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NORTHERN LIGHTS  
IMPLEMENTING LASTING CHANGES IN THE NORTH BEFORE THE SUN SETS

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## ABSTRACT

The traditional perception of Canada's Northern landscape is dissolving. The polar ice shelf is falling into the sea. The polar bear population is declining: the bears are drowning in search of food and there is less viable floating ice to stand on. The houses and infrastructure built on the permafrost are sinking. The traditional Inuit way of life is disappearing. The current political, legal and socio-cultural "truths" about Canada's Arctic must change and become more relevant.

The situation in the Arctic serves as an indicator to the rest of the world of the global climate crisis, and the government has repeatedly failed to provide the strategic leadership and commitment to make meaningful, long-term investments in the North. While it could be hundreds of years before drastic climate change takes place in Canada's North, it could happen in a very short time frame. Prime Minister Harper's promises will necessarily take several years to implement. Meanwhile, a new government could be elected and it might choose to slow the rate of progress in the North in favour of southern Canadian issues – those affecting many more constituents.

Therefore, it is argued that the responsibility for Defence, Diplomacy, Development and Commerce ("3D+C") in the Arctic cannot rest solely in the hands of elected politicians. There must be a strong representation of all levels of government, associations and the private sector in the Canadian North to provide an effective and timely response to a constantly changing situation. The private sector is not subject to the volatile political will that influences politicians and can act in a more immediate time frame. Private

industry will be attracted to economically sound investment and development opportunities. Leveraging Private/Public Partnerships (PPP) could bring much needed speed and stability to Northern development. The government must initially focus on ensuring a holistic and economically viable PPP approach. This will bring all government stakeholders needed in the North to the same location, a first step to building the necessary whole-of-government approach.

This paper discusses briefly the impact of climate change on Canada's Arctic and further expands on the sovereignty, security, environment and economic benefits of having a strong Northern presence. These factors predicate the need for swift and determined actions. It is imperative that the government addresses the reality of a warming Arctic, including the potential economic consequences. A whole-of-government approach to managing affairs in the North is the ultimate ideal solution. Meanwhile, initiating PPP projects such as a Deep Sea Port, an Arctic Training Centre, and a fleet of Unmanned Aerial Vehicles provide an immediate means for delivering an affordable and flexible "3D+C" solution.

## CHAPTER 1 - INTRODUCTION

“The Arctic is undergoing a period of fundamental change. We may not fully understand the complete nature of the transformation, but there are significant geopolitical developments that portend to the beginnings of a confounding storm about to break upon the entire Arctic region.”

Rob Huebert – “Controlling the Arctic,” *Vanguard Magazine*, Nov/Dec 2007

We live in a time of unprecedented change; our physical environment fluctuates unpredictably, we live under the constant threat of terrorist reprisal, our finite resources are demonstrating just how finite they are. The pace of change has increased dramatically, with significant events happening more and more rapidly.<sup>1</sup> How we deal with these changes dictates our ability to achieve sustainability and survivability. In order to meet national interests, Canada must react quickly, decisively and with foresight. With the global demand for resources increasing, Canada has the opportunity to take the lead in matters such as environmental responsibility, protection of aboriginal human rights, and long-term sustainable development for newly accessible areas. The Arctic Archipelago serves as a testing ground for many theories and practices in these matters. The Arctic responds to atmospheric changes more rapidly than any other region on the globe.<sup>2</sup> Warming surface, air and water will allow for access to previously inhospitable

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<sup>1</sup> Mary Simon, “Sovereignty from the North,” *The Walrus*, November 2007, 33.

<sup>2</sup> Martin and Louis Fortier, “Canada’s Arctic: Vast, Unexplored and in Demand,” *The Journal of Ocean Technology*, Volume I, Number I, (Summer 2006): 2. (in there, they referred to Holland, M.M. and C.M. Bitz, “Polar amplification of climate change in coupled models,” *Climate Dynamics*, Vol. 21, (2003): 221-232).

regions of the North.<sup>3</sup> With its vast untapped resources, this region will experience unprecedented modification and invasion. There are already such signs: the boreal forest is moving North and bird and insect species previously never seen in the North are appearing (the Inuit do not even have words for them). More alarmingly, foreign governments, such as the United States, Russia and Denmark, have recently taken steps to secure their interests in the circumpolar region.<sup>4</sup> We risk being overcome by events if our initiatives are not undertaken quickly.

Our administration has, in the past, taken a passive approach to Northern policy, as though “inaction has been a viable policy.”<sup>5</sup> Multilateral agreements such as the United States Convention on the Law of the Sea (UNCLOS) and unilateral declarations such as the *Arctic Waters Pollution Prevention Act* (AWPPA) nominally serve to protect our right to control what is happening in our Northern territorial waters. These agreements and declarations have held in the past due mainly to the fact that they have never been contested.<sup>6</sup> Canada’s ability to patrol and monitor our North has become severely limited through lack of funding, reassessment of priorities and changes in administration.<sup>7</sup> Our

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<sup>3</sup> Intergovernmental Panel on Climate Change, *Climate Change*, IPCC Plenary XXVII, Valencia, Spain, (12-17 November 2007), [http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf), Internet; accessed 23 March 2008, 32.

<sup>4</sup> Doug Struck, “Russia’s Deep-Sea Flag-Planting at North Pole Strikes a Chill in Canada,” *Washington Post*, 7 August 2007, A08.

<sup>5</sup> Donald McRae, *Arctic Sovereignty? What is at Stake?*, Behind the Headlines, Volume 64, Number 1, (Canadian Institute of International Affairs and Centre for International Government Innovation, January 2007), 23.

<sup>6</sup> *Ibid.*, 22.

<sup>7</sup> Examples of initiatives that have been cancelled include the Polar 8 Icebreaker and the fleet of Nuclear Submarines in 1987.



ability to protect our national interests will depend upon our ability to react to global pressures. Without a resources broad-based strategic approach in place, effective reaction is impossible: political promises will not feed homeless Inuit living on barren ground, enforce environmental protection legislation, or repel invaders seeking the natural wealth of Canada's North.

Prime Minister Stephen Harper has stated that the North is a priority for his administration. He was elected on the belief that his government would make true investments in the Canadian military, and strengthen its role in defending Canadian Arctic sovereignty. However, the new government's first step was to dismiss Jack Anawak, Canada's Ambassador for Circumpolar Affairs, an international forum where Arctic are discussed among the states staking claim to Northern Arctic regions. Nonetheless, this government has embarked on a "four-pronged Arctic Agenda;"<sup>8</sup> namely, economic development (unleashing the resource-based potential of the North), asserting national sovereignty (protecting our land, airspace and territorial waters), establishing Northern input and control (ending paternalistic federal policies of past governments) and committing to environmental protection (protecting the unique Northern environment). The government has also claimed some immediate concrete results, including the construction of eight arctic offshore patrol ships, the construction of an arctic deep water port, the increased Northern surveillance by the Canadian Forces, the

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John Honderich, *Arctic Imperative: Is Canada Losing the North?* (Toronto: University of Toronto Press, 1987), 78 and Department of National Defence, *Challenge and Commitment 1987 Defence White Paper*, (Ottawa: Minister of Supply and Services, 1987), 53.

<sup>8</sup> Mary Simon, "Sovereignty from The North...", 32.

investment of \$20.5 million into climate change research in the Arctic, and a \$150 million contribution for scientific research to coincide with the International Polar Year.<sup>9</sup> However, as is the case with any government policy, there is a time delay between announcing an initiative and realizing any concrete benefits. For example, the first of the promised arctic offshore patrol ships will not be delivered until at least 2013.<sup>10</sup> While Canada will wait half a decade for new icebreaking vessels, other states and interested companies have commissioned ships that will be ready to sail in months. According to one broker, the outstanding orders for arctic reinforced ships as of December 2007 stood at 152, nearly half the size of the current worldwide fleet of 352 such vessels.<sup>11</sup> In many cases, these ships are being commissioned and built for companies based in non-circumpolar states. Canada is facing the huge expansion of arctic capability outside our borders and has no capability to monitor its usage.

Time is quickly running out for the Canadian government to take action in the North. On 15 September 2007, the Northwest Passage (NWP) was completely opened to non-icebreaking vessels for the first time in human memory. Université Laval oceanographer and ArcticNet scientific director, Louis Fortier, forecasts an Arctic free of summer ice as

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<sup>9</sup> Conservative party of Canada, *Sovereignty (Ottawa: Canada Communication Group, 2008)*, <http://www.conservative.ca/EN/4739/87277>, Internet; accessed 21 March 2008, n.p.

<sup>10</sup> Department of National Defence, *Arctic / Offshore Patrol Ship* (Ottawa: Canada Communication Group), [http://www.forces.gc.ca/site/newsroom/view\\_news\\_e.asp?id=2370](http://www.forces.gc.ca/site/newsroom/view_news_e.asp?id=2370) Internet; accessed 25 March 2008, n.p.

<sup>11</sup> Hugo Miller, "Ships Intrude on Arctic's Warming Waters," *Los Angeles Time*, <http://www.latimes.com/business/la-ft-ships10mar10,1,1109447.story>, Internet; accessed 10 March 2008, n.p.

early as 2015.<sup>12</sup> This is the earliest that the aging fleet of 18 Canadian Forces Lockheed CP-140 Aurora maritime patrol aircraft will be replaced. The measures taken by DND include the decommissioning of eight airplanes, nearly half of its Aurora fleet, due to excessive airframe wear, and upgrading the remaining aircraft. Even this quick fix will not occur until 2009.<sup>13</sup> Unfortunately, the problem of acquisition delays are further compounded by the fact that many government agencies are duplicating effort, some are proceeding with inefficient and ineffective programs, and both of these in the context of limited budgets and a short-sighted planning framework. To complicate the issue, the maintenance of current and acquisition of new infrastructure in Canada is unaffordable. The government alone will not be able to support such expenses without a drastic tax increase or the support of the private sector.

