

A Framework for Integrating Civil-Military Responses to Conflict: Network Enabled Operations in Support of Defence, Diplomacy and Development¹

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ABSTRACT

The Canadian Forces and the Department of National Defence are in the process of formulating a roadmap and policy for the adoption of Network Enabled Operations. The decision to develop this policy in conjunction with joint, interagency, multinational and public (JIMP) partners has resulted in a number of challenges, including language, cultural, fiscal, procedural and political. For instance, whereas the Government of Canada has directed a “3 D” (diplomacy, defence and development) approach to international affairs, the practices and procedures within the Departments of Foreign Affairs and Defence, and the Canadian International Development Agency are disparate and institutional goals vary. A solution proposed for coordinating these efforts is Network Enabled Operations, which is seen as providing the means of establishing a collaborative environment, thereby moving towards the integration of the major components of national power.

This paper will provide an overview of policy and initiatives taken to date, examine two case studies and lessons learned related to integrating defence, diplomacy and development efforts, detail some of the issues associated with the establishment of a collaborative approach, and outline a proposed Network Enabled Operations framework intended to resolve these issues.

¹ I gratefully acknowledge the financial support of the Directorate of Defence Analysis, National Defence Headquarters, Ottawa, Canada, which made presentation of this paper at the Cornwallis X conference in Kingston possible. I also appreciate comments provided on an earlier draft by Doug Hales and John Bovenkamp. However, any errors or omissions that may remain are mine. Notwithstanding the editorial and financial support received, this report does not necessarily represent the view of the Department of National Defence.

INTRODUCTION

In 2004, the Canadian Government released *Securing an Open Society: Canada's National Security Policy*, which advocated an integrated "3 D" (defence, diplomacy and development) approach to international security. This approach was designed to leverage Canadian experience in support of peace, order and good government for developing, failing and failed states. As part of this, the Government already has taken steps towards facilitating a multi-agency response to crisis, including enhancement of intelligence, emergency planning and management, and security measures. Despite these initiatives, there undoubtedly remains room for improved delivery of the "3 Ds".

This paper will argue that the concept of Network Enabled Operations (NEOps) should be adopted by governmental agencies as a means of better delivering and supporting Canada's response to new and emerging conflicts. While such an approach is anticipated to provide a significantly improved capability for participating agencies, a wide variety of challenges exist, including cultural, fiscal, technical, procedural and political. The intent of this paper is to discuss issues related to the adoption of this concept and to describe some relevant past and ongoing Canadian initiatives to provide context for the facilitation of civil-military cooperation through NEOps. It will conclude with a proposed framework.

NETWORK ENABLED OPERATIONS

While many are undoubtedly familiar with the concept of Network Enabled Operations (NEOps), by this or any of its other names (Network Centric Warfare in the United States, Network Enabled Capabilities in the United Kingdom, or Network Based Defence in Sweden), for those that may not be aware of this concept, a quick overview is provided.

NEOps in an information age concept that contends that a robustly networked force improves information sharing. With information sharing and collaboration, the quality of information and shared situational awareness is improved. Shared situational awareness results in improved collaboration and self-synchronization, and these, in turn, increase mission effectiveness. Figure 1 provides a depiction of these processes.²

NEOps are inherently flexible and allows for an appropriate command and control structure to contribute to improved operational effectiveness. Foremost, NEOps is characterized by full information availability, which permits network users to search, access, manipulate, post and exchange information from a wide variety of sources internal and external to the field of operation. The supporting information infrastructure must be agile, robust and extensive, allowing people, sensors and systems to be dynamically grouped or configured according to requirements with a minimum of disruption. Through collaborative sharing and the common appreciation such interconnectivity would facilitate, 3D elements are able to synchronize efforts to achieve the desired operational effect by utilizing the most appropriate resources available through dynamic planning, and decentralized but still coordinated execution. Such mission execution may employ effects based planning,

² David S. Alberts, et al, *Network Centric Warfare: Developing and Leveraging Information Superiority* (2nd Edition) (DoD C4ISR Cooperative Research Program, Feb 2000), pp. 88-90.

involving military or non-military measures, in order to achieve the specific outcome desired.³

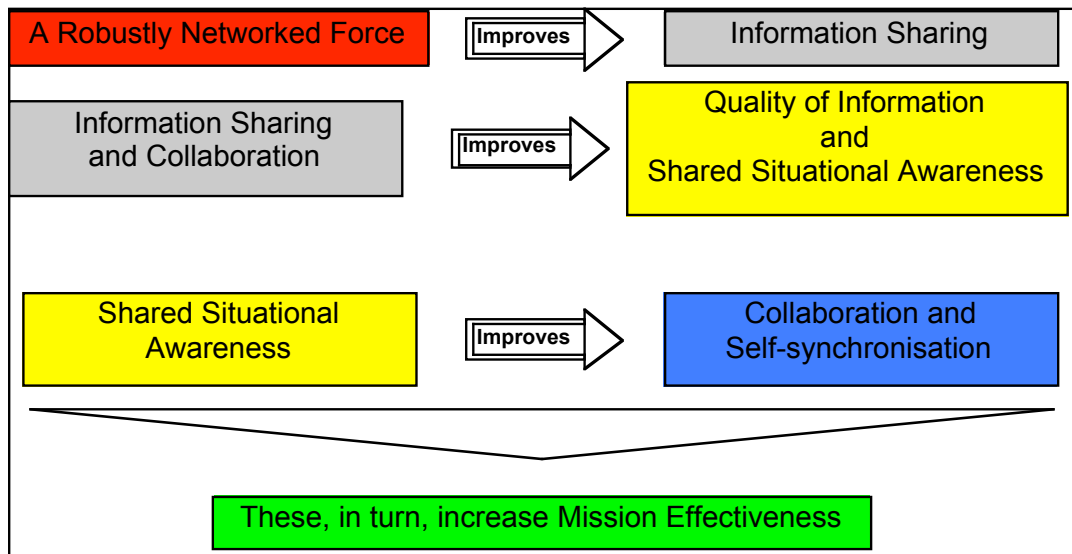


Figure 1: NEOps Processes

As a working definition for this concept within Canada, the following is provided:

