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THREATS TO FUTURE PLANNING: CHALLENGES OF CAPABILITY-BASED PLANNING

LCdr W.J. Loder

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Exercise Solo Flight

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**THREATS TO FUTURE PLANNING: CHALLENGES OF CAPABILITY-
BASED PLANNING**

LCdr W.J. Loder

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THE QUESTION OF CAPABILITY-BASED PLANNING

The end of the Cold War created a void in the realm of capability development for western nations, Canada included. For decades, like most western nations, Canada maintained and improved defence capabilities based on the threat of the Soviet Bloc. With that threat removed, how would the Canadian Armed Forces identify what capabilities and equipment needed to be replaced, improved, or acquired?

Certainly, threats remained, but the previous philosophy was that armed forces of western nations needed the combined capability to engage and defeat the single greatest threat in the world in a prolonged war. Having such capability would result in no other threat posing a challenge. And yet, the first decade after the end of the Cold War proved to be one of the busiest for military operations. This era also proved to be one of the most challenging for western armed forces. The threats posed by rogue states, militia groups, criminal organizations and insurgents proved that the capabilities needed to defend against the Soviet threat were not necessarily the most effective against a modern, unsophisticated (in capability) but flexible and ideological threat.

In the absence of a new potential enemy in which to balance the threat, western nations sought a new method of planning to develop capabilities, as a result Capability-Based Planning emerged as the primary method to determine future capabilities for defence. Capability-Based Planning would define and develop a vision of the future security environment and nations would in turn use scenarios from this vision to identify the capabilities required to support future operations. The process focussed on the capabilities needed for the future vice the equipment.

Having been used for nearly two decades across the western world, and the last decade in Canada, the effectiveness of Capability-Based Planning is now being questioned. In those two decades the world has changed. It is now argued that threats have re-emerged in the new world order, and combined with the weaknesses of Capability-Based Planning, it is time to return to a Threat-Based Planning method.

Inherent weaknesses in the Capability-Based Planning process that have been identified range from the lack of government direction to the continued influence of the environmental services hindering the effectiveness of the process. With the demonstrated aggressive nature of Russian, Chinese and North Korean foreign policies through their use of military force in the Ukraine, South China Sea or Sea of Japan, there have been calls for a return to Threat-Based Planning and the identification of these nations as potential threats. While most of the calls have risen in the United States; all focus on the rise of these new threats. They also call out on issues with process discipline, or a lack of focus that fails to delivered promised strategy.¹ Even in Canada, the rise of a potential threat has opened the practicality and effectiveness of Capability-Based Planning for debate, questioning its requirement for “military judgement” in vague scenarios.²

With the rise of potential threats, and a lack of substantive improvement on defence procurement by the use of Capability-Based Planning, perhaps this line of questioning is appropriate. Perhaps it is time to revert to Threat-Based Planning. However, Threat-Based Planning is generally confined to the replacement of

¹ Thomas E. Ricks, “The Pentagoner: The long, slow death of capabilities-based planning,” *Foreign Policy*, last modified 5 January 2015, <http://foreignpolicy.com/2015/01/05/the-pentagoner-the-long-slow-death-of-capabilities-based-planning/>; Michael W. Pietrucha “Essay: Capability-Based Planning and the Death of Military Strategy,” *USNI News*, last modified 5 August 2015, <https://news.usni.org/2015/08/05/essay-capability-based-planning-and-the-death-of-military-strategy>.

² Tony Balasevicius, “Is It Time To Bring Back Threat-Based Planning?” *Mackenzie Institute*. Last modified 4 July 2015, <http://mackenzieinstitute.com/is-it-time-to-bring-back-threat-based-planning/>.

capability with like capability, most often using similar equipment. Capability-Based Planning is not as restrictive. As mentioned it is neither threat specific nor equipment specific. It is intended to overcome some of the weaknesses that manifested themselves in the late nineties when western forces attempted to use forces, doctrine and tactics, optimized against the Soviet Bloc, in Africa and Bosnia on peacekeeping and peacemaking missions with questionable results.