It is therefore argued that, from a “National Strategy” perspective, the Canadian government should take an immediate but modest approach to protect its Arctic by using Public Private Partnerships (PPP) to act as a catalyst to a long-term whole-of-government (WOG) focus. First, an analysis of the impact of climate change to the Northern sovereignty, security, environment and economy will illustrate that Canada’s Northern sovereignty is not at risk if a common approach is taken to promote its economy. While a WOG approach would be the best avenue to achieve a streamlined, timely and comprehensive response to the economic growth, it will be demonstrated, using the

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<sup>12</sup> Quoted by Stuart McCarthy in “Keeping our True North, Strong and Free”, Innovation Canada.ca, Issue #19, November-December 2005; <http://www.innovationcanada.ca/19/en/pdf/north.pdf>; Internet: accessed 20 Jan 2006, 1.

<sup>13</sup> Department of National Defence, *Future of the CP-140 Aurora*, (Ottawa: Canada Communication Group, 2008), [http://www.forces.gc.ca/site/newsroom/view\\_news\\_e.asp?id=2532](http://www.forces.gc.ca/site/newsroom/view_news_e.asp?id=2532), Internet; accessed 25 March 2008, n.p.

British “best practices” model, that such an approach does not currently exist in Canada. A review of the PPP concept and its application in the Canadian Forces will support the argument that a PPP driven initiative, which can utilize the flexibility of the private industry, has the potential to put in place the required groundwork to establish a WOG approach in the future. Finally, three recommendations developed from electoral promises by the current government, namely the Deep Sea Port, the Arctic Training Centre, and the fleet of Unmanned Aerial Vehicles, will be presented supporting this approach.

## **CHAPTER 2 - CURRENT STRATEGIC CONSIDERATIONS IN THE NORTH**

“Humanity is conducting an unintended, uncontrolled, globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war.”

World Meteorological Organization (WMO), report # 710, dated 1988, 292

The terms “Arctic”, “Canadian North” or “North” in this paper mean the three territories, the Yukon Territory, the Northwest Territories (NWT), and Nunavut. They account for 40 percent of Canada's land mass. Yet the total population makes only about three percent of the country's population.<sup>14</sup> Its harsh frigid climate has stymied boom development; however, this is changing. According to reports such as the Arctic Climate Impact Assessment, there has, over the past 30 years, been a steady decline of nearly 15 to 20% of sea-ice cover during the summer months. The Assessment report further

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<sup>14</sup> Dr. Martin and Dr. Louis Fortier, “Canada’s Arctic: Vast ...”, 1-2.

predicted that by the end of this century, there will be a near total loss of summer ice cover.<sup>15</sup> As shown in Figure 1, the ice extent is shrinking at an alarming rate.

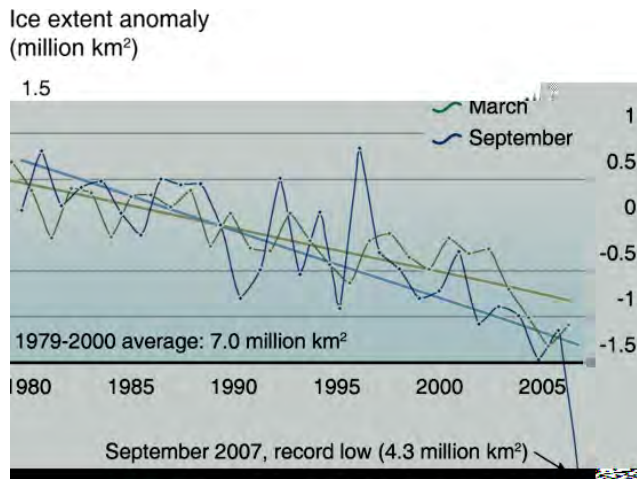


Figure 1 – Decline of Sea Ice in the Canadian Arctic over the last 25 years. Source: ACAI report, Cambridge University Press.

The focus of scientists, politicians and sceptics on the issue of climate change and its impact on Canada’s North has shifted from a question of “if” to “when.” Environment Canada defines climate change as a shift in the “average weather” that a given region experiences.<sup>16</sup> This is measured by changes in all the features associated with weather, including temperature, wind patterns, precipitation and storms. Figure 2 depicts the interrelations between climate change and other areas of the environment, the potential impact of human activities and the global consequences. Climate change in the North is

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<sup>15</sup> Arctic Climate Impact Assessment, *Impacts of a Warming Arctic*, Cambridge University Press, 2004, <http://www.acia.uaf.edu/>, Internet; accessed 20 February 2008, 25.

<sup>16</sup> Environment Canada, *The Science of Climate Change* (Ottawa: Canada Communication Group, 2007), [http://www.ec.gc.ca/climate/overview\\_science-e.html](http://www.ec.gc.ca/climate/overview_science-e.html); Internet; access 2 February 2008, n.p.

three times more rapid than in the rest of the world.<sup>17</sup> Consequently, Canada must be prepared to react quickly to these changes. However, any initiatives must first take into consideration many factors in order to allocate the limited resources. The four dominant strategic factors that must be taken into account are the sovereignty, the security, the environment and, most importantly, the economy.

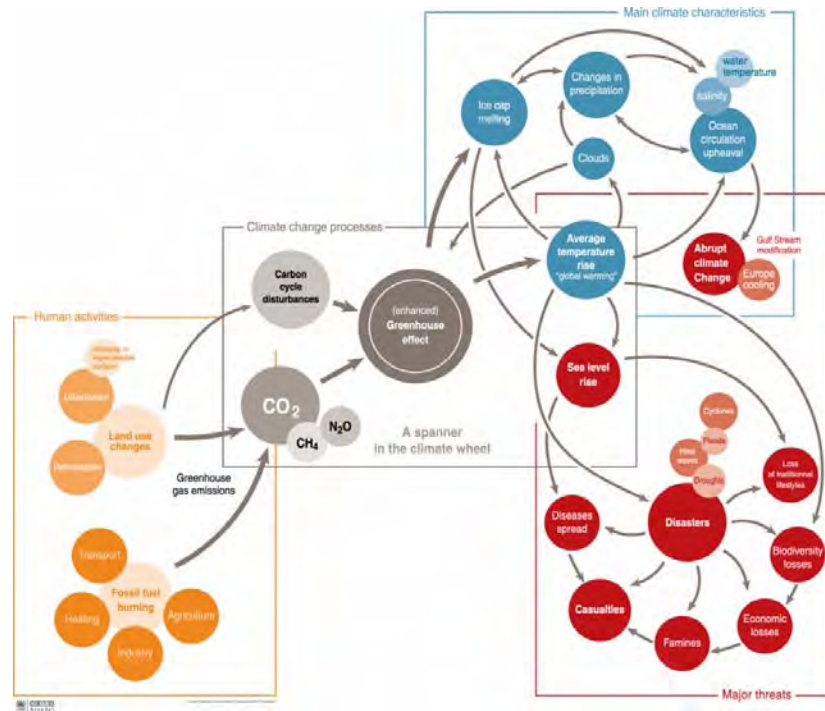


Figure 2 - Climate Change Relationships  
 Source: World Meteorological Organization (WMO) report # 710.

<sup>17</sup> *Ibid.*, n.p.

## Sovereignty

The first, and most obvious, issue related to climate change is the question of sovereignty. The October 2007 Speech from the Throne specifically highlights the requirement to defend our sovereignty in the North. However, experts like James Kraska will argue that there are “no challenges to Canadian territorial sovereignty in the Arctic.”<sup>18</sup> No country disputes Canada’s sovereignty over the lands and islands of the Canadian Arctic and its maritime boundaries. The only qualifications are the Denmark’s claim to Hans Island, the United State’s claim to a portion of the Beaufort Sea, and the definition of the NWP.<sup>19</sup> As shown in the following discussion, while those issues have an impact on the economy and the environment, they certainly do not affect Canadian national interests from a sovereignty point of view. At worst, some experts argue that these issues are “coloured by the political context” and there is great potential for amicable legal or bilateral resolutions.<sup>20</sup>

Hans Island is a small uninhabited island of approximately 1.3 sq km in the Kennedy Channel between Greenland and Northern Ellesmere Island. The dispute started in 1973 when Denmark and Canada drew a border down the Nares Strait, between Canada's Ellesmere Island and Greenland, a semi-autonomous Danish territory. The dispute between Canada and Denmark is only about the island and not the surrounding waters or any resources

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<sup>18</sup> James Kraska, *The law of the Sea Convention and the Northwest Passage*, Defence Requirements for Canada’s Arctic, Vimy paper 2007, The Conference of Defence Associations Institute, 40.

<sup>19</sup> *Ibid.*, 40.

<sup>20</sup> *Ibid.*, 39.

in the sea or seabed. While no natural resources have been found on this seemingly insignificant island, the Danish sent a ship in 2002 to claim it.<sup>21</sup> Canada's claim for this island is based on various international law arguments, including "effective occupation," which is supported by Canada's intent to exercise sovereignty since the end of the 19th century and the actual visit of the Minister of National Defence on 25 July 2005. Hans Island is not important by itself but there are economic reasons for Canada not wanting to create a precedent. A Joint declaration was issued following a meeting of the Canadian and Danish Foreign Minister in September 2005, which states that discussions will continue.

The Beaufort Sea issue is rooted in the definition of the boundary between Alaska and the Yukon, which was agreed to in the 1825 Anglo-Russian Treaty of St. Petersburg. A line tracing the 141st meridian of longitude up to "la Mer Glaciale" is considered to constitute the boundary north of the summit of Mont St-Ilias. Canada supports this boundary which was agreed to by the United States when they purchased Alaska from Russia in 1867 but the Americans now argue that the line should be drawn 90 degree eastward.<sup>22</sup> The issue is mostly related to oil and gas resources in this 6,250 sq NM area;<sup>23</sup> however, the harsh environment has kept the issue contained. Canada has been issuing oil and gas exploration permit up to this boundary since 1965 and the Americans' first protest was

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<sup>21</sup> Rob Huebert, *Northern Interests And Canadian Foreign Policy*, Associate Director Centre for Military and Strategic Studies, University of Calgary, n.d., <http://www.cdfai.org/PDF/NORTHERN%20INTERESTS%20AND%20CANADIAN%20FOREIGN%20POLICY.pdf>, Internet, accessed 17 January 2008, 8.