Based upon an emerging concept, NEOps seek to improve planning and execution of operations through the use of information and communications technology linking people, processes and ad hoc networks. Such operations are intended to allow joint, interagency, multinational and public stakeholders, as appropriate, to seamlessly access information and data from a wide range of sources in order to facilitate effective and timely interaction between sensors, leaders and effects. The result is an expanded awareness and comprehension of the environment, improved access to timely, relevant information, improved reaction time and synchronization of activity, and ability to act.⁴

A related concept is effects-based operations (EBO), which, from a Canadian perspective, may be seen as:

Operations designed to influence the long- or short-term *state of a system* through the achievement of desired physical or psychological effects. Operational objectives are sought to achieve directed policy aims using the integrated application of *all applicable* instruments of hard or soft power. Desired effects, and the actions required to achieve them, are concurrently and reactively planned, executed, assessed (and potentially adapted) within a *complex adaptive system*.⁵

³ These characteristics were derived, in part, from DSTL/IMD/SOS/500/2,(Draft 2.0) 2 May 2003, Part 2, p. 5.

⁴ *Network Enabled Operations: DND/CF Responding to the New Security Environment* (Draft), dated 5 November 2004, pp. 26-27.

⁵ Robert Grossman-Vermaas, *The Effects-Based Concept and Multinational Experiment 3: An Analysis of the Inter-Agency Role*, Research Note 12/2004, (Ottawa: Operational Research Division, DND), p. 7.

A way to conceptualize these concepts is that EBO is about “what” to do and NEOps is about “how” to do it. The next section will examine the current Canadian operating environment and relevant policy statements.

CURRENT CANADIAN POLICY AND THE DELIVERY OF 3D

Canada, as a nation, has a long history of involvement in international responses to new and emerging conflicts. As an example of this, of the 59 United Nations peacekeeping missions to date, Canada has taken part in 50 of them⁶, representing a participation rate of 84.7%. Furthermore, Canada has participated in a range of other stability and observer missions, including the International Commission for Control and Supervision South Vietnam, Observer Team Nigeria, Multinational Force Observers Sinai Peninsula Egypt, International Commission for Supervision and Control Cambodia, Laos and Vietnam and the European Community Monitoring Mission in Yugoslavia. More recently, Canada participated in Operation Desert Storm in Iraq, Operation Enduring Freedom in Afghanistan and NATO’s ongoing International Security Assistance Force (ISAF) in Afghanistan. Yet despite this long history of international involvement, there has been increasing recognition within Canada that, like in other countries, we are operating in an increasingly complex and dangerous environment, thereby requiring a more integrated approach to how the defence, diplomacy and development elements of national power are provided during foreign deployments.⁷

This was addressed, in part, in the 2004 policy statement *Securing an Open Society: Canada’s National Security Policy*, in which the federal government initiated various significant measures towards the establishment of a collaborative security environment. This was especially so in reference to domestic operations. For instance, Public Security and Emergency Preparedness Canada (PSEPC) was provided with the mandate to test and audit the level of security readiness and capabilities across departmental lines. PSEPC was also assigned the responsibility for establishing and operating a Government Operations Centre during a national emergency. In support of this Operations Centre, a National Emergency Response System (NERS) will provide the emergency response framework in support of incident identification, warning and notification, information sharing, incident analysis, planning, and operations coordination. Beyond the boundaries of PSEPC, this policy also led to the appointment of a National Security Advisor, the creation of an Integrated Threat Assessment Centre, networked Maritime Security Operations Centres, and a range of other intelligence, emergency planning and management, public health, transport security and border security measures.⁸

While the term NEOps is not directly used in reference to these upgrades to Canadian domestic security, there are indications that, in some instances, NEOps-related precepts are being adopted. For instance, PSEPC has participated in some of the NEOps developmental

⁶ Canada did not take part in UNOMIG, UNOMSIL, UNOMIL, UNASOG, MONUA, UNAVEM I, UNAVEM III, UNMOT and UNPSG. Participation in the various 50 UN missions included the deployment of small and large military forces, diplomatic contributions to missions and federal, provincial and municipal police deployments to assist in establishing law and order and training missions. See www.un.org/Depts/dpko/dpko/index.asp and www.forces.gc.ca/commelec/brhistory/anxa_e.htm.

⁷ *Securing an Open Society: Canada’s National Security Policy*, (Ottawa: Privy Council Office, 2004), pp. iii and 51.

⁸ *Ibid.*, pp. vii-x.

work within Department of National Defence/Canadian Forces (DND/CF) and is advocating an approach of “information push vice information pull” for their National Emergency Response System and a collaborative environment as part of inter-departmental response to incidents.⁹ However, NERS is still in the planning stage and is designed to operate only in times of domestic emergency. There is, in fact, no collaborative network in place at the strategic level for planning activities between government departments for domestic or international operations. As another example of some of the nascent steps taken towards the establishment of a NEOps environment, the aforementioned Maritime Security Operations Centres, which are co-located with Canadian naval establishments, have been set-up using net-centric practices, such as the maintenance of a Common Operating Picture and the provision of network connectivity between select departments to provide the supporting infrastructure to plan and conduct joint operations at the regional level.