Regarding the rise of quantifiable threats, these threats all rise from nations that, despite posturing and parlance, generally rely on the global economy for national interest. War with the western powers would significantly affect their status within the global economy and likely diminish national influence. Furthermore, while they each have potential reasons for engaging in conflict with the West, their geographical separation, economic diversity and differences in political and cultural ideologies make it unlikely to see an alliance formed.

Thus, the only remaining reason to either return to Threat-Based Planning or develop a new method would be the inherent weaknesses in the Capability-Based Planning process. This paper argues that the use of Capability-Based Planning across the Department of National Defence successfully enables proper strategic planning in concert with the processes and policies across the Government of Canada and with continued evolution, does not need to be replaced. By examining the implementation of Capability-Based Planning in the Department of National Defence and its evolution, specifically looking at the impact an apparent lack of government defence policy, and issues surrounding the stove-piped nature of the joint force it will be seen that Capability-Based Planning assists decision makers to look through the “lens of Defence policy” to identify “what the CAF believes it needs to do in the future, how

well it will do it with the capabilities currently available and programmed and what it might change to perform better.”³

CANADIAN IMPLEMENTATION OF CAPABILITY-BASED PLANNING

The concept of Capability-Based Planning was first introduced to the Canadian Armed Forces in a discussion paper developed by the staff of the Director-General Strategic Planning under the Vice Chief of Defence Staff.⁴ The paper was published in June 2000. As mentioned, throughout the Cold War, Canadian planners had primarily used threat-based planning at the strategic level to develop and acquire new capabilities.

Threat-Based Planning was a reactive process that required an understanding of the enemy’s capabilities and developed or replaced existing capability to better those of a potential adversary. Throughout the Cold War, with the Soviet Bloc being the primary, and in reality sole threat Canada faced, the challenge was difficult in the level of incompleteness of which the Soviet capabilities were known. This was primarily due to Soviet efforts to protect against our knowledge of those capabilities. With the end of the Cold War and the dissolution of the Soviet Bloc there was no longer a clear threat to plan against. In the United States and other western countries Threat-Based Planning was deemed no longer appropriate.

The end of the Cold War also brought about a peace dividend, the term used to describe the ability to reduce defence spending in the absence of the major threat. The desire to reduce defence spending in the lack of clear defined enemy had a

³ Department of National Defence, *Analysis of Options to Sustain a Canadian Forces Fighter Capability, Task 2: Chief of Force Development Mission Needs Analysis, Final Report*, (Ottawa: DND Canada, n.d.), 4, last accessed 26 April 2017 <http://www.forces.gc.ca/en/about-reports-pubs/mission-needs-analysis.page>.

⁴ Department of National Defence, *Strategic Capability Planning for the Canadian Forces*, (Ottawa: DND Canada, 13 June 2000), 3.

profound impact on defence policy and planning.⁵ Capability-Based Planning was developed in response to the inability of Threat-Based Planning to address the existing situation post-Cold War, a world seeking a new order among nations, a world strife with localized conflict. In an “effort to migrate defence acquisitions towards a more proactive process” the entire force development process was revamped in Canada and at its heart was Capability-Based Planning.⁶

The intent of Capability-Based Planning was to conduct planning using analytical tools to ensure rational decision-making processes evolved. Capability-Based Planning was considered more flexible and adaptable to the uncertain nature of the world at that time. The most significant difference is where Threat-Based Planning used a bottom-up approach. One that would see each environmental service generate capability requirements in a stovepiped manner using their own scenarios and subsequently attempt to integrate them at the strategic level with each other in an attempt to partition limited resources. Capability-Based Planning would instead start at the top with strategic direction and work down to the services in a joint manner achieving joint capabilities. While the capabilities may be managed by a single service, the goal was to ensure capabilities supported the joint strategic vision. The focus is on planning to achieve capabilities not the acquisition of equipment.