<sup>22</sup> *Ibid.*, 7.

<sup>23</sup> *Ibid.*, 7.



made 11 years later. Both sides agreed that they do not agree and Canada continues to protest American attempts to sell leases in the disputed zone. A review of similar international cases indicates that other states resolved such disputes politically. Since the issue is related to the economy and not the issue of sovereignty, a possible solution would be for Canada to enter into an agreement similar to the one between Australia and Indonesia whereby the USA could recognize Canada's territorial claim but both states would "share in the development of the resources within the disputed area."<sup>24</sup>

Andrea Charron has nicely summed up the legal issue involving the NWP in these terms: "[Canada maintains] the NWP falls within historic internal waters and that it is not an international strait. The US maintains that the Passage does not meet the requirements of historic internal waters, and that the NWP is an international strait."<sup>25</sup> No country disputes Canada's ownership of the resources in the waters of the NWP, on the sea floor or in the subsoil and no country disputes Canada's authority under Article 234 of UNCLOS (Arctic Exception) to enforce the *Arctic Waters Pollution Prevention Act* up to the limit of our EEZ.<sup>26</sup> The only matter at issue is whether the NWP is an international

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<sup>24</sup> Australia and Indonesia, "Agreement establishing certain seabed boundaries in the area of the Timor and Arafura seas," Agreement No. 14123, signed at Jakarta on 9 October 1972, [http://untreaty.un.org/unts/1\\_60000/27/14/00052699.pdf](http://untreaty.un.org/unts/1_60000/27/14/00052699.pdf), Internet, accessed 25 March 2008.

<sup>25</sup> Andrea Charron, *The True North: Stronger and Freer with Help*, Defence Requirements for Canada's Arctic, Vimy paper 2007, The Conference of Defence Associations Institute, 27.

<sup>26</sup> The 1982 United States Convention on the Law of the Sea (UNCLOS) "divides marine space into a number of zones, both within and beyond the limits of national jurisdiction. The limits of these zones are measured from baselines extending along the coast. The areas within national jurisdiction include: internal waters, archipelagic waters, the territorial sea, the contiguous zone, the exclusive economic zone (EEZ), and the continental shelf. UNCLOS sets out States' rights and responsibilities both in these defined zones subject to coastal State sovereignty (internal waters, archipelagic waters, territorial sea) and jurisdiction (namely, the EEZ and the continental shelf) and in areas beyond national jurisdiction."

strait or part of the Canadian internal waters. If the NWP were to be considered a strait, foreign ships would have the right of transit passage, which would change the rights of Canada to limit traffic, and specifically for military and government flagged vessels. Canada argues that the NWP is part of the internal waters surrounding the Arctic Archipelago islands by virtue of historic title.

The “internal waters” interpretation would give Canada more legal control over the waters of the NWP. Until a legal decision is made, Canada and the US are using the “Package Deal” which was agreed to by the US, Canada and Russia during negotiations of the law of the Sea Convention and the “1988 Cooperation Agreement”<sup>27</sup> as being instruments that could deal with NWP legal issues. Even if a claim were to be lost in an international court, experts argue that there are enough uncontested conventions in place that Canada will retain most of its current rights to control all traffic in our far North.<sup>28</sup> However, more than land claims are at stake as far as the other sovereignty issues are

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Minutes of the Ad hoc open-ended working group on Protected Areas Convention on Biological Diversity, *The International Legal Regime of the High Seas and the Seabed Beyond the Limits of National Jurisdiction and Options for Cooperation for the Establishment of Marine Protected Areas (MPAS) in Marine Areas Beyond the Limits of National Jurisdiction*, (Montecatini, Italy, 13-17 June 2005), 7.

<sup>27</sup> The elements of the Package Deal: The US supported the inclusion of Arctic 234 which allows for the adoption of national laws from preserving the marine environment in ice-covered areas, thereby legitimizing Canada’s Arctic Waters Pollution Prevention Act, dated 1970. It was agreed that such legislation would not apply to state and or military vessels. In return, Canada publicly supported the provisions on international straits, but it was also understood that the US would not use these provisions against Canada, leaving such matters to bilateral negotiation. Ambassador Wilkins reiterated in September 2007 that no one in the United States is claiming sovereignty over the lands or disputing Canadian sovereignty over its Arctic Territories or disputing mineral rights or fishing rights. The US is arguing that the strait, the Northwest Passage, is a strait to be used for international navigation. There were also diplomatic notes between Canada and the US and both Ambassador Wilkins’ comments and the notes are a departure from the deal struck in 1976.

Franklyn Griffiths, *Politics of the Northwest Passage* (Dalhousie Ocean Studies Programme, McGill-Queen’s Press – MQUP, 1987), 110.

<sup>28</sup> Donald McRae, *Arctic Sovereignty ...*, 21-22.

concerned. The economic potential of the Arctic has yet to be realized, and there is increasing international interest in reaping those benefits. In 1986, Canada drew straight baselines<sup>29</sup> around the Arctic Archipelago islands in order to preclude the right of innocent passage or of transit passage in the territorial sea.

### Security

While most studies refer to the above legal disputes when they speak about the security of the Canadian Arctic, there are other aspects that must be considered. Michael Byers divides Northern security issues in three categories; namely traditional, non-traditional and human.<sup>30</sup>

The first security issue that we have wrongfully tended to ignore since the end of the Cold War is the traditional notion of security. But the fact is that President Vladimir Putin ordered the Russian air force to resume strategic bomber patrol flights over the Arctic oceans last August.<sup>31</sup> Moreover, the region witnesses an often intense undersea cat-and-mouse game as various states probe each other's capability with hunter-killer submarines.

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<sup>29</sup> When the US ice breaker Polar Sea used the NWP without Canadian permission, the government adopted the straight baseline, which can be used "in localities where the coastline is deeply indented and cut into or, if there is a fringe of island along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured." When the straight lines are drawn, the waters inside the "box" are considered internal waters.

United States, "The Law of the Sea" Official Text of the United States Convention on the Law of the Sea, New York, 1983.

<sup>30</sup> Michael Byers and Martin Shadwick, "Canada and the Arctic: A Panel Discussion on Arctic Sovereignty," (Pannel discussion, Marriott Hotel, Toronto, March 6, 2008).

<sup>31</sup> "Russian Strategic Bombers continue patrol flights, Air Force," *Russian News and Information Agency (RIA)*, <http://en.rian.ru/russia/20080313/101266881.html>, Internet; accessed 13 March 2008.

Submarine activity in the North began in 1946 with the expedition of USS Thule, and since that time, Soviet and American submarines have navigated in the Arctic waters on an almost an annual basis. The fact that Canada has not received a request for an allied submarine transit through the Canadian Arctic waters for years does not mean that they are not operating within our territorial waters. Local Arctic inhabitants have reported several suspected submarine contacts.<sup>32</sup> While there is no imminent risk of “war”, it is essential that Canada show that our land is inhabited and that people living in the North are the eyes and ears of the country. Such a presence will become even more important with the increase of non-military traffic in the area.

Non-traditional threats can take numerous forms in the Arctic, ranging from innocent cruise ships to multi-national companies seeking new capital ventures. Norilsk, the world's biggest producer of nickel, is taking proactive measures to increase its presence in the North and “is building its own shipping fleet to capitalize on the melting of the polar ice caps.”<sup>33</sup> Commercial flights over the North Pole region have also increased dramatically since the 1990s, when Russia agreed to open up its air space to commercial airlines. This has allowed airlines a shorter, faster option for connecting North American and Asia. Such improved accessibility brings inherent security risks which force various departments to be more proactive in the region. Participants in a mock summit, organized by University of British Columbia political scientist Michael Byers, expressed such

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<sup>32</sup> Department of National Defence, *On Guard* (Ottawa: Canada, Communication Group, 2008), [http://www.airforceforces.gc.ca/site/athomedocs/athome\\_4\\_e.asp](http://www.airforceforces.gc.ca/site/athomedocs/athome_4_e.asp), Internet; accessed 24 March 2008.

<sup>33</sup> Hugo Miller, “Global Warming Melts New Sea Lanes for Norilsk, ConocoPhillips,” *Bloomberg.com*, <http://www.bloomberg.com/apps/news?pid=20601082&refer=Canada&sid=aQ4ROJItxvU>, Internet; accessed February 26, 2008, n.p.

concerns and concluded that action must be taken because “increased shipping will bring heightened security risks due to terrorism, nuclear proliferation, illegal immigration and drug smuggling” in the Northern regions.<sup>34</sup>

Accordingly, human security will become a new source of concern not only for all levels of government but other Northern actors. The recent mainstream attention to Al Gore’s “The Inconvenient Truth” not only won him a Nobel Prize, but it attracted public attention at the international level. Sheila Watt-Cloutier, a 54-year old Inuk woman, championed her “human right to be cold,” coincidentally with Gore’s move to make climate change a mainstream issue and was awarded the first Northern Medal by the Governor General last April. She spearheaded a historic petition to the Organization of American States that linked climate change to human rights, asserting that: “The subsistence culture central to Inuit cultural identity has been damaged by climate change and may cease to exist if action is not taken by the United States in concert with the community of states.”<sup>35</sup> This claim exposes an alarming truth: the way of life of our indigenous peoples is being threatened. Although not a terrorist act or combat action, there is still a threat to the way of life of some Canadians. There is a need to redefine the term security since it has a larger dimension in the Arctic because it includes environmental and human security. However, the government does not seem able to deal with such issues. Former Supreme Court of B.C. Justice Thomas Berger was brought in as Conciliator for the Nunavut Land Claims Agreement Implementation Contract

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<sup>34</sup> “Simulated talks show possible solution for Arctic dispute,” *National Post*, 19 February 2008, <http://www.nationalpost.com/news/story.html?id=31970>, Internet; accessed February 26, 2008, n.p.

<sup>35</sup> “The Hunter,” *Carp Magazine*, 11 February 2008, 10.

negotiations where the Inuit were seeking \$1 billion in damages. Berger's review concluded: "Nunavut is in a state of crisis, and Inuit will only get their fair share of jobs in government and elsewhere when the education and training systems are transformed."<sup>36</sup> There is an immediate need to invest in the social welfare of the Inuit to ensure that they are active participants in arctic expansion while protecting their environment.