The *National Security Policy* indicated that Canada would take an increasingly integrated approach to defence, diplomacy, and development contributions to international commitments.¹⁰ Specific mention was made of the need for Canada to help restore peace, order and good government in failed and failing states.¹¹ These intentions were further clarified in *A Role of Pride and Influence in the World: Canada’s International Policy Statement*¹², which indicated that in exercising the elements of national power internationally, Canada will seek to advance its interests and values by focussing on selected threats, partners and institutions in order to achieve defined policy outcomes.¹³ Initiatives identified in the *International Policy Statement* include improving surveillance capabilities,¹⁴ increasing the CF’s ability to collaborate with Allies in counterterrorism operations,¹⁵ and focussing on integrated operations in order to achieve the effect desired.¹⁶ A critical element will be the establishment of a Stabilization and Reconstruction Task (START) Force to plan and coordinate rapid and integrated responses to international crises in partnership with a range of government departments, including DND/CF and the Canadian International Development Agency.¹⁷

While details on the implementation of the START Force are limited at present, early indications are that it is intended to consist of a multi-departmental team operating out of the Department of Foreign Affairs. Beyond statements of intentions to improve planning, coordination and support for governmental responses to crises,¹⁸ specific information on how this will be achieved is not currently available. It is argued here that the best way of achieving such an integrated Canadian approach to 3D is through NEOps.

⁹ Pierre Gagnon, Acting Director, Plans and Major Events, Public Security and Emergency Preparedness Canada, ppt. presentation, dated 8 February [2005]

¹⁰ *Securing an Open Society*, p. 47.

¹¹ *Ibid.*, p. 50.

¹² See, for example, *A Role of Pride and Influence in the World: Canada’s International Policy Statement*, (Ottawa: Department of Foreign Affairs and International Trade, 2005), for details concerning the role of multiple Federal departments, other levels of government, and international and non-governmental bodies in helping to form international policy, pp. 26-29 refers. This Statement also confirms the need for Canadian defence, diplomacy and development efforts to be coordinated in a “3D” approach, p. iv refers.

¹³ *Ibid.*, pp. 2-3.

¹⁴ *Ibid.*, p. 8.

¹⁵ *Ibid.*, p. 12.

¹⁶ *Ibid.*, p. 14.

¹⁷ *Ibid.*, p. 13. START is intended to replace DND/CF’s Disaster Assistance Response Team (DART).

¹⁸ <http://www.dfait-maeci.gc.ca/cip-pic/IPS/IPS-Diplomacy6-en.asp> .

Importantly, while the NEOps concept is about the enhanced effectiveness that may be achieved through the collaborative environment made possible through networking, as opposed to being about the network itself, it should be noted that a significant portion of the following discussion is about issues related to the physical establishment of the network between the national security partners. The absence of such interconnectivity is a major barrier to the collaboration needed for an integrated approach to 3D for Canada.

CASE STUDIES

The purpose of this section is to provide details from recent Canadian experiences relevant to NEOps in order to demonstrate some of the issues associated with adopting this concept. Specifically, the Atlantic Littoral ISR Experiment and aspects of the Canadian participation in ISAF and Afghanistan will be examined.

CASE STUDY ONE: THE ATLANTIC LITTORAL ISR EXPERIMENT (ALIX)

Between 10-31 August, 2004, the Canadian Forces Experimentation Centre conducted an Integrated Intelligence, Surveillance and Reconnaissance Architecture (IISRA) experiment off the Atlantic coast using an Uninhabited Aerial Vehicle (UAV). This event, the Atlantic Littoral ISR Experiment (ALIX), was the first Canadian pragmatic assessment of a net-enabled operation and a significant component of it was the development and use of a collaborative sharing environment, in the form of a Common Operating Picture (COP), between various government departments. In addition to the Department of National Defence (DND), another 13 federal government departments¹⁹ and two provincial agencies were invited to participate. While the analysis of ALIX is still ongoing, there are some preliminary indications of the success of this aspect of the experiment.

Four major planning conferences preceded ALIX, the first of which was held in October 2003. Invitations for these events were sent to a variety of federal departments, and between seven and 11 participants took part from up to six different organizations.²⁰ Wider participation had been hoped for, but those that did attend, typically from the national level of their organizations, expressed support and interest in taking part in the experiment and recognized the enhanced capability a COP could contribute to their work environment.

ALIX activities were designed, in part, to demonstrate the relevance to the non-Defence departments in a couple of ways. First of all, experiment scenarios were designed to stimulate inter-departmental cooperation over a network, and prompt the use and maintenance of a COP. As depicted in Figure 2, these vignettes included a domestic

¹⁹ These federal departments included Canada Customs & Revenue Agency – Canadian Border Services Agency, Citizenship & Immigration Canada, Department of Fisheries & Oceans – Canadian Coast Guard, Department of Foreign Affairs & International Trade, Department of Justice Canada, environment Canada, Industry Canada, Privy Council Office, Public Safety and Emergency Preparedness Canada, Public works & Government Services Canada, Royal Canadian Mounted Police, Transport Canada, and Treasury Board.

²⁰ Lieutenant Colonel S.J. Newton et al, *Experimentation Report IISRA 2004-1 (Draft), Atlantic Littoral ISR Experiment (ALIX)*, Canadian Forces Experimentation Centre, p. 93

operation involving a satellite crash in the far North, a UN peace support operation, and, finally, a fishery protection mission with exercise injects related to a potential terrorist attack operation. Associated with these scenarios, metrics were developed to assess the reach, completeness and accuracy of the data passed over the communications network.²¹ The network in question, the Canadian Maritime Network (CANMARNET), was already in existence and used by a number of government departments, but the range and location of non-Defence users was to be increased and the volume and richness of the information on the system enhanced for the purposes of ALIX. Secondly, imagery collected by the UAV while transiting an area was made available to various government departments for their internal usage. Consequently, as examples, shoreline erosion imagery was provided to Department of Fisheries and Oceans, Environment Canada was provided imagery of a potential new national park, and New Brunswick Public Security and Emergencies was supplied with imagery of critical infrastructure.²²