Capability-Based Planning has four basic steps. First, it uses government guidance to derive broad capability objectives and force structure options. Second, using high level doctrine and potential future scenarios a nation’s forces may face, planners consider how assigned forces will fight, in doing so they develop an operational concept. Third, capabilities are then divided into groupings commonly

⁵ David Perry, “A Return to Realism: Canadian Defence Policy after the Great Recession,” *Defence Studies* 13, no. 3 (2013), 338.

⁶ Mark Rempel, *An Overview of the Canadian Forces’ Second Generation Capability-Based Planning Analytical Process* (Defence R&D Canada: DRDC CORA TM 2010-198, September 2010), iii.

called capability partitions. The goal here is to make things more manageable and remove the potential stovepipe issues that result when capabilities are environmentally separated. Finally, the resulting capabilities are balanced against available resources to determine and prioritize defence needs.

Canada embarked officially into Capability-Based Planning in June 2005.⁷ On completion of its first three-year cycle the strategic capability roadmap of July 2008 was developed. Purpose of this roadmap was to provide "rigor and logic to planning for future CF capabilities" and "strategic high level input to the departmental Investment Plan."⁸ The key component of the Strategic Capability Roadmap was a prioritized "list of approved alternatives as well as government approved initiatives." The list informed sponsors and stakeholders of timelines and targets for the identified projects would allow them to prioritize level of effort of their staffs.⁹

Iterative by its very nature, the Capability-Based Planning process has evolved since being employed by the Department of National Defence. The main intent of the "feedback paths is to apply corrective action" as necessary, through changing strategic direction, or changes to project timelines.¹⁰ This feedback loop is also leveraged to capture lessons learned and changes to the process were implemented by the start of the second round of Capability-Based Planning.

Improvements in the second round were primarily focused on the analytical methods used throughout the process. Some of the tools and methods were replaced; in other instances some tools were modified to conduct analysis at a deeper level. Finally, additional tools were used to analyze aspects that had not been analyzed in

⁷ Guy R. Thibault, *VCDS Directive –Capability-Based Planning 2013-2106* (Vice Chief of the Defence Staff: 2100-1 (DCI), 24 September 2013).

⁸ Department of National Defence, *Strategic Capability Roadmap Version 1.0*, (Ottawa: DND Canada, July 2008), iii.

⁹ *Ibid.*, 55.

¹⁰ Rempel, *An Overview of the Canadian Forces' Second Generation ...*, 6.

the first round. For example, the ability to look at deficiencies and adequacies of rotating force structure elements through concurrent scenarios was not taken into account in the first iteration of Capability-Based Planning but was in the second.¹¹ The intended output of Capability-Based Planning had not changed, but its effectiveness had been improved after a single iteration.

The latest round of Capability-Based Planning process was completed last year (2016). It, like the rounds before, was expected to improve “on the ability to capture, organize and use data.”¹² Notably the specific role of the Capability-Based Planning process is to inform decisions not make decisions. It remains the realm of Department of National Defence leaders to make decisions with respect to future capabilities of the Canadian Armed Forces, not the process.

CAPABILITY-BASED PLANNING WITHOUT POLICY

As mentioned, Capability-Based Planning is a top-down approach that starts with “overarching guidance.”¹³ This overarching guidance comes in the form of a number of inter-related documents that are produced to stand alone nonetheless. The “cornerstone” of these documents is the government’s defence policy or strategy.¹⁴ Since 2008, this has been the Canada First Defence Strategy. While complete with respect to strategy, the policy quickly proved unaffordable, so while it provided guidance, it was hardly prescriptive.

Anecdotally, with the election of the Trudeau Government, the Canada First Defence Strategy is no longer to be used as government policy. Until the results of

¹¹ *Ibid.*, 18.

¹² Thibault, *VCDS Directive...*

¹³ The Technical Cooperation Program (TTCP), TR-JSA-TP3-2-2004 *Guide to Capability-Based Planning* (A Paper prepared for the MORS Workshop held in Alexandria, VA, USA, 19-21 October 2004), 3, last accessed 26 April 2017 www.acq.osd.mil/ttcp/reference/docs/JSA-TP-3-CBP-Paper-Final.doc.