### Environment

The environmental challenges are certainly the most pressing of the current issues. With eight states having a sovereign interest in the Arctic, not to mention the increased global interest in the region, the consequences of its environmental degradation due to pollution and impact on the ecosystem have every potential for heightening tensions, increasing prospects for future conflict between states and for having a significant negative impact on the economy.

Canada is facing a pollution crisis and the sources come from inside and outside the country.<sup>37</sup> Canada's interest in declaring the NWP as internal waters had to do with controlling navigation around the Arctic coasts because the potential clean-up costs of environmental disasters in this isolated region are very substantial. For example, the accident area associated with the grounding in 1989 of the Exxon Valdez oil tanker in Alaska's Prince William Sound was accessible only by helicopter and boat, and the clean-

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<sup>36</sup> *Ibid.*, 10.

<sup>37</sup> Rob Huebert, *Northern Interests...*, 15.

up costs totalled \$40 billion.<sup>38</sup> And pollution is not always caused by accidents. The Russian Yablokov Commission's report provides very alarming information about radioactive pollution. The Commission estimated that the USSR had unloaded 2.5 million curies of radioactive waste into the ocean since 1965 and 11,000 barrels of liquid and solid radioactive waste were dumped in the same region.<sup>39</sup> Although it may seem surprising to some, Canada's performance is not much better. PCB was used in the DEW line to insulate the equipment. When these stations were closed, contaminated sites and perforated barrels of PCB were left on site. There has been some attention paid to this situation, however, with the government allocating \$4 billion to clean up contaminated sites in the North, including \$500 million dollars to clean up the DEW sites before they affect the ecosystem.<sup>40</sup>

The impact of the pollution on the environment is starting to be visible in various ways in the Northern ecosystem. Changing temperatures due to the emission of greenhouse gases is thawing the ice cap and the permafrost.<sup>41</sup> Such change has a double impact since it is

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<sup>38</sup> Department of Fishery and Oceans, *Sea otter recovery action plan consultation workshop*, (Ottawa: Canada Communication Group, 2004), <http://www-comm.pac.dfo-mpo.gc.ca/pages/consultations/sea-otters/meeting-notes/Sea%20Otter%20Consultation%20-%20Massett%20Feb%2019%2004.doc>, Internet: accessed 21 March 2008, 7.

<sup>39</sup> Curie is the amount of radiation released by one gram of radium. Canadian Arctic Resources Committee, *Northern Perspective, Military Activity and Environmental Security: The Case of Radioactivity in the Arctic*, Volume 21, number 4, winter 1993/94.

<sup>40</sup> Paul A. Hamel, Environment and War, *Science for peace*, (Toronto: University of Toronto, January 2004), n.p.

<sup>41</sup> "About a quarter of the Northern Hemisphere's land contains permafrost, defined as soil that remains below 32 degrees F (0 degrees C) for at least two years." Boulder, "Permafrost Meltdown Across the Arctic," *Environment News Service*, <http://www.ens-newswire.com/ens/dec2005/2005-12-20-03.asp>, Internet; accessed 22 February 2008.

believed that the permafrost may hold 30 percent of the carbon stored in soils worldwide. The melting permafrost will liberate carbon, which in turn will increase the greenhouse effect. If the greenhouse effect increases, the planet will warm up and the permafrost will melt faster. Scientists have warned that the sea level will continue to rise over the years because 50% of the permafrost could thaw by 2050 and as much as 90 percent by 2100.<sup>42</sup> There is already evidence of a 30cm sea level rise on the Atlantic coast in the last century and related studies suggest that many of PEI coastal buildings could be lost by 2100.<sup>43</sup> Other states such as the Netherlands could eventually be completely submerged, and thus creating a flux of immigration to other states. Researchers have also demonstrated that the water levels in the Mackenzie Delta (13,000 km<sup>2</sup>) have increased by the same percentage and this increase has resulted in enhanced storm surges.

As the Arctic climate warms, the boundary between discontinuous and continuous permafrost may move hundreds of km northward. This change will increase land instability and cause problems for infrastructure in the North. This kind of engineering problems is already affecting current infrastructures and is becoming a challenge for future construction. The increase in water level also impacts on the water systems and stream flow in areas of complete permafrost decay.<sup>44</sup> Pipelines, airstrips, water and sewage systems, building foundations, roads, rail lines, and mining systems will all be

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<sup>42</sup> Ibid., n.p.

<sup>43</sup> M.M. McCulloch et al, *Coastal Impacts of climate change and sea level rise on Prince Edward Island*, (Forbes,D.L. and Shaw,R.W., editors). Geological Survey of Canada.

<sup>44</sup> Department Natural Resources Canada, *Sensitivities to Climate Change: Permafrost*, (Ottawa: Canada: Communication Group, 2008), [http://adaptation.nrcan.gc.ca/resource\\_e.asp](http://adaptation.nrcan.gc.ca/resource_e.asp) , Internet; accessed 26 February 2008, 6-7.



affected by the increase in the thawed permafrost.<sup>45</sup> The government alone will not be able to support the cost of fixing and maintaining the infrastructure. Therefore, all federal, provincial, territorial and municipal actors in the Arctic will have to work closely with the private sector to address climate changes that impact on the Northern economy.

### Economy

As it will be demonstrated in the following discussion, the Canadian Arctic is becoming a target for future resource development, including oil and gas, fresh water, mineral wealth and commercial transportation. Industry has to date ignored the potential of this region because of low global commodity prices and the high cost of doing business in this isolated location. However, the potential profitability of the North is now being recognized, given the reduction of ice cover, the instability in the Middle East and the climbing price of natural resources such as oil, gas and even fresh water due to their scarcity. Government at all levels will have to take into account this level of interest and be proactive in the region.

The 2007 US Geological Survey reported that 25% of all untapped oil and gas reserves are located in the Northern hemisphere. It has however been discovered that contrary to the last study performed in 2000, the amount of oil is less than expected while natural gas presence is higher than expected.<sup>46</sup> It is estimated that in the Mackenzie Beaufort region, there are 9 trillion cubic feet of natural gas and 6.7 billion barrels of petroleum. This has

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<sup>45</sup> Intergovernmental Panel on Climate Change, *Climate Change 2007...*, 59.

<sup>46</sup> Department of the Interior, *USGS Releases New Oil and Gas Assessment of North-eastern Greenland*, <http://www.usgs.gov/newsroom/article.asp?ID=1750>, Internet; accessed 23 March 2008.

again raised the issue of exploration rights and construction of infrastructure such as a North American pipeline. The Mackenzie Gas Project consists of a 1,220 km natural gas pipeline system from the Mackenzie Valley to an existing pipeline system in Alberta. This pipeline would be able to transfer 1.2 billion cubic feet per day of natural gas outside the North. While there has been a three-year delay in the actual implementation, it is expected that the pipeline will be active in 2014.<sup>47</sup> While there is a certain amount of risk associated with this project, there is a great upward economic potential which will surely attract southerners to the region.

Water is more important to life than oil, but we spend billions to expand our oil-driven economies while “at least 1.1 billion people on the planet lack access to safe water.”<sup>48</sup> If oil is considered the “black gold,” fresh water will soon become the “clear gold.” Ontario, Manitoba, Saskatchewan, Alberta, and the Northern regions account for 73 percent of Canada's fresh water.<sup>49</sup> The redirection of water systems to the US will become one of the next economic and political pressures for Canada. As well as water, the Arctic is the longest coastline in Canada and includes more than 300 fish species and 50 species of marine mammals. Illegal fishing will almost surely become an increasing

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<sup>47</sup> “Mackenzie Gas Project Report,” <http://www.mackenziegasproject.com/theProject/overview/index.html>, Internet; accessed 22 March 2008.

<sup>48</sup> Sands Watch, “The Future of Water,” <http://www.tarsandswatch.org/future-water>, Polaris Institute Energy Program, Internet; accessed 26 February 2008.

<sup>49</sup> Department of Fishery and Oceans, *Fresh Water Institute*, (Ottawa: Canada Communication Group), [http://www.dfo-mpo.gc.ca/regions/central/pub/fresh-douces/01\\_e.htm](http://www.dfo-mpo.gc.ca/regions/central/pub/fresh-douces/01_e.htm), Internet; accessed 7 April 2008.

economic threat for the Arctic when the waters will open up. In fact, both Canada and Greenland have already reported illegal foreign trawlers on the east side of the NWP.<sup>50</sup>

Mining operations have already proven to be viable enterprises. Reduced permafrost provides more incentives for personnel to move north and lower transportation costs will reinforce interest. For example, the diamond industry is expanding at a dramatic rate. It was only in 1991 that diamonds were found in enough quantity for commercialization. By 2002, of the 300 kimberlitic pipes found in the Northern region, 25 of them were economically viable. Canada is now the 3rd largest producer of diamonds after Russia and Botswana.<sup>51</sup> The resources of the region are not only limited to diamonds. The latest important non-diamond discovery was made in the 1990s at Voisey's Bay in Labrador, and \$3 billion will be invested over a 30-year period for this nickel recovery project. Some of this investment will be directed to the regional headquarter and staging area in Goose Bay Labrador. This economic boom will compensate for the economic loss related to the termination of the low level flying program at 5 Wing. Since it is expected that exploitation for mineral resources will continue to go further north as the permafrost and ice cap reduce, a common approach will have to be taken by all levels of government to control further economic expansion.

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<sup>50</sup> John Honderich, *Arctic Imperative: Is Canada...*, 64.

<sup>51</sup> Government Northwest Territorie, *The Story of the Government Certified Canadian Diamond™*, [http://www.canadianArcticdiamond.com/03\\_history/history.html](http://www.canadianArcticdiamond.com/03_history/history.html), Internet; accessed 18 February 2008.