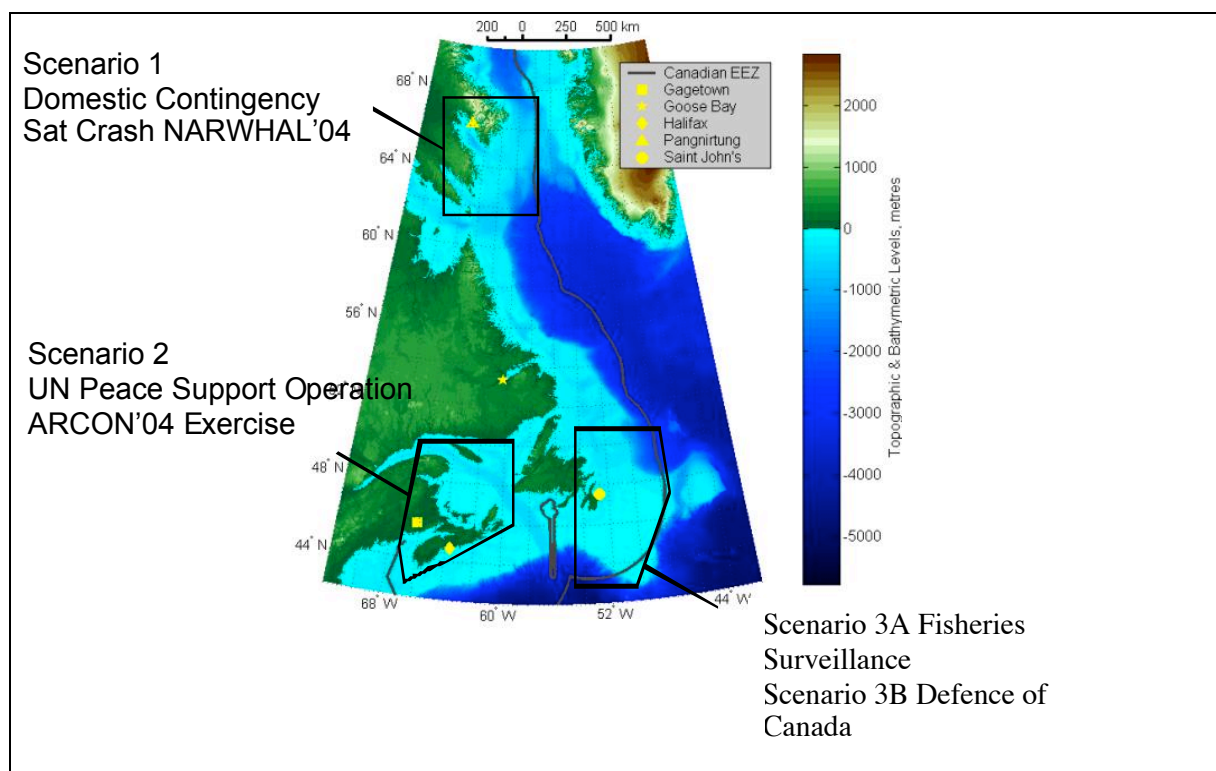


Figure 2: The Atlantic Littoral ISR Experiment (ALIX) Scenarios.

The actual conduct of the experiment, which was very successful overall, identified a number of issues related to inter-departmental cooperation. For instance, while the national level of various federal departments supported participation in ALIX and use of CANMARNET to establish and maintain a COP, those at the regional level did not participate and make use of the technology as anticipated. While this may reflect communication or delegation issues between national and regional offices within these departments, it does demonstrate a natural and well-known reluctance of people to use new technology and processes. Certainly the ALIX planners within DND and the CF did not facilitate the introduction of NEOps to the other government departments as well as they

²¹ Interview of Paul Comeau, ALIX Lead Analyst, 14 March 2005.

²² Ibid.

could have, since training sessions associated with the experiment, new collaborative tools, the COP and CANMARNET for new users had to be compressed or cancelled due to time constraints.²³

Furthermore, it was a common occurrence for many of those accessing the COP, whether from DND or other government departments, initially to use it and related network-based assets passively instead of proactively searching for relevant data and taking appropriate actions according to the developing situation. While increased familiarity with the system and processes at times resulted in improved performance, most non-defence representatives did not have sufficient exposure to make this adjustment, thereby not making the paradigm shift from “need to know” to “need to share”.²⁴

Another partial barrier to improved inter-departmental cooperation relates to questions of security. Whereas most within DND/CF have a working knowledge of security regulations related to the classification of information and the passage of such information over networks, this was not necessarily so amongst all government departments. Technical issues related to security also intruded on the experiment, as all government departments did not have the ability to receive, process, store or transmit classified data.²⁵

Finally, there are questions of familiarity and availability of information technology. National Defence has a high degree of information technical penetration, including many complex, highly capable systems. This is not necessarily so amongst the other government departments, partially due to their mandate and requirements, but also as a question of financial resources to acquire such capabilities. Therefore, there were some structural and organizational impediments to close, network-based collaboration between departments.

As a consequence of these and other factors, enhanced operational effectiveness between DND and the other government departments was not achieved to the extent desired. Still, there were a number of appropriate lessons learned in relation to interdepartmental operations. Firstly, it is easier to build a robust network than it is achieve robust networking. Organizations and individuals need to be trained and practiced in a new networked environment. Secondly, net-enabled operations blurred classic organizational boundaries, as strategic level oversight and involvement was possible during a tactical or regional activity. This indicates a requirement for organizations to delineate areas of responsibility and to follow a clear and practiced chain of command, which may not be as practiced an experience within other government departments as it is within DND/CF. Thirdly, information exploitation and fusion support tools are required, which would help make collaborative information environment more accessible to users from outside of the defence environment. Finally, it was concluded that NEOps was an enabler for Maritime Security Operations Centres and for interdepartmental/interagency collaboration, especially in support of effects-based operations.²⁶ However, in order to achieve the increased effectiveness available through NEOps during interdepartmental operations, it is evident that a range of cultural, technical, financial, procedural and training issues remain to be addressed.