¹⁴ Department of National Defence, *Capability-Based Planning Handbook Version 8.0*, (Ottawa: DND Canada, June 2014), 16.

the Defence Policy Review are published, the Department of National Defence has been operating, and commenced its latest iteration of Capability-Based Planning without the cornerstone document—defence policy. Even under the previous Harper Government, the unaffordability of the Canada First Defence Strategy left the Capability-Based Process in a “policy vacuum [that] undermined the efficacy of the departmental strategic planning processes.”¹⁵ The Department of National Defence operated eleven years between the 1994 White Paper and the 2005 Foreign Policy Statement. While the Foreign Policy Statement would provide some direction, it would be another three years before the Canada First Defence Strategy would be published. Nine years later, it is doubtful that a new defence policy will provide significant change or extra foundation to the *cornerstone* of the Capability-Based Planning process.

Hartfiel considers planning without guidance a significant problem and fraught with the risk that the results will be “ill-suited to government policy preferences.”¹⁶ Yet, in the eleven years of use, this separation of goals from preferences has not risen, and arguably civilian and military staffs have done well without guidance. They have done so as a result of tradition, a Canadian tradition in lack of formal guidance and a Canadian tradition in guidance, when provided.

While the Canadian Armed Forces have a proud history and Canadians generally look upon the Forces with favour, Canada does not have a strong history of military financial support. Once the potential threat of invasion by the United States was addressed after Confederation, there has not been a significant need for a large standing armed force. Canadians benefited from geography. Peace with our southern neighbour meant that war had to come to Canada, and arguably today that fact

¹⁵ Robert M. Hartfiel, “Planning without Guidance: Canadian Defence Policy and Planning, 1993–2004,” *Canadian Public Administration* 53, no. 3 (2010), 339.

¹⁶ *Ibid.*, 340.

remains. As a result, Canadians and their politicians have generally had a disinterest in the Canadian Armed Forces. This is similarly reflected in the amount of defence policy published.

However, despite this void of policy, the Canadian Armed Forces continue to exist, and support Canada's interests. While changes were made to the size, look and capability of the Canadian Armed Forces since Korea, the primary missions have not changed.

In the 1964 White Paper, the primary missions defined by defence policy were: *collective measures and defence* to maintain peace and security under the Charter of the United Nations and defence of NATO; *collective partnership with the United States* for North American Defence; and *national measures* for the defence of Canada.¹⁷ In 1971, the White Paper would reverse the order, but reiterate similar activities: protection of sovereignty, defence of North America in cooperation with the United States; and fulfill NATO commitments and international peacekeeping roles.¹⁸ These themes are reiterated in the 1994 White Paper and Canada First Defence Strategy. With the end of the Cold War, the delineation of NATO and UN involvement become merged into "Contributing to International Peace and Security"¹⁹

Despite the apparent lack of regular policy, a tradition emerges in the potential missions of the Canadian Armed Forces: defense of Canada, defence of North America, contribute to Canada's international interests. Planners clearly do not need new policy to direct themselves to the types of missions that the Canadian Armed

¹⁷ Department of National Defence, *White Paper on Defence* (Ottawa: Queen's Printer, 1964), 13-15.

¹⁸ Department of National Defence, *Defence in the 70s: White Paper on Defence* (Ottawa: Information Canada, 1971), 16.

¹⁹ Department of National Defence, *1994 White Paper* (Ottawa: Canada Communications Group, 1994), 17, 20, 24; Department of National Defence, *Canada First Defence Strategy* (Ottawa: Canada Communications Group, 2005), 8.

Forces can be expected to perform. As they review the scenario development portion of the Capability-Based Planning process, planning staff need only assess the current world situation with these broad government directed missions to update or develop scenarios to guide the remainder of the process.