In fact, economic expansion will also come from the opening of the Arctic Ocean, which will provide shipping companies and interested states with alternate water transportation routes. The NWP provides savings in distance traveled when sailing between Asia and Europe/Eastern US. It is estimated that in some instances, a company would save over 7,000 NM and therefore as much as 11 days and \$800,000 in fuel and labour costs. In addition to other kinds of savings such as lower insurance premiums and reduced maintenance and repair costs, the NWP would allow access to large vessels, whose size prohibits going through the Panama Canal.<sup>52</sup> There are, however, some negative considerations that need to be factored in. For example, it is predicted that the NWP will never be completely ice free and there is the possibility of increased iceberg occurrence, which will present more significant problems than is now the case. Byers cautions that while experts talk about an ice-free NWP, “it remains uncertain as to whether or not international shipping companies will find it more attractive to sail on the Russian side through the Northern Sea Route.”<sup>53</sup> At this point the relevant factors are all speculative, but government action will be inevitable in light of the future economic gain. An indication of this is the increased investment in icebreaker capability, which jumped from \$500M in 1999 to \$2.5 billion in 2006.<sup>54</sup>

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<sup>52</sup> Size is limited to 956 ft long, 106 ft wide, 39.5 ft deep and 190 ft tall.

Alanna Mitchell. “The Northwest Passage Thawed,” *Globe and Mail*, 5 February 2000, A11 and Colin Nickerson. “Girding for a Sea Change: With Ice Thinning, Canada Claims a Northwest Passage,” *Boston Globe*, 21 March 2000, A1.

<sup>53</sup> Michael Byers and Martin Shadwick. *Canada and the Arctic...* and Andrea Charron, *The True North...*, 23.

<sup>54</sup> Bloomberg.com, “Global Warming Melts New Sea Lanes for Norilsk, ConocoPhillips,” <http://www.bloomberg.com/apps/news?pid=20601082&refer=Canada&sid=aQ4ROJItxvU>, Internet; accessed 19 February 2008.

### Interaction between strategic factors

While the above factors have been presented separately in order to have a better understanding of the impact of global warming on the Canadian Arctic, sovereignty, security, environmental and economic issues “are all interconnected and decisions must incorporate each of these aspects in order to be successful over the longer term.”<sup>55</sup> A review of these factors highlights three specific themes that come up again and again in most writings about the North, namely, economy, presence and cooperation.

As far as national threats are concerned, Kim Nossal and Andrew Cooper argue that domestic societies are increasingly elevating societal needs and interests, especially the economic factor, to the top of their agenda. This is particularly true in Canada where economic issues tend to take precedence over the security of the state. Because of the absence of a perceived physical threat, security policies have now become a function of economic policy and are being developed to support trade.<sup>56</sup> Andrea Charron provides numerous examples showing that the economic factor requires resolving Northern threats. Russia is charging escort fees to vessels sailing to their ports generating needed employment, reinforcing national security and sovereignty through constant presence while generating revenue.<sup>57</sup>

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<sup>55</sup> Environment Canada, *Sustainability*, (Ottawa: Canada Communication Group, 2007), <http://www.ec.gc.ca/default.asp?lang=En&n=354F26>, Internet; accessed 19 February 2008, A4-1.

<sup>56</sup> Kim Richard Nossal, *The Politics of Canadian Foreign Policy*, (3rd ed. Scarborough, Ontario: Prentice Hall Canada Inc, 1997), 184 and Andrew F. Cooper, *Canadian Foreign Policy: Old Habits and New Directions* (Scarborough, ON: Prentice Hall Allyn and Bacon Canada, 1997), 15.

<sup>57</sup> Canadian Arctic Resources Committee, “What’s Sauce for the Goose...,”

By reinforcing its presence in the North, Canada protects its “sovereignty [and] fulfill[s] Canada’s international responsibility to protect the environment, to protect Northern Canadians and to protect our Borders.”<sup>58</sup> Harper’s initiatives, including the proposed deep-water port, training centre, and the Canadian Rangers, all demonstrate a Canadian presence.

Nothing can be done alone and all Northern actors must cooperate if they want to succeed. However, the Canadian Forces should not have the primary role and a strictly military approach is not an appropriate response. No one organization has the necessary personnel, monetary resources or expertise. It is essential to promote investment and attract people to the North. This is not a new concept and it has been minimally applied for many years. In their contribution to the economic development of the North, private companies have also provided essential infrastructures, such as ice roads and the seaport at Nanisivik.

As far as Canadian sovereignty is concerned, only three relatively minor legal issues are outstanding and solutions exist if addressed at the proper political level. From a security and environmental perspective, there is a requirement to have a greater Canadian presence (not necessarily military), as well as better cooperation between all Northern actors. A strong economy secured through Public/Private Partnerships, to be developed

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[http://www.carc.org/sustainable\\_dev/why\\_would\\_canada.php](http://www.carc.org/sustainable_dev/why_would_canada.php), Internet; access 19 February 2008, n.p.

<sup>58</sup> Andrea Charron, *The True North* ..., 26.

later in this paper, will cement a presence and the ongoing cooperation necessary in a WOG solution.

### **CHAPTER 3 - A WHOLE-OF-GOVERNMENT FOR THE CANADIAN ARCTIC**

In the past, the circumpolar Arctic was dominated by defence needs-a policy arena in which Canada played only a minor role. Today this region is emerging as a venue in which all facets of foreign policy can be exercised, if we have sufficient imagination. Sustainable development and environmental security promise to be the policy touchstones in the circumpolar Arctic well into the next century.

"Sovereignty, Security, and Surveillance in the Arctic" - Northern Perspectives, winter 1994-95

Many factors must be taken into consideration for “managing” the Northern part of Canada and all levels of government and many departments need to be involved. Many of the actions taken to date have met with limited success for reasons that include lack of interest on the part of politicians and the federal bureaucracy, the impact of international priorities and the view that the Canadian North is untouchable due to its harsh climate. No matter the reasons, however, the impact of global warming does not allow such lethargy anymore. Global warming can no longer be addressed in isolation due to its magnitude. Therefore, the government must establish an independent organization with the sole purpose of developing an overarching Northern national strategy and implement a WOG approach. It is only by combining the resources and expertise of departments at all levels with non-state actors that the problems threatening the Arctic will be positively

resolved. A review of a British WOG model will help in determining if current Northern committees such as the Arctic Council and the Arctic Security Working Group (ASWG) meet the criteria of a WOG approach. A review of actions taken to date by federal governments responsible for the WOG policy and Northern strategy will also help to understand why implementation of such approach is still fractured in Canada and more precisely in the North.

### The British Model

The WOG concept has been adopted by many states and adjusted to meet their specific needs. In 2002, Tom Ling, a specialist in Public Administration, developed a model that captures the elements of an effective WOG approach. Ling's model (Figure 3) highlights changes that occurred while the British government pursued its "joined-up" policy. The best practices listed in the four quadrants help to understand the impact of a WOG approach regardless of its modified application in different states.



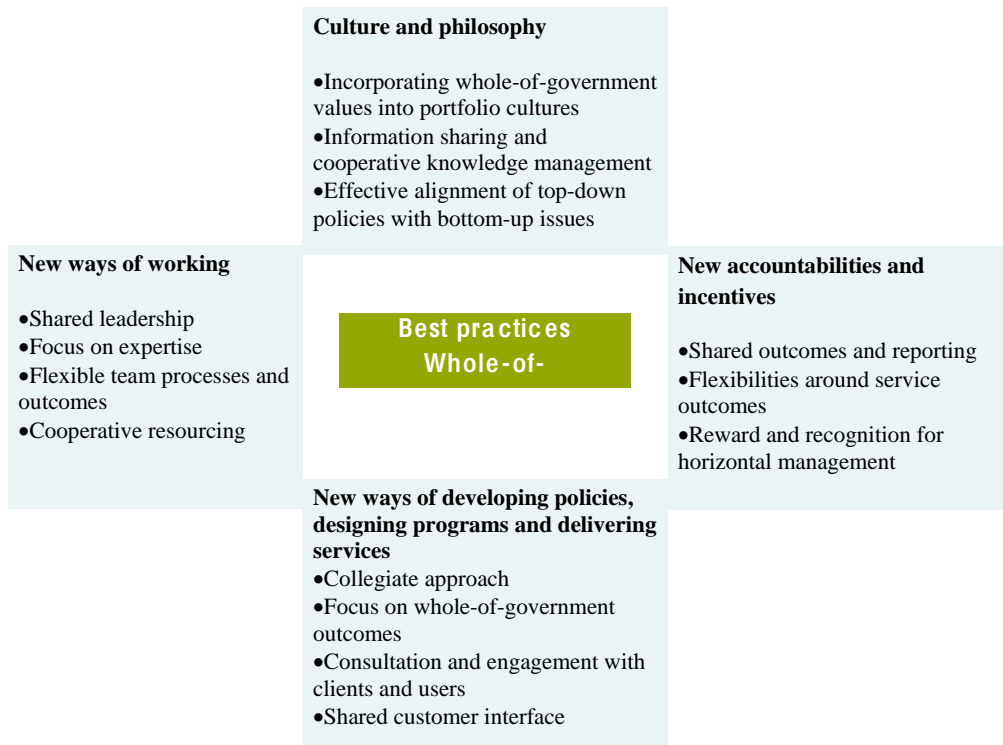


Figure 3: Best Practices, WOG approach  
 Source: T Ling, *Joined up government - A review of national and international experiences*

### Northern Committees

While the WOG concept was not officially introduced in Canada until 2002,<sup>59</sup> many organizations already understood the advantages of applying such an approach to the

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<sup>59</sup> “Treasury Board first introduced the whole-of-government framework in 2002 to map the contributions of departments, agencies and Crown corporations that receive appropriations and it has evolved through departmental consultations over the years. Canada’s Performance 2002 is based on the foundation set out by the Management, Resources and Results Structure (MRRS), so that it can be linked to the financial and non-financial performance data being collected in departments and agencies. In short, the whole-of-government framework is designed to improve reporting to Parliament by helping parliamentarians understand overall spending, performance and planning information high-level priorities of Government, which departments are working on related outcomes and where to find the departmental details they need.”