²³ Ibid.

²⁴ Interview of Captain (Navy) Kevin Laing, Commandant, Canadian Forces Experimentation Centre, 17 March 2005.

²⁵ Comeau interview, op. cit.

²⁶ Paul Comeau, *Integrated ISR Architecture Concept Development and Experimentation*, .ppt presentation, slide 33, at SMi Conference on Persistent Surveillance, The Hatton, London, England, 6 February 2005.

CASE STUDY TWO: THE INTERNATIONAL SECURITY ASSISTANCE FORCE (ISAF)

During early 2004, Canada led the ISAF mission in Afghanistan and contributed significantly to the Kabul International Brigade.²⁷ In addition to the CF contingent, a Canadian diplomatic mission headed by an ambassador and a small team from the Canadian International Development Agency (CIDA) were provided, bringing together all of the main components in Canada's stated "3D" approach. What, then, was the extent and experience of collaboration between these agencies? As a caveat, it should be noted that the following observations are derived from information obtained solely from DND/CF sources.

First of all, the Foreign Affairs, DND/CF and CIDA components were not co-located. The only direct network connection between departmental representatives in Kabul was e-mail; there were no collaborative or planning tools available. In lieu, telephone conversations were sometimes used for consultation, which limited the amount and quality of information that could be exchanged. Although all participants were cooperative, helpful and attuned to operational requirements, meetings between these players largely took place on an ad hoc, as required basis. DND/CF dealings with CIDA often took place using the ambassador as an intermediary. Any direct CF civil-military liaison team visits with a CIDA representative that did take place proved to be resource and time intensive due to the distance between them.²⁸

Reach-back to the strategic level in Ottawa was done through three departmental stovepipes, with no direct connectivity between the three departments at this national level either. This rendered collaborative planning and coordination difficult on strategic, operational and tactical levels. Even many of these departmental stovepipes had bandwidth issues and the level of information technology support available was, to an extent, limited. Therefore, even with the best of intentions between the 3D elements on the ground in Kabul, structural constraints limited the amount of information that could be shared and on how integrated their efforts could be.²⁹ In view of this, it appears that planning and operations would have benefited and coordination between the 3Ds enhanced through broader access to the range of information available.

While there are no direct metrics to validate this, there are reasons to believe that the operational effectiveness of Canada's support to ISAF would have been enhanced through improved interconnectivity and coordination. For example, while there were periodic reports on hand, the military force would have benefited from having on-line and readily available access (e.g. reach-back) to additional information sources, such as cultural experts, to support their activities. The creation and ready sharing of such things as databases, planning documents, intelligence requirements, threat information and related material would have facilitated synchronization between defence, diplomacy and development activities. A case in point of the limited ability to share information relates to UAV imagery that was available to select ISAF planning staff but was not disseminated to most military staff, let alone to diplomatic or development personnel.

²⁷ Although no longer leading this mission, Canada continues to contribute a large number of troops to ISAF.

²⁸ Mr. Alden Skidd, presentation entitled "3D Approach to Canadian CIMIC", Cornwallis X Conference, Kingston, Ontario, 27 March 2005.

²⁹ Interview with Canadian ISAF participant, 17 March 2005.

In addition, it is clear that the relative size of the 3D teams on the ground was a factor and, even with the best of intentions, limited the extent of coordination that could take place in-theatre. For example, Foreign Affairs had only two political representatives, one of which was the ambassador, in Kabul on a full time basis. Clearly, a robust and shared reach-back capability would have allowed for additional resources to be available on-line in order to facilitate mutual cooperation.³⁰

As well, there were other in-theatre organizational and cultural issues that impacted mission performance. For instance, the CF sought to conduct an information operation with the intent of fostering loyalty to the central government, encouraging trust and cooperation between ISAF and the local population, and potentially establishing information sources in an Afghani community. This “hearts and minds” venture revolved around installation of an electric pump to draw water from a local well. Such an operation was aimed at achieving some results in the near term and required fairly prompt decision making to approve prerequisite funding. CIDA, which is responsible for development projects, has a mandate and planning horizon focused on fostering long-term stability within a country and an internal funding approval process reflective of their mandate and responsibilities.

It would be unfair of Kabul-based CF personnel to perceive the lack of funding support in such circumstances from CIDA as being unsupportive of Canada’s overall mission, a subtlety that may not have been appreciated by all of the military on the ground. This, then, speaks directly to the need for an improved appreciation of the respective roles, mandates and capabilities between Canada’s 3D partners, and a political determination to permit a more flexible approach to 3D through, for example, an increase in the funding provided to the CF for short-term and relatively inexpensive development initiatives intended to support military operations.³¹

In view of the above, despite the support for a collaborative approach between the 3D elements in Kabul, a number of factors restricted the degree of cooperation that took place. The diplomatic and development teams were small, with many demands upon their time. Information infrastructure was limited in availability and capability, thereby reducing opportunities to work together. Automated tools to enhance collaboration were not present. Reach-back capacity was constrained, thus inhibiting the amount of information available and the support provided from the strategic level. Cultural differences between the defence, diplomacy and development communities may have caused difficulties at times. Many of these issues would have been resolved or at least mitigated through the use of NEOps.

OPTIONS ANALYSIS FOR INTEGRATION OF 3D

Two frameworks will be examined for the possible integration of Canadian defence, diplomacy and development services during a deployed mission. The first framework, which is used by the United States of America, adopts the approach of fully integrating diplomatic and development personnel under a military commander. The second, less revolutionary approach advocates the creation of a technical backbone, to be fielded and managed by the CF, with connectivity between the 3D elements in order to provide the means of cooperating

³⁰ Ibid.