Furthermore, Bland argues there are four additional traditional traits common to Canadian defence policy. The first being that lack of threat directly to Canada requires *forward security*. Thus the CAF must remain deployable to ensure that future conflict does not migrate to North America. Second is our reliance on *coalition warfare*. Canada has and will continue to rely on the significant capability of the United States for the protection of Canada and North America, further, Canada will not enter a conflict elsewhere in the world on its own. Whether within the formal alliance of NATO or an *ad hoc* coalition of the willing, Canadian participation in conflict will involve other partner nations. Third is the desire for *operational influence*. This is the desire to ensure Canada has control over the employment of its forces in operations. This may be done through international agreements or seeking a Canadian leadership role in any international operation. The final aspect is *salience*, the availability and use of the Canadian Armed Forces is a limited and expensive effort, as such Canada seeks to garner the most benefit in support of foreign and domestic policies through their use.²⁰

As with the current Defence Policy Review, defence policy change is often brought about by change in government. Yet “changes from one major party to the other do not consistently ... lead to clear-cut shifts in the direction of Canadian

²⁰ Douglas L. Bland and Sean M. Maloney, “Finding a Defence Policy: The Never-Ending Dynamic”, in *Campaigns for International Security: Canada’s Defence Policy at the Turn of the Century* (Montreal: McGill-Queen’s University Press, 2004), 56-57.

defence policy.”²¹ Clearly across the decades, through the Cold War and the New World Order Era, the three primary missions of the Canadian Armed Forces have not changed and are not likely to do so in any future defence policy. Planners are able to describe what the Canadian Armed Forces need to do and using Bland’s traditional traits, planners have an idea how the Forces will conduct assigned missions. As such despite a vacuum of direct government defence policy, the cornerstone of the Capability-Based Planning process is solidly placed upon a tradition recurring defence policy.

Despite all this tradition, the goal of defence policy is to “define the government's national defence goals [and] the resources it will commit to the production of coercive force.”²² Resources are not normally allocated in these policy statements. While the *what* and *how* are known with respect to defence policy tradition, resources need to be defined to dictate *how much* will be done in achieving defence goals. Resources are generally allocated annually in the Budget Statement. Thus Capability-Based Planning had to function without this key component of policy in the cornerstone.

A secure and stable budget that can be planned against would be the ideal component to alleviate this potential issue. And while promised under the Canada First Defence Strategy, economic realities demonstrated this was, and is, unachievable. This issue, while having a significant impact on the Department of National Defence due to the size of its budget, also impacts all other federal departments not just Defence. Thus strategic planning is difficult to achieve across all departments. In an effort to alleviate this issue, the federal government instituted the Expenditure

²¹ Brian Bow “Parties and Partisanship in Canadian Defence Policy,” *International Journal* LXIV, no. 1 (2009): 87.

²² Douglas L. Bland and Sean M. Maloney, “Finding a Defence Policy: The Never-Ending Dynamic”, in *Campaigns for International Security: Canada’s Defence Policy at the Turn of the Century* (Montreal: McGill-Queen’s University Press, 2004), 57.

Management System in 1995. The Expenditure Management System is founded on four principles of which the first two are to provide a “stable planning environment [and] a focus on medium- to long-term planning.”²³

By 2003, the stability provided by the Expenditure Management System was significantly enhanced with the adoption of Accrual Accounting Procedures in the national budget.²⁴ Historically, Canada, and subsequently the Department of National Defence, had used a cash-based accounting method that recorded revenues whenever cash was received and deducted expenses when they were paid. This would have a significant impact on defence capability acquisition as it required the department to expend significant in-year funds when a platform or expensive weapon system would be purchased and delivered within a few years. Afterwards, minimal funding would be required with the exception of large maintenance issues or perhaps another significant inject for an upgrade or re-fit mid-life. Gaining approval and budgetary resources was difficult for such projects, thus making long-term planning for capability development very difficult.