Treasury Board of Canada Secretariat, *Whole of Government Framework* (Ottawa: Canada Communication Group, May 2007), [http://www.tbs-sct.gc.ca/pubs\\_pol/dcgpubs/mrrsp-psgrr/wgf-cp\\_e.asp](http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/mrrsp-psgrr/wgf-cp_e.asp), Internet, accessed 24 March 2008, n.p.

North, including the Joint Task Force North. Unfortunately, the conclusion of the Cold War had marked the end of Canada's interest in the North and its security.<sup>60</sup> Huebert argues that the only time "when the Government did give any consideration to the role of Canadian North in the emerging new international system, it was in the context of new multilateral institutions."<sup>61</sup> There is now however a resurgence of interest in the North, and some of the organizations that formed over the last decade display many of the WOG framework's best practices. A review of the two most important committees will show that it would not take much to establish such concept in the North.

Established by the Ottawa Declaration in 1996, the Arctic Council is a "high level intergovernmental forum, which promotes cooperation, coordination and interaction among the eight Arctic members."<sup>62</sup> In addition to the members, six Arctic indigenous communities are considered Permanent Participants on the Council and six non-arctic states are officially sanctioned as observers. The Council meets twice a year and discusses issues related to the environment, social issues and the economic development of the Arctic region. The Council cannot address security related issues because the United States government placed a clause in the founding document to ensure that international organizations would not limit their freedom of action regarding the Arctic

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<sup>60</sup> Department of Foreign Affairs and International Trade Canada, *The Northern Dimension of Canada's Foreign Policy* (Ottawa: Canada Communication Group, 2000), [http://www.dfait-maeci.gc.ca/circumpolar/ndfp\\_rpt-en.asp#11](http://www.dfait-maeci.gc.ca/circumpolar/ndfp_rpt-en.asp#11), Internet; accessed 19 February 2008, n.p.

<sup>61</sup> Robert Huebert. "Renaissance in Canadian Arctic security," *Canadian Military Journal*, Volume 6, Number 4, (Winter 2005-2006), 22.

<sup>62</sup> Arctic Council. *About Arctic Council*. (Website, 2008), <http://Arctic-council.org/article/about>, Internet; accessed 19 February 2008.

security.<sup>63</sup> Despite this, the forum was an excellent platform for launching a WOG approach. In particular, Anawak participated in the ongoing work of the Arctic Council and directly consulted with various levels of government and more importantly, Northern communities to understand their needs and how they could be translated into a Canadian circumpolar agenda.<sup>64</sup> However the government commitment to circumpolar affairs was called into question with the cancelling of the position of the Ambassador in 2006 to be replaced by a senior bureaucrat from Indian and Northern affairs Canada (INAC).<sup>65</sup> Other limitations to the establishment of a WOG approach included the absence of cooperation with Northern communities. Not only are these communities not represented, but this Council addressed issues impacting Arctic members at the international level only.

A small number of government officials recognized the strategic importance of the North at the national and regional levels and the implications of the inaction of government in the areas of sovereignty, human and environmental issues and security. In 1999, Colonel

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<sup>63</sup> Rob Huebert, *The Rise and Fall (and Rise?) of Canadian Arctic Security?*, Defence Requirements for Canada's Arctic, Vimy paper 2007, The Conference of Defence Associations Institute, 14.

<sup>64</sup> Indian and Northern Affairs Canada, *Working Together: Strengthening Global and Circumpolar Cooperation* (Ottawa: Canada Communication Group, 2004), [http://www.ainc-inac.gc.ca/pr/pub/indigen/wkin\\_e.html](http://www.ainc-inac.gc.ca/pr/pub/indigen/wkin_e.html), Internet; accessed 19 February 2008, n.p.

<sup>65</sup> "Circumpolar ambassador job axed," *CBC News*, 3 October 2006, <http://www.cbc.ca/canada/north/story/2006/10/03/circumpolar-cuts.html>, Internet; accessed 18 February 2008 and "Dion slams 'use it or lose it' Northern strategy," *CBC News*, 20 December 2007, <http://www.cbc.ca/canada/north/story/2007/12/20/dion-north.html>, Internet; accessed 18 February 2008.

On 20 Dec 2007, the Liberal Leader Stephane Dion slams the "use it or lose it" Harper's Northern strategy. He described to CBC News the move "to abolish the diplomatic position of ambassador for circumpolar affairs in 2006 as a step to the wrong direction."

(retired) Pierre LeBlanc and six government representatives created a consortium to exchange information and create cooperation between the federal and territorial governments. This consortium evolved into the ASWG, which grew from sixteen to sixty representatives from various governmental organizations and agencies who meet twice a year to discuss Arctic security issues, perspectives and common concerns. At its 16th meeting, held in May 2007, the ASWG addressed the topic of the International Polar Year, a two-year program (from March 2007 to March 2009) of science, research and education focused on climate change, and how that program will impact the environment and people living in Northern communities. The ASWG also last year led Operation Narwhal<sup>66</sup> so as to have a better comprehension of the role and ability of each participating organization. The Commander of Joint Task Force North, BGen Whitecross, said that “the genesis of Operation Narwhal came from ASWG. It gave ... the opportunity to figure out how we co-operate together, who we call when something happens, where we are duplicating efforts, and where are the gaps in our capabilities.”<sup>67</sup> While not formally identified as a WOG initiative, the ASWG does in many ways meet WOG best practices criteria.

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<sup>66</sup> “The Exercise NARWHAL series is part of the Canadian Forces strategic collective training plan. The first of this series began in 2002; Operation NARWHAL 07 will complete the series. Exercise NARWHAL was designed to exercise Canadian Forces Northern Area, now known as Joint Task Force (North), in the conduct of domestic operations in Canada’s Arctic. Operation NARWHAL 07 occurred in the Northwest Territories April 16-27, 2007 and was designed to exercise Joint Task Force (North) in the conduct of domestic operations in support of other government departments. This operation involved about 500 military personnel and was conducted with the participation of other federal departments, territorial government and the private sector.”

Department of National Defence, *Exercise Narwhal Series* (Ottawa: Canada Communication Group, 2007), [http://www.dnd.ca/site/newsroom/view\\_news\\_e.asp?id=2254](http://www.dnd.ca/site/newsroom/view_news_e.asp?id=2254), Internet; accessed 18 February 2008, 30.

<sup>67</sup> Trevor Wales, “Working group talked Arctic security,” *Circumpolar Musing*, [http://dl1.yukoncollege.yk.ca/agraham/stories/storyReader\\$4198?print-friendly=true](http://dl1.yukoncollege.yk.ca/agraham/stories/storyReader$4198?print-friendly=true), Internet; accessed 18 February 2008 and Department of National Defence, *Exercise NARWHAL Series* ...

The ASWG acts as a forum to share information and explain each other's responsibilities thereby reducing the likelihood of duplication of effort. Adopting these cultural and philosophical principles is one of the signs that the ASWG is acting as an unintentional WOG forum. A second indicator is the concern for "providing for the coordination of policies and planning activities."<sup>68</sup> Because of its isolated location, the Canadian North is an ideal location to bring all players together and thus offer one of the most important advantages of the WOG concept, i.e., the benefits that come from working as a single entity. In contrast to more structured committees, the flexibility of the ASWG organization allows all members to exercise their leadership in their own area of expertise. In addition, most agencies operating in the North have limited assets and experience, and by working together in a forum such as the ASWG, the whole is stronger than its parts.<sup>69</sup> Thirdly, the structure of the ASWG is ideal for the sharing of accountability and commitment. More specifically, the intent is not to demonstrate who has the lead or who is more important but how the entire community can work as a team for the best outcome. As BGen Christine Whitecross observed, "The Team North approach to addressing the security concerns of the Arctic is imperative because no single department, federal or territorial, works independently in the North; collectively, success will be achieved and the Government of Canada's mandate will be fulfilled."<sup>70</sup> Finally, the broad-based nature of ASWG makes it an ideal forum to develop policies and to

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<sup>68</sup> Rob Huebert, "Renaissance in Canadian Arctic...", 22.

<sup>69</sup> Department of national Defence, "16th Meeting of the Arctic Security Working Group," *Nation Talk*, Joint Task Force North, 16 May 2007, <http://www.nationtalk.ca/modules/news/article.php?storyid=1475>, Internet; accessed 18 February 2008.

<sup>70</sup> *Ibid.*, n.p.

design programs that will provide the best service to the community. By including academic and representatives of various Northern Aboriginal groups, the ASWG allows for a collegial approach that maximizes expert input and engagement. This approach was so positive that territorial officials started working together to develop their own security and sovereignty policies.<sup>71</sup> However, since this working group is chaired at the regional level by the military, the focus is limited to security issues and therefore does not allow for a WOG approach with a national perspective. The success of the ASWG makes a strong case for the government to consider using it as a model for the establishment of a national WOG approach led at the federal level.

#### Canada's Whole-of-Government Approach

While many small steps have been taken over the last century, one of the first explicit formal introductions of a WOG strategy was made by Senator Hugh Segal in his address to the Security and Defence Forum in Ottawa on 24 April 2001. Senator Segal argued that the “cabinet process as ... structured [did] not encourage integration between national security priorities that are rightfully discharged through existing line departments of the federal government.”<sup>72</sup> He considered that federal departments work in vertical stovepipes and with the accompanying lack of integration of initiatives. Two years later, he recommended a WOG approach to protect its citizens at home and abroad from the

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<sup>71</sup> *Discussion paper Developing a New Framework for Sovereignty and Security in the North*, (Governments of Yukon, Northwest Territories, and Nunavut, April 2005), [http://www.gov.nt.ca/research/publications/pdfs/sovereignty\\_and\\_security\\_in\\_the\\_north.pdf](http://www.gov.nt.ca/research/publications/pdfs/sovereignty_and_security_in_the_north.pdf), Internet; access 19 February 2008.