³¹ Ibid.

and coordinating efforts in a more coherent manner than currently exists. This approach respects current organizational mandates and procedures while facilitating a significantly enhanced reach-back capability to the national defence, diplomatic and development missions.

UNITED STATES JOINT INTERAGENCY COORDINATION GROUP

To achieve Effects-Based Operations, the concept of providing Joint Interagency Coordination Groups (JIACGs) has been prototyped in the US. Full-time, multifunctional advisory elements from a wide range of civilian agencies and departments are attached to various US Regional Combatant Commanders. Such Coordination Groups, which are explicitly prohibited from challenging or replacing existing US civilian government activities or interfering with internal agency processes, are designed to keep Combatant Commanders informed of the planning, sensitivities and support requirements, capabilities and limitations of participating agencies. It also serves as a feedback loop to update represented agencies on the operational requirements, concerns, capabilities and limitations of the Combatant Commanders. These JIACGs are designed to coordinate with and on behalf of the various agencies, diplomatic staff, the Combatant Commanders' staff, and other multinational and multilateral bodies within the area of operations. The JIACGs are the lead advocates with the Combatant Commanders for the interagency process and provide a civilian perspective on military operational planning and execution. This concept has been tried successfully during a number of experiments and deployments, including Operation Iraqi Freedom and recent Tsunami relief operations in Southeast Asia. US Joint Forces Command is currently staffing a proposal for fielding this concept to the Chairman, Joint Chiefs of Staff and the Secretary of Defense.³²

However, despite the overall success of this concept, its applicability for other nations may be questioned. For instance, a number of cultural and organizational challenges have been identified, with no reason to suggest that these are unique to the US. There are differences in roles and priorities (usually with good reason), rivalries and tensions among and within agencies, and reluctance within civilian agencies to “buy into” the concept, reflecting reservations that such an approach will lead or amount to ceding control.³³ Civilians taking part in the JIACG have expressed concern that interagency coordination is critical yet undervalued, that training and education is important to JIACG participation, but not widely available,³⁴ and that the Department of Defense does not interact effectively with civilian agencies.³⁵ As well, many civilians associate negative career implications with working with the JIACG (e.g. FBI agents indicated that there was a “negative” affect and State Department employees indicated that there was a “very negative” affect), resulting in difficulties in recruiting appropriate representatives from civilian agencies to serve with the

³² www.jfcom.mil/about/fact_jiacg.htm , United States Joint Forces Command Fact Sheet, Joint Interagency Coordination Group (JIACG) – A Prototyping Effort, Jan 2005.

³³ www.t2net.org/briefs/TIM2/Brief_TIM2JIACGBRIEF.pdf, PPT presentation by John Oppenhuizen, USJFCOM J9, May 04, “*Joint Interagency Coordination Group*”, slide 6.

³⁴ www.thoughtlink.com/ppt/TLI-JIACGSurvey-FinalBrief-Revised.ppt , Marcy Stahl, Joint Interagency Coordination Group (JIACG) Training and Education Survey, January 15, 2004, slide 4.

³⁵ *Ibid.*, slide 16.

JIACGs.³⁶ Finally, the personnel resource bill, with up to 50 full time civilian and 75 command staff, was found to be cause for thought.³⁷ It should be noted, however, that overall

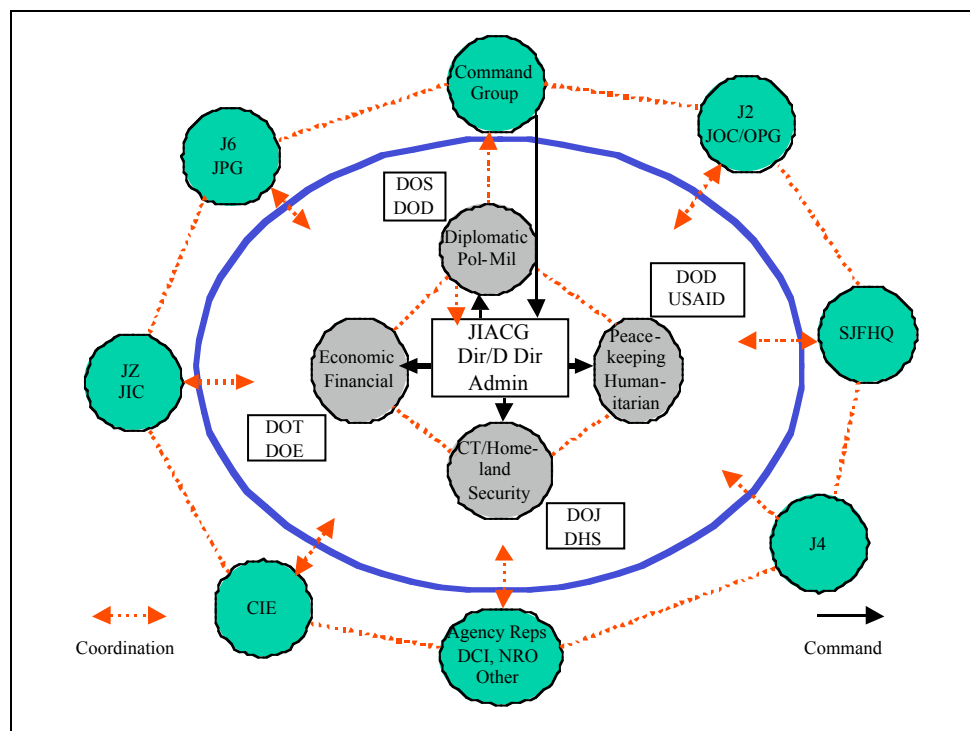


Figure 3: Notional Joint Interagency Coordination Groups (JIACGs) Construct and Staff Interaction³⁸