Accrual-based accounting alleviated a lot of the issues associated with cash-based accounting, in particular when planning for very expensive capabilities. Accrual accounting reports revenue and expenses when they occur vice when they are received or paid. The most significant impact on planning was it allowed the Department of National Defence to amortize capital expenditures. Thus, instead of upfront costs, the cost of investment in the Canadian Armed Forces could now be recorded over the estimated life of the asset.²⁵

²³ Ross Fetterly and Richard Groves, *The Claxton Papers: Accrual Accounting and Budgeting in Defence* (Kingston: Queen’s University School of Policy Studies, 2008), 6.

²⁴ *Ibid.*, 17.

²⁵ Binyam Solomon and Craig Stone, “Accrual Budgeting and Defence Funding: Theory and Simulations,” *Defence and Peace Economics* 24, no. 3 (2013): 212.

Funding for capital assets in the Department of National Defence is sourced from Vote 5. Traditionally, these funds were A-Base Vote 5 funds that were charged against the departmental budget as expenditures were made. Now those funds are divided; a portion remains traditional Vote 5 funds and a portion is now assigned to the Accrual Envelope to enable long-term staple funding plans. As a result not all projects supporting those capabilities selected through the Capability-Based Planning process are amortized under accrual accounting procedures. Some projects are still charged against Vote 5 and these remain subject to the variations in funding availability.

This is challenging for planners considering long-term strategic planning for capability implementation. Clearly, there will never be enough resources to satisfy the ambitions of the Canadian Armed Forces. Thus a goal of Capability-Based Planning is to enable leaders to make decisions with respect to priorities. The availability of the Accrual Envelope makes long term planning easier. Once a project to support a capability is included in the investment plan and funding sourced from the Accrual Envelope it should be generally safe to progress, even with change in government policy or leadership. However the Accrual Envelope cannot support all desired or required capability investments.

Thus, despite the benefits and ability to overcome budget fluctuations using accrual accounting, planners within the Department of National Defence still have to rely on A-Base funds for a significant number of investments. While the Capability-Based Planning process does have an advantage with accrual accounting, long-term plans still suffer from unknown budget variations due to the mixed use of both A-Base and the Accrual Envelope. The Department of National Defence does not, and will likely not, achieve long-term fiscal planning capability. However, the division of

Vote 5 funds has provided a step in the right direction and enables a partial resolution to the gap between policy and funding enabling the Capability-Based Planning process to recommend long-term planning of capability acquisition and investment.

STOVEPIPING REMAINS, OBJECTIVITY THROUGH TOOLS

As mentioned, the previously employed method of Threat-Based Planning was bottom-up and subsequently stovepiped due to different environmental services identifying required or desired capabilities within their own organizations, then attempting to prioritize them against competing programs from the other services. A key goal of Capability-Based Planning was to remove the stovepiping through its top-down approach in order to achieve joint capabilities. While these capabilities may eventually be operated or managed by a single service, the intent was to avoid duplication of effort across the services and ensure the most appropriate option to achieve the required capability. The joint nature of the process was to encourage leaders to make decisions base on overall defence goals vice those of their service.²⁶ Despite the joint nature of the process, it argued that stovepiping still exists within the process as a result of human nature.

Military planners remain dedicated to their environmental service, whether directed by their parent organization or through loyalty, they tend to support or emphasize the interests of their environment.²⁷ These loyalties run deep, despite Hellyer's attempt at Unification, it was not possible to generate a single military culture.²⁸ By the mid-eighties, distinctive service uniforms had returned. Most recently the identifiers of the Royal Canadian Navy, Royal Canadian Air Force and Canadian Army were reinstated along with traditional rank insignia. This loyalty to

²⁶ The Technical Cooperation Program (TTCP), TR-JSA-TP3-2-2004 *Guide to Capability-Based Planning...*, 3.

²⁷ Bland and Maloney, "Finding a Defence Policy...", 47.

²⁸ Allan English, *Understanding Military Culture: A Canadian Perspective* (Montreal: McGill-Queen's University Press, 2014), 96.

one's service is extremely strong, noted by Vice-Admiral Norman on his change of command of the Navy "Today essentially marks my last day 'in the navy.' ...

