transferred	0%	2%	-10%	0%	-7%	-19%	-6%
Available Authorities	3,964	3,841	4,108	5,311	4,322	3,322	24,868
Spent	3,200	3,271	3,343	3,807	3,255	3,059	19,935
'Un-Spent'	764	570	765	1,504	1,067	263	4,933
% Un-Spent	19%	15%	19%	28%	25%	8%	20%

Historically, DND project budgets were established in fixed-year dollars that were automatically adjusted as needed to keep pace with inflation, project schedules and any delays. All of the accrual projects established as part of the CFDS, however, are set in Budget Year (BY) dollars, which are pre-escalated to specific budget years. Under this practice, if schedules slip project budgets receive no additional escalation to compensate for inflation, defence-specific or otherwise. According to the Canadian Association of Defence and Security Industries (CADSI), "the deleterious impact of setting initial budgets in BY dollars is momentous, in the order of 20-25 percent over the project life."²⁵ As a result, former assistant deputy minister (Materiel) Dan Ross described schedule slippage as the most pressing problem facing the defence recapitalization program: "Schedules are taking a beating. As schedules slip the buying power ... is eroded."²⁶ According to Ross, the impact on the \$26.2 billion Canadian Surface Combatant project alone is equivalent to \$1 million a day, and the cumulative impact to the overall capital program is equivalent to hundreds of millions of dollars annually.

Since 2007/2008, the \$1.49 billion in Vote 5 authorities transferred after the beginning of the fiscal year, and the further \$4.93 billion that was not spent, meant a combined \$6.42 billion in capital funds were not used as intended (see Table 1). In October 2011 the Vice Chief of Defence Staff stated that defence-specific inflation (DSI) averaged seven percent.²⁷ Making the simplifying assumption that this average rate of DSI would affect the entire unexpended capital amount of \$6.42 billion by one year, this would be equivalent to a loss of purchasing power of \$450 million for the affected projects.

Because defence capital budgets are fixed, this will continue to lead to a reduction in the capability acquired. This has already occurred with the Joint Support Ship (JSS), where project delay resulted in a significant loss of purchasing power, even after the project budget was increased. As a result, the project's scope was reduced from a possible three to only two vessels, and the joint capabilities originally envisioned in the vessel were essentially removed.²⁸ The fall 2013 Auditor General's report indicated

²⁵ CADSI Marine Industries Working Group, *Sovereignty, Security and Prosperity*. Ottawa: CADSI, 2009, 35.

²⁶ Ross, *Ottawa Conference 2013*

²⁷ Standing Senate Committee on National Security and Defence. *Proceedings of the Senate Standing Senate Committee on National Security and Defence*, 1st sess., 41st Parliament. Issue 2 October 17, 2011.

²⁸ Office of the Parliamentary Budget Officer. *Feasibility of Budget for Acquisition of Two Joint Support Ships* Ottawa: 2013.

that the navy's combat ships may face a similar fate as "the CSC [Canadian Surface Combatant] project budget of \$26.2 billion... is insufficient to replace Canada's three destroyers and 12 frigates with 15 modern warships with similar capabilities."²⁹

4. THE ADEQUACY OF THE CAPITAL PROGRAM

A final consideration is that the adequacy of the CFDS spending plan has been questioned ever since the document was published, with many commentators believing insufficient funds have been allocated for recapitalization.³⁰ In particular, it has been asserted that the escalation of the defence budget under the CFDS provides only half the annual increase needed to afford the desired capital equipment.³¹ The *Report on Transformation 2011* provided the first indication in an official DND document that the CFDS funding plan is inadequate to deliver the envisioned capabilities. In addition to finding financial efficiencies to contribute to deficit reduction and personnel to staff new priorities, that report sought \$1 billion that could be used to bolster the capital plan.³² The naval recapitalization program, in particular, is believed to have a significant gap in funding relative to the desired capability. Although \$31.6 billion has been allotted to this program, the capability believed necessary could cost as much as \$50 billion.³³

According to Ross, with respect to the CFDS, "The reality is there was only so much money, it was divided out, to the demands. No one, no Army, Navy Air Force project got everything they needed. So they had to live within their means and manage expectations within their budget."³⁴ This statement indicates the CFDS was based on the funding available, not on an articulation of defence requirements, and the DND has attempted to produce the maximum capability possible from the allocated resources. Because the CFDS capital plan is a long-term, fixed accrual budget envelope and the DND's Investment Plan was fully allocated, the DND cannot increase the budget for one project, without providing an offsetting reduction to another.³⁵ Whereas the Canadian Coast Guard was able to secure additional funds for its Polar Ice Breaker, after refining its cost estimates, the DND does not have the ability to make a similar adjustment, unless it can offset the funding by making a reduction to another project. Thus, unless the defence budget is increased, the DND can only bolster some project budgets by providing other offsetting budget reductions. Therefore, because the budgetary ceiling has been fixed and the funding fully allocated, the only way to increase a project budget to account for cost escalation is to reduce the funding of another project, or cancel it outright. More commonly, project capabilities have been reduced to stay within budget.

²⁹ AG, "Chapter 3," 20.

³⁰ Sloan, Elinor C. "Stretched to the Breaking Point," *National Post* June 17, 2008.

³¹ Commodore (ret'd) Kelly Williams contends that it was understood in the DND that the force structure in the CFDS required an annual budget escalator of four percent, not the two percent provided. SPP Procurement Workshop, Ottawa, February 19, 2014.

³² Leslie, LGen Andrew. *Report on Transformation*. Department of National Defence. Ottawa: 2011, iv, CDAI Roundtable. Ottawa, ON, October 5, 2011.

³³ Public Works and Government Services. "Backgrounder on the National Shipbuilding Procurement Strategy (NSPS) - Year 2: A Status Update," <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/ddi-bkgr-10-eng.html#no8> (accessed November 12, 2013); Thorsteinson, Janet. "Projecting Shipbuilding Success," *Canadian Naval Review* 7, no. 2 (Summer, 2011), 28-29.

³⁴ Ross, *Ottawa Conference 2013*

³⁵ Confidential interview, Ottawa, November 2013.

5. CONCLUSION

The impact of defence budget adjustments since 2008 on capital equipment has been mixed. Budget cuts have not reduced the funding available for capital equipment purchases, as the reductions have been applied primarily to the DND's personnel and operations and maintenance funds, but they have indirectly affected the capital procurement program by imposing reductions in the acquisition workforce. This will likely contribute to further schedule slippage, which is the most significant problem facing defence recapitalization. Due to defence cost escalation, the delay in the capital program—signified by the re-profiling of \$6.6 billion in capital funds—is eroding hundreds of millions of dollars in purchasing power for those projects that are not yet in contract. This delay will exacerbate what many believe to be a CFDS funding plan that was insufficiently resourced from its inception.

About the Author

Dave Perry is a doctoral student in political science at Carleton University. His dissertation research analyzes the privatization of defence and security in the United States, Canada and Great Britain, focusing on the use of Private Military Firms on international operations. He was previously the Deputy Director of Dalhousie University's Centre for Foreign Policy Studies, and holds a BA in Political Science and History from Mount Allison University, and an MA in Political Science from Dalhousie University.

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