JIACGs have been considered a successful innovation and work is proceeding with addressing issues. Many of these concerns would likely resonate with non-DND members of the Federal Government asked to serve with the Canadian Forces in a similar capacity. For instance, there are differences in culture and organization practices between DND/CF and other government departments. Accordingly, the level of trust between DND/CF and the other departments would have to be enhanced and nurtured before such a collaborative coexistence could be adopted. This would require time and funding investments. Moreover, Canada lacks a mature national security architecture akin to the US National Security Council. The relative relationship, authority and interactions between the US State Department and Department of Defense differ from the experience between Canada’s Department of Foreign Affairs and the Department of National Defence, with Foreign Affairs having the clear lead role and historically not required to have staff organizationally subordinate to the military as a matter of routine during a deployment. Further, the personnel requirements to establish and sustain a permanent structure similar to a JIACF are unlikely to be deemed affordable. Not least, the scope and purpose of JIACGs is more in line with US global predominance and the roles foreseen for US Combatant Commanders, which are more focussed at the operational and strategic levels, than Canadian levels of ambition, which are focussed at the more tactical and operational levels. Accordingly, a different structure from

³⁶ Ibid., slide 18.

³⁷ Ibid., slide 26.

³⁸ Based on: www.ca.dtic.mil/doctrine/July04_jiacg_brief.ppt, Mr. Phil Kearley, GS, Joint Interagency Command Group (JIACG), Joint Faculty Education Conference, Slide 10.

that being implemented in the United States to facilitate interagency cooperation is likely appropriate north of the border.

FRAMEWORK PROPOSAL

At present, Canada is not structured to optimize the integrated delivery of defence, diplomacy and development. In order to achieve a suitable framework, first and foremost, is a requirement for high-level political sponsorship. Commitment is required to overcome the bureaucratic and organizational barriers between defence, diplomacy and development, and championship is necessary to promote robust information sharing and to ensure joint and dynamic planning and operations. The START Force advocated in the *International Security Policy* very well may be intended to provide the framework for this; however, until such time as measures are taken to develop this construct beyond the current policy statement, it is not possible to assess its capabilities.

Secondly, though sceptics remain, the overall merits of NEOps have been accepted by many of the western democratic armed forces.³⁹ Quantifying the precise extent of the operational advantage achieved through NEOps remains elusive; however, there is a growing body of work detailing the merits of this concept.⁴⁰ Nonetheless, before adopting a NEOps framework for interagency cooperation, a rigorous experimentation programme would be prudent in order to ascertain the best construct for Canadian purposes.⁴¹ Whatever framework evolves should be inclusive and incorporate all components involved in security and development policy, including non-traditional federal and provincial participants, recognizing that different missions, including domestic contingencies, will require teams comprising different skill sets.⁴² A critical element of such an experimentation programme would be an evaluation of the decision-making process and tool requirements to overcome the traditional delay associated with interagency decision-making.⁴³

Thirdly, it is assumed that the merits of the improved operational effectiveness foreseen as a result of adopting a NEOps construct warrants allocation of a relatively modest financial commitment from government to support the physical and human network infrastructure needed to implement this concept. The term modest is used since the majority of the cost involved would be associated with linking and expanding existing networks, and developing and fielding collaborative tools. The over \$8 billion committed to address security gaps noted in last year's *National Security Policy*⁴⁴ suggests that this is achievable. Since significant aspects of the improved operational effectiveness sought through NEOps include collaborative pre-deployment planning at the strategic level and the reach-back capabilities

³⁹ Clear advocates of this concept include the United States, the United Kingdom, Sweden and Australia.

⁴⁰ See, for example, the Network Centric Operations case studies sponsored by the US Office of Force Transformation at <http://oft.ccrp050.biz/docs/NCO/short-course-ndu-oct-2004/3-forsythe-nco-case-studies>.

⁴¹ One of the cultural barriers associated with engaging other government departments in NEOps relates to the different "language" used in each department. For instance, it proved to be surprisingly difficult for the author to brief personnel from outside of DND/CF about participating in a NEOps symposium held in Ottawa 30 Nov – 2 Dec 04 in a context they could relate to their own environment.

⁴² For example, the ongoing ISAF mission could perhaps benefit from advice from Agricultural Canada in regards to replacing traditional Afghani opium grow operations with those focusing on food staples.

⁴³ For more on this issue, see Grossman-Vermaas, op. cit., p.10.

⁴⁴ *Securing an Open Society: Canada's National Security Policy*, op.cit., p. iii.

and support for those deployed in-theatre, a critical component of this network infrastructure would be connectivity to the various department head offices in the Ottawa region.

Fourthly, there is the practical issue of where the expertise and ability would reside to field and operate such a network infrastructure. Some federal departments have a degree of experience in establishing and maintaining a network in foreign locales. However, the Department of National Defence and Canadian Forces have conducted numerous missions in austere environments and would appear to be an obvious choice for implementing a wider solution. They have personnel with the required skill sets, and experience in deploying systems on short notice and sustaining networks under adverse conditions. A logical location for such capability is with the Canadian Forces Joint Operations Group (JOG), which provides a rapidly deployable, joint operational-level command and control capability for domestic and international missions for DND/CF. Since JOG personnel typically operate this command and control capability for the first portion of any deployment, it is submitted that the other government departments routinely taking part in such deployments, notably from Foreign Affairs and CIDA, might be requested to designate a few personnel to accompany initial deployments of the JOG to help establish the required infrastructure and procedures needed to facilitate an integrated approach to 3D. Through the familiarization that would develop by working together over a series of deployments, such an arrangement would help facilitate the creation and maintenance of a trusted relationship between the participants so necessary to the conduct of NEOps. At the same time, it is acknowledged that limitations on the number of personnel available to CIDA and Department of Foreign Affairs could well prove to be an impediment to such arrangements. As well, the culture of continuous individual and collective training found within the Canadian Forces would be difficult to replicate and accommodate in the other government departments.