Although I will continue to proudly wear the uniform."²⁹ While he may no longer be in the Navy, Admiral Norman's statement reflects he will always be a naval officer.

Beyond the individual biases towards service, Capability-Based Planning had to overcome an organizational tradition of working independently across the services. During the Cold War the force structure was designed to integrate into NATO force instead of deploying as a joint expeditionary force.³⁰ This effect would not only encourage stovepiping, it actually required it to ensure each service would be interoperable with its allies in the same environment.

Apart from its premise of a top-down approach, Capability-Based Planning has two primary methods to overcome the stovepiping issue. The first is simply its use of a joint staff. Under the leadership of the Director General of Capability and Structure Integration and subsequently the Director of Capability Integration stakeholders from all Level 1 and departmental force developers are brought together to form the Joint Capability Planning Team.³¹ The multi-disciplinary nature of this team of subject matter experts is intended to break down the barriers and biases associated with environmental service to conduct the analysis and produce the required documents of the Capability-Based Planning process.

Another key component to overcome barriers associated with stovepiping is the use of objective analysis tools and models. Different tools and models were used in the very first iteration of Capability-Based Planning. Analysis tools "were rapidly

²⁹ Mark Norman (speech, RCN Change of Command Ceremony, Ottawa, Canada, 21 July 2016), last accessed 26 April 2017, <http://www.navy-marine.forces.gc.ca/en/about/in-depth-speeches-analysis-view.page?doc=vice-admiral-mark-norman-haul-down-speech/iqqtqknd>.

³⁰ Department of National Defence, *Capability-Based Planning Handbook Version 8.0*, (Ottawa: DND Canada, June 2014),11.

³¹ Thibault, *VCDS Directive...*

built, tested/validated and employed.”³² A number of different models were used including the CDS Action Team 3 Capability Assessment Methodology (CATCAM). This tool facilitated “the prioritization of activities by first assigning weights to the scenario’s mission effects then scoring the activities against the mission effects to produce an overall numerical score for each activity.”³³ Another tool, the Force Generation and Evaluation (ForGE) tool, was used “to assess the individual contributions of force structure to providing capability, as well as providing an aggregate assessment of the entire CF’s ability to meet all facets of each capability.”³⁴

These tools and more were a first step by the Department of National Defence to analytically remove some of the subjectivity associated with the analysis by individuals of a joint staff. As mentioned before, there was a review process throughout that ensured subsequent iterations of the planning process would change to improve. The analysis tools were modified or replaced in the second iteration. CATCAM was modified to conduct deeper analysis of activities and sub-activities and a new tool, the Scenario Capability/Capacity Requirements Assessment and Outlook Tool (SC2RAT) was developed to replace ForGE and two other tools.³⁵

The latest iteration of Capability-Based Planning has seen new tool implement that uses data-mining techniques from initiatives and projects that have been input by the stakeholder. This tool, the Capital Investment Program Plan Review (CIPPR) was developed “to facilitate the institutionalization of a process that is transparent, repeatable, rigorous, coherent, and can be used to assess all present and future

³² Gary Christopher, *et al. Strategic Capability Roadmap Version 1.0 Analytic Framework*. (Defence R&D Canada: DRDC CORA TR 2009-13, December 2009), 52.

³³ *Ibid.*, 10.

³⁴ *Ibid.*, 17.

³⁵ Rempel, *An Overview of the Canadian Forces’ Second Generation ...*,18.

investments.”³⁶ Like all tools used in the process, CIPPR undergoes regular iterative updates. The goal of which is to mine deeper into project data, update available A-Base and Accrual Envelope profiles, and to provide options of portfolios of projects delivering capabilities identified by the Capability-Based Planning process. They are then recommended for approval to the senior leadership for insertion into the departmental investment plan. These projects are prioritized based on how well they align with government policy, with the capability and institutional view, and with the recommended priority assigned by the sponsor. While this last element does suggest stovepiping is still present, weightings are assigned to each of these elements to again remove significant sway by an individual environmental service.