<sup>72</sup> Hugh D Segal, “National Security, The Public Interest and how we govern: A time for Innovation,” *Canadian Military Journal*. Volume 2, number 2, summer 2001, [http://www.journal.forces.gc.ca/engraph/vol2/no2/pdf/39-42\\_e.pdf](http://www.journal.forces.gc.ca/engraph/vol2/no2/pdf/39-42_e.pdf); Internet; accessed 19 February 2008, 40.

threat of terrorist attacks. He called for “an integrated geopolitical strategy that unifies diplomacy, foreign aid, intelligence and military deployment ... [that] ... must be coordinated with partners and should be accompanied by Canadian diplomatic and aid intervention.”<sup>73</sup>

Shortly thereafter, in his 2005 International Policy Statement (IPS), then Prime Minister Paul Martin recommended deploying defence, diplomacy and development assets as a WOG approach.<sup>74</sup> This IPS includes five documents: an overview and one section each for diplomacy, development, commerce and defence. This is commonly referred to as the “3D+C” approach. As it is applied to operations, the 3D approach can be defined as follows:

...the best way for Canada to make a difference in post-conflict situations is to pursue a “3D” approach, undertaking Defence efforts to strengthen security and stability, pursuing diplomacy to enhance prospects for nation-building and reconstruction and making certain that development contributions are brought to bear in a coordinated and effective way.<sup>75</sup>

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<sup>73</sup> Hugh D. Segal, “A Grand Strategy for a Small Country,” *Canadian Military Journal*, Volume 4, number 3, Autumn 2003, [http://www.journal.forces.gc.ca/engraph/vol4/no3/pdf/02-policy\\_e.pdf](http://www.journal.forces.gc.ca/engraph/vol4/no3/pdf/02-policy_e.pdf), Internet; accessed 19 February 2008, 4.

<sup>74</sup> Department of Foreign Affairs and International Trade, *Canada's International Policy Statement: A Role of Pride and Influence in the World - Overview* (Ottawa: Canada, 2005, Forward), <http://geo.international.gc.ca/cip-pic/ips/ips-overview2-en.aspx>, Internet; accessed 19 February 2008, n.p.

<sup>75</sup> Rob Huebert, “Renaissance in...”, 22.

The Provincial Reconstruction Team (PRT) in Afghanistan<sup>76</sup> is a good example of the CF working with other government agencies and departments and the private sector to meet the government's priorities and intent and acting on the basis of a WOG strategy. The rationale behind this approach is two-fold. The first motive is based on the principle of economy of efforts. The objective is to avoid duplication of efforts, to eliminate interference with the plans of other departments and to reduce the waste of energy and resources. This is important considering the number of actors who must coordinate their activities in diplomacy, defence, development and commerce.<sup>77</sup> The second motive is related to the interdependence between the military and civilian actors: "Without security, development cannot happen, and without development, lasting security cannot be sustained."<sup>78</sup>

It is interesting to note that the former government applied a WOG concept to international policy but did not explicitly refer to such an approach for resolving security issues at the national level. The IPS stipulates that the Department of Foreign Affairs and

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<sup>76</sup> "PRT is small joint civil-military team that first began deploying across Afghanistan in early 2003, in an attempt to expand the legitimacy of the central government, enhance security, and facilitate reconstruction. Although only lightly armed, their very presence is intended to serve as a deterrent to insurgents and criminals who have been active in these areas and as a catalyst by enabling local government authorities, the UN, and NGOs to operate. Each of the individual implementing countries has developed its own PRT designs in an attempt to customize the concept to meet local conditions—with varying degrees of success."

<sup>77</sup> Alfred Owen and James McMenemy Savage, "Peacebuilding in Afghanistan: The Case of the Canadian Provincial Reconstruction Team 2005/06," (Royal Roads University, master's dissertation, 2006), <http://www.royalroads.ca/about-rru/the-university/news-events/convocation/2006/fall/faculty-social-applied-sciences-2006-fall.htm>, Internet; accessed 18 February 2008, 19.

<sup>78</sup> David Peabody, "The Challenges of Doing Good Work: The Development of Canadian Forces CIMIC Capability and NGOs," (Conference of Defence Associations Institute, October 2005), <http://www.cda-cdai.ca/symposia/2005/Peabody.pdf>, Internet; accessed 18 February 2008, 4.



International Trade (DFAIT), the Department of National Defence (DND) and the Canadian International Development Agency (CIDA) would work jointly in order to meet Canada's intent to assist failed states.<sup>79</sup> The argument advanced for the joint approach was the fact that the failed and failing states are a threat to Canada's national interests and security. The IPS further defines the WOG as "a doctrine of activism that over decades has forged our nation's international character that will serve us even better in today's changing world."<sup>80</sup> The same principles could be applied for domestic issues and specifically for the emerging issues in the Canadian North. However when looking at the application of "3D+C" in the IPS section on Commerce, the offices of international affairs at the University of Victoria notes that there is no "... re-examination of the impacts of free trade, how this WOG approach will balance human rights, or development commitments and commercial interests."<sup>81</sup> What this means is that there was little forethought given to the application of WOG as a viable framework on a national basis and virtually no regard to using a WOG strategy to address economic implications. DFAIT is responsible for the development of an international WOG policy and there is currently no indication in the literature of an intention to develop such policy for domestic use. Perhaps "3D+C" will be addressed by the "Canada First" document but it cannot be confirmed since it is not available at this time.

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<sup>79</sup> Department of Foreign Affairs and International Trade, *Canada's International Policy Statement: A Role...*, n.p.

<sup>80</sup> *Ibid.*, n.p.

<sup>81</sup> *An Analysis of the International Policy Statement: voices of concern and praise for the new approach to Canadian Foreign Policy*, University of Victoria, November 2005, [http://oia.uvic.ca/feature/11\\_2005/](http://oia.uvic.ca/feature/11_2005/), Internet; access 19 February 2008, n.p.

In December 2004, just before the IPS, Harper and the three territorial First Ministers announced their intention to develop a Northern Strategy and that INAC, as the lead federal department, would coordinate federal input and work with the territories on this first jointly developed initiative.<sup>82</sup> In the Speech from the Throne, three years later, another government announced:

[the] Government will bring forward an integrated Northern strategy focused on strengthening Canada's sovereignty, protecting our environmental heritage, promoting economic and social development, and improving and devolving governance, so that Northerners have greater control over their destinies.<sup>83</sup>

Four years later, the complexity of the issues, the number of players involved and, most importantly, the lack of priority and assigned resources mean that a Northern Strategy is not even close to completion.<sup>84</sup> This is somewhat understandable given that there is only a small section in INAC that must deal with seven circumpolar states, Inuit organizations, First States communities, three territorial governments and fifteen other federal departments. In its 2006 report on plans and priorities to Treasury Board, INAC observed that its biggest challenge is to coordinate the function between all of the

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<sup>82</sup> Indian and Northern Affairs Canada, *DPR 2004-2005* (Ottawa: Canada Communication Group), [http://www.tbs-sct.gc.ca/rma/dpr1/04-05/INAC-AINC/INAC-AINCd4501\\_e.asp](http://www.tbs-sct.gc.ca/rma/dpr1/04-05/INAC-AINC/INAC-AINCd4501_e.asp) , Internet; accessed 19 February 2008, n.p.

<sup>83</sup> Government of Canada, *Speech from the Throne, 2008* (Ottawa: Canada Communication Group), <http://www.sft-ddt.gc.ca/eng/media.asp?id=1364> , Internet; accessed on 20 February 2008, n.p.

<sup>84</sup> Canadian Arctic Resources Committee, "Renewing the Northern Strategy", *Northern Perspectives*, Volume 30, Number 1, Winter 2006, [http://www.carc.org/pubs/v30no1/CARC\\_Northm\\_Perspctves\\_Winter\\_2006.pdf](http://www.carc.org/pubs/v30no1/CARC_Northm_Perspctves_Winter_2006.pdf), Internet, accessed 24 March 2008, 1.

interested parties.<sup>85</sup> To date, there are not enough resources assigned and no methodology in place to integrate and harmonize numerous policies and programs and take the lead for a WOG approach.

Since the lead to develop a WOG policy was given to DFAIT and because the project was carried out within a foreign policy framework, little attention was given to using WOG in the domestic or national setting. No federal department has been assigned responsibility for developing and coordinating a national WOG and so each of the federal departments and agencies with an interest or responsibility for Northern issues is, in large measure, operating independently. The military Joint Task Force North theme has taken the lead for the ASWG. However, this organization does not craft policy (nor should it) and is not capable of capturing all national issues. Furthermore, the primary responsibility for dealing with critical associated issues such as sovereignty and environmental protection, organized crime, and the smuggling of drugs or humans rests with other federal departments. While the CF operation is affected in a number of ways by all these factors, it should only play a secondary role.<sup>86</sup>

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<sup>85</sup> Indian and Northern Affairs, *Canada and Canadian Polar Commission* (Ottawa: 2005-2006 Plans and Priorities), [http://www.tbs-sct.gc.ca/dpr-rmr/0506/INAC-AINC/inac-ainc04\\_e.asp](http://www.tbs-sct.gc.ca/dpr-rmr/0506/INAC-AINC/inac-ainc04_e.asp), Internet; accessed on 20 February 2008, 7 and 14.

<sup>86</sup> See for instance comments from the Liberal Leader, Stephane Dion, when he blamed Harper's government to put too much emphasis on the military to ensure sovereignty and security in lieu of using diplomacy.

"Dion slams "use it or lose it" Northern strategy", *CBC News*, 20 December 2007, <http://www.cbc.ca/canada/north/story/2007/12/20/dion-north.html>, Internet; accessed 19 February 2008 and Department of National Defence, *Defence policy Statement* (Ottawa: Canada Communication Group, 2008), [http://www.forces.gc.ca/site/reports/dps/main/toc\\_e.asp](http://www.forces.gc.ca/site/reports/dps/main/toc_e.asp), Internet; accessed 18 February 2008.

To build a WOG approach, one needs a common goal or theme that will attract and encourage all actors to work together. For example, the common theme in Afghanistan is the development of the rogue state while the one for the ASWG is security. It is therefore necessary to find an entity that can support the theme for the Arctic, namely economic development. As will be explained in the next Chapter, the newly created Crown Corporation, PPP Canada Inc., could take the lead for establishing a WOG in the North by using ASWG as a model.