A range of practical benefits could be acquired by channelling all defence, diplomacy and development traffic from deployed missions back to national offices through a single pipeline set-up by the JOG. It would be more economical to establish a single, highly capable connection back to Canada than three separate departmental systems. Notably, this framework does not advocate changes in current work relationships, as deployed defence, diplomacy and development missions would still be tasked and responsible to their respective departments. To facilitate this, encryption could be utilized to maintain security between system users to preserve departmental areas of responsibility. Such a single network approach would provide higher overall capacity than some of the individual departmental systems currently in use and could be configured to address mission-specific requirements. Moreover, given the presence of CF technicians as part of the deployment, a higher degree of network reliability may be expected than likely experienced currently by small diplomatic and development missions.

Finally, there is the issue of the overall hierarchical relationship between participating agencies in a NEOps environment. Essentially, there is no reason for any changes from the current inter-department construct during international deployments, i.e. Foreign Affairs would typically remain the lead agency. NEOps would simply provide the means for more effective control and coordination of activities and operations, not only within theatre but also from the strategic level. An integrated NEOps framework would also provide the means for greater transparency and better political oversight of the defence, diplomacy, and development components of national power through reach back to the strategic level. For instance, in addition to improved connectivity between the national level offices associated with delivery of the 3Ds, the network easily could be extended to include the Privy Council

Office (PCO), which is responsible for coordinating political input into Government departments.

Figure 4 depicts the framework described in this section, including the lines of communications and the tasking relationships.

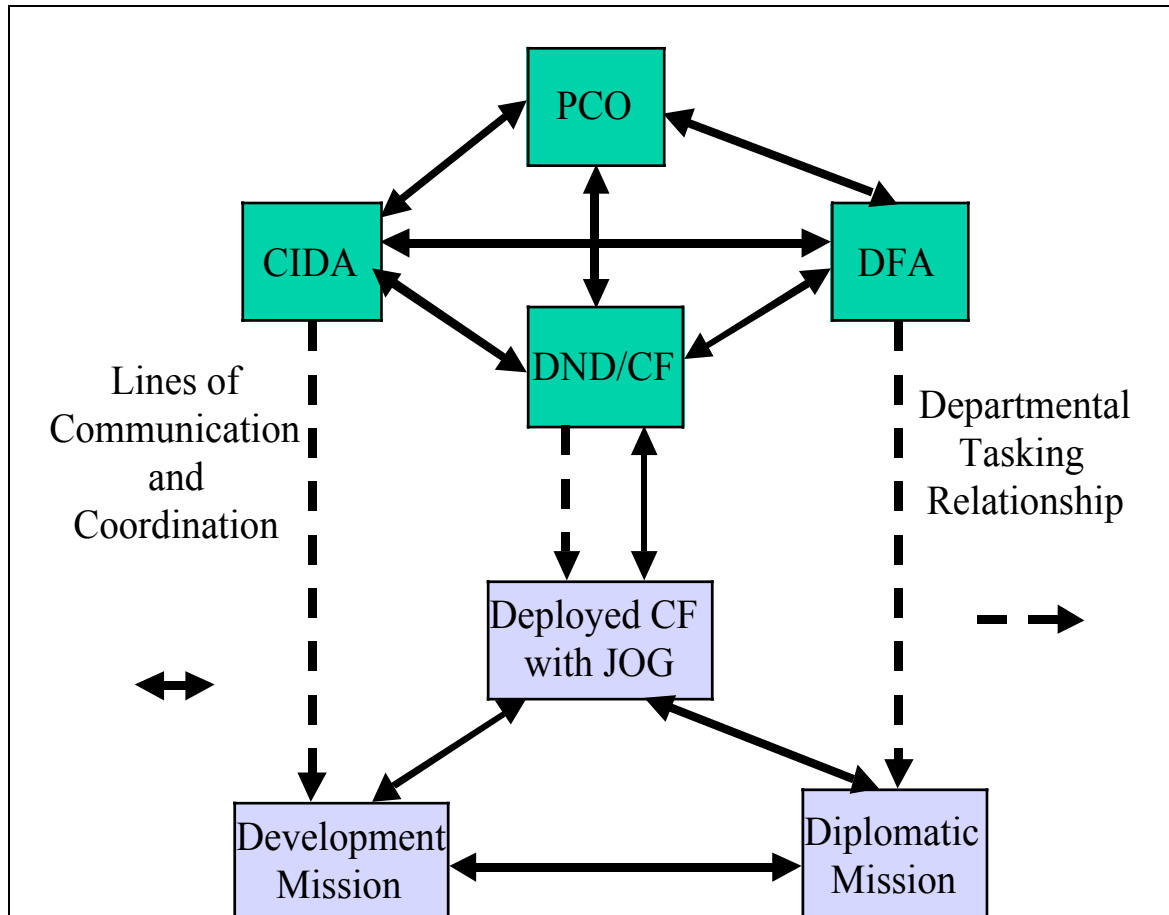


Figure 4: Proposed Canadian Framework for NEOps Coordination of Delivery of 3D

CONCLUSION

In summary, it has been asserted that the stated intention of the Canadian government to better integrate the defence, diplomacy and development elements of national power is achievable through the government-wide adoption of NEOps, and that doing so would also lead to increased effectiveness, better reach-back, oversight and coordination, and reduced planning cycles. Given the relative size, capabilities and experiences of the defence, diplomacy and development communities, it has been suggested that the capability to field and support the required infrastructure for NEOps should reside in the CF JOG. A distinction between the proposed framework and that used within the US is that the former is designed to facilitate the operations of all elements of national power, not just the military, and it is designed to be scalable and extendable down to the tactical level. The START Force construct to be developed would appear to benefit from taking a NEOps approach. However, given traditions, bureaucratic inertia and stovepipes, and related issues, it is clear that such an

end state can only be achieved through high-level political intervention and some further (albeit limited) investment.

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