This process not only provides decision makers with portfolio options vice a single prioritized list, it allows them force or remove projects depending on operational necessity, it provides timelines based on affordability within funding limits over the cash-phasing of a project.³⁷ The CIPPR tool is an excellent example of how analytical tools have and continue to apply objectivity to the Capability-Based Planning process to further reduce potential influence due to the stovepiping influence of individuals from the environmental services.

The ability of CIPPR to adapt portfolio options to changing funding profiles in both A-Base and the Accrual Envelope further strengthens the previous argument of the Canadian process’s ability to deal with a lack of defence policy and variability in resource allocations. While the aforementioned stability provided in accrual accounting is key, changes to that stability can be taken into account and capability portfolios can be re-profiled quickly to re-inform decision makers.

³⁶ C. Young and Mark Rempel, *The Portfolio Approach Developed to Underpin the Capital Investment Program Plan Review (CIPPR)*, (Defence R&D Canada: DRDC CORA DRDC-RDDC-2014-L255, 6 November 2014), 4.

³⁷ *Ibid.*

While the top-down approach of Capability-Based Planning is designed to overcome the stovepiping nature of bottom-up planning, clearly there remains a cultural influence of the environmental services in joint planning staffs.

Representation from stakeholder and force developers from across the entire department provides a well-rounded nature to capability analysis. However, it is by combining joint teams with objective analytical models and tools that the department enables a more objective result from the process. Continued refinement of the process and tools will further enhance the desired objectiveness of the process.

CAPABILITY-BASED PLANNING REMAINS EFFECTIVE

The fall of the Soviet Bloc and the end of the Cold War brought about a new world order, one where the threat of the past era no longer existed but the operational tempo of western forces had not been higher. The peace dividend meant defence budgets could not support existing capabilities let alone invest in new capabilities. While no defined threat was present, clearly threats to the west still existed. As a result western nations sought a new process to enhance strategic planning to balance more restrictive budgets, with a spectrum of threats and the need to seek value for money in a transparent manner for their defence forces. This resulted in the implementation of Capability-Based Planning across a number of nations. Canada was no exception.

Despite calls for a return to Threat-Based Planning due to the rise of national interests that contravene those of western nations and the inherent weakness of the process, Capability-Based Planning has made significant progress to enable decision makers on investments in future capabilities and adapt those investments as needed based on both operational and fiscal pressures.

Capability-Based Planning is suited not only to the world today, but to a certain degree the political and policy environment that influences the Department of National Defence. It requires divining the future, assessing and analyzing potential operations to produce a future force structure whose units perform tasks expressed in terms of capabilities not in terms of equipment. With that output leaders ultimately pursue priority capabilities for investment or renewal. Ultimately, the output of the Capability-Based Planning stems from basic policy and strategic guidance through a series of rigorous, objective evaluations to provide a vision into an unknown future.

Capability-Based Planning had evolved from its introduction as concept in June 2000 to its initial employment five years later. Subsequent iterations have seen further evolution. Despite two key weaknesses of the process, the Canadian Armed Forces have been able to adapt the process to effectively inform the decision-making process of today with respect to the applicability and affordability of joint and environmental requirements and desired capabilities. This in turn, has enabled project staffs to engage their efforts at the appropriate time and define project requirements using the most appropriate planning methods, including Threat-Based Planning. As a result the evolution of the Canadian Capability-Based Planning process has overcome a lack of definite government policy and through the use of technology reduced potential environmental biases of planning staff to produce an effective tool assist in the development the long-term corporate strategy for Canadian force development.

Capability-Based Planning has proved adaptable to influences from both internal and external environments. As such it is this adaptability that will likely result in continued effective planning for the Department of National Defence well into the future. Until a better understanding of the future, or potential new and more effective planning tool arises, there is clearly no need to revert to Threat-Based Planning.

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