#### **CHAPTER 4 - PUBLIC PRIVATE PARTNERSHIP, THE FIRST STEP**

"By increasing our use of P3s and taking into account contributions by other levels of government, we should be able to leverage a \$100-billion investment in infrastructure."

Finance Minister Jim Flaherty, 2008 Federal Budget

Governments around the world are focusing on new ways of financing the ever-increasing costs of capital and infrastructure projects and to deliver services in the most efficient way. Not only do many states have a long list of needed infrastructure, most of them have postponed maintenance of the existing structures and are facing a large backlog. The current municipal infrastructure maintenance backlog in Canada is estimated at \$123B while the new infrastructure needs are predicted to amount to \$115B. The total national infrastructure deficit will almost double (\$400B) by 2020 unless action

is taken in the meantime.<sup>87</sup> Most governments are reaching a point where it is almost impossible to fully fund such projects without taking drastic fiscal measures or severely curtailing other programs.

As a backdrop to the position that Public/Private Partnership (PPP) programs can be a foundation for a WOG approach to deal with the needs of Northern communities, this section will define PPP, examine embryonic PPP projects in the CF and, finally, argue that the newly created Crown Corporation, PPP Canada Inc., could be the ideal mechanism to bring all Northern actors together in order to implement Canada's commitment to the Arctic in an economic and timely manner.

#### PPP program

The Canadian Council for Public Private Partnerships describes PPP as a program that brings together the “strengths of both the public and private sectors... maximiz[es] efficiencies of private enterprise... provide[s] much needed capital to finance government programs ... thereby freeing public funds for core economic and social programs.”<sup>88</sup> In other words, PPP is a public/private partnership established to deal with the design, construction, financing, operation and maintenance of public infrastructure. PPP goes beyond simple outsourcing or contracting. Funding for the initial capital cost of the project and subsequent operation and capital maintenance expenses may be funded in a

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<sup>87</sup> Tim Philpotts and Gord Willcoks, “Public-Private partnership in Canada.” Presentation to legislators and students in California,” (4/5 March 2008), [http://www.pppcouncil.ca/pdf/cali\\_pres\\_022008.pdf](http://www.pppcouncil.ca/pdf/cali_pres_022008.pdf), Internet; accessed 26 March 2008, n.p.

<sup>88</sup> *Ibid.*, n.p.

variety of ways, including lease payments, user fees and pre-established fund transfers.

Figure 4 shows a spectrum of partnership models that exist depending on the level of public or private sector participation.

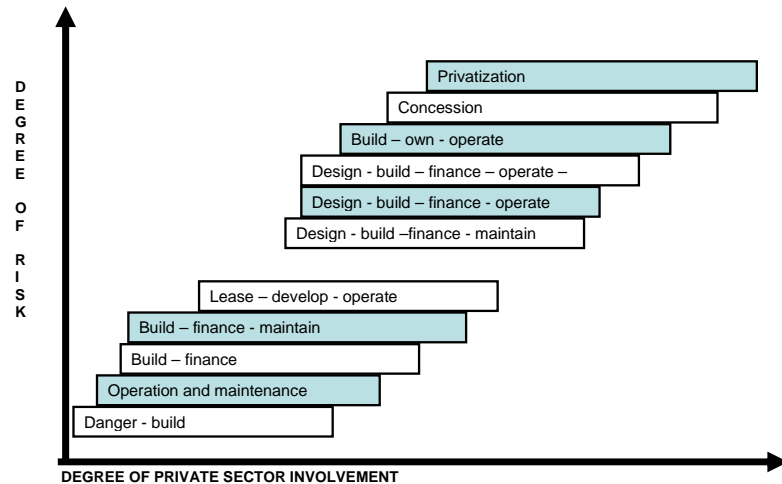


Figure 4: PPP Impact on Private Sector  
Source: Tim Philpotts and Gord Willcocks, "Public-Private..."

Canada is an international leader in PPP, with the first such project being the construction of Terminal 3 at Toronto's Pearson Airport. There have been more than 60 major PPP projects since then, which have ranged from government infrastructure projects (schools, hospitals, recreation facilities and airports) to public transit (roads, bridges and ports). The advantages of a PPP structure are numerous. From a fiscal point of view, because this model attracts an immediate investment of private capital there is a corresponding reduction in the immediate requirement for an infusion of public funds and thus allows the government to reap the benefits of long-term capital financing. That is, the government can manage its cash flow by delaying making any payments until the facility

is fully operational and by ‘leveraging’ public dollars over a term of years. This means that public funds are more readily available for other critical economic and social programs because of the leveraging opportunities. From the GDP perspective, this model creates growth opportunities because it allows for the transferring of expertise to the private sector and the increase in job creation that comes from increased sales. The collaborative effort that marks a PPP enterprise results in an optimal sharing of assets and information, and the improvements that the PPP creates for the specific regional economy increases presence of the workforce in the targeted locations.<sup>89</sup>

While this paper does not address the specific details of such process, it must be mentioned that there is also a school of thought against PPP. Although the general view that governments should seek "value for money" has been widely accepted, there have been continuing disputes over whether the guidelines designed to achieve these goals are appropriate, and whether they have been correctly applied in particular cases. A balanced consideration must precede the decision to use the PPP approach to implement a public initiative. For example, once financial resources have been committed and the project launched, the “private” partner will not be (and cannot be) amenable to a sudden decision to redirect efforts to a totally different endeavour. That is, there is not the flexibility for a change in direction that an elected government may want or need to take. Another consideration is the appropriate “profit” margin: it must be possible to create the conviction in the minds of the public that a fair deal has been struck. Finally, there must be a solid agreement on the term of the partnership, not only for the private partner to

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<sup>89</sup> The Canadian council for Public-Private partnership, “Why Public-Private Partnerships?” [http://www.pppcouncil.ca/aboutPPP\\_why.asp](http://www.pppcouncil.ca/aboutPPP_why.asp), Internet; accessed 19 February 2008, n.p.

make their plans but also for the WOG planning that will complement or take over the PPP endeavour. It would therefore be important to develop a list of criteria for the North and use them in a decisional matrix to determine which project would be beneficial under PPP.

#### PPP in the CF

DND is well acquainted with the idea of using private resources to meet public needs. For many years, with an ever-shrinking budget in the post-Cold War era, the CF resorted to Alternate Service Delivery mechanisms to streamline operations and save money. One example is in the changes made to support services at 5 Wing Goose Bay where all services were contracted out. Of the 432 military members originally posted to 5 Wing, only 12 core positions remained after the ASD contract was awarded.<sup>90</sup>

The NATO Flying Training in Canada (NFTC) initiative is another groundbreaking example of outsourcing that captures the spirit of PPP. In December 1994, Bombardier Military Aviation Training made an unsolicited proposal to provide jet pilot training in Canada.<sup>91</sup> Under the multi-party agreement that followed from this proposal, the CF provides the use of 15 Wing Moose Jaw, its services, training standards, airspace and air traffic control. Participating states provide instructors and students, while Bombardier

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<sup>90</sup> Information from the author's previous employment as Wing Personnel Officer at 5 Wing Goose Bay from 1993 to 1998.

<sup>91</sup> "A formal offer to host NATO Joint Jet Pilot Training beyond the year 2005 was submitted to NATO on May 1, 1995 based on a business case analysis and the NFTC was created in 2000." Canada. Department of National Defence. *NATO Flying Training in Canada: An Innovative Solution for NATO Flying Training Requirements* (Ottawa: Canada Communication Group, 2000), [http://www.forces.gc.ca/site/Newsroom/view\\_news\\_e.asp?id=75](http://www.forces.gc.ca/site/Newsroom/view_news_e.asp?id=75), Internet, accessed 19 February 2008.



provides simulation systems and simulator instructors, aircraft, infrastructure, and equipment maintenance. Without this program, the CF would have not been able to afford the acquisition of new training airplanes. This PPP partnership provides “first-class training program that takes advantage of new and up to date aircraft.”<sup>92</sup>

RADARSAT-2 is another PPP project affecting the security of the Canadian Arctic. “With the successful launch of Canada’s RADARSAT-2 on December 14, 2007, the Department of National Defense’s Polar Epsilon project took another step towards strengthening Canada’s sovereignty in the Arctic.”<sup>93</sup> This project also demonstrates Canada’s commitment to support advanced research and encourage science development and technology by increasing collaboration between the government and the industry through the establishment of PPP programs.<sup>94</sup> In late 1990s, the Canadian Space Agency transferred ownership of the satellite to MacDonal, Dettwiler and Associates Ltd. (MDA). Under this PPP agreement, MDA has full ownership of the technology, satellite and data and is responsible for the full operation of the satellite and the management of its operation on the ground. The government, through the Canadian Space Agency, is responsible for the construction cost and the launch of the satellite.<sup>95</sup> Overall, Canada paid 85% of the total cost (\$524M) of the project. In exchange, MDA guarantees that

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<sup>92</sup> Dave Andrews, “It all starts here - NATO Flying Training in Canada,” *Maple Leaf*, Vol. 9, No. 26, 12 July 2006, [http://www.forces.gc.ca/site/community/mapleleaf/article\\_e.asp?id=2922](http://www.forces.gc.ca/site/community/mapleleaf/article_e.asp?id=2922), Internet; accessed 18 February 2008.

<sup>93</sup> LCdr Robert Quinn. “Project Polar Epsilon,” email, 18 January 2008

<sup>94</sup> Canadian Space Agency, *RADARSAT 2 – overview* (Montreal: Canada Communication Group), 23 November 2007, [http://www.space.gc.ca/asc/eng/satellites/radarsat2/inf\\_over.asp](http://www.space.gc.ca/asc/eng/satellites/radarsat2/inf_over.asp), Internet; accessed 18 February 2008, n.p.

<sup>95</sup> *Ibid*, n.p..

Canada will have access to the world's most advanced radar imaging satellite on a priority basis at the time of emergencies. It is expected that Canada will recover its \$445M investment through the supply of RADARSAT-2 data during the lifetime of the mission.<sup>96</sup> While the initial investment is significant, the deal is financially sound when the cost of alternative measures to maintain surveillance throughout the Arctic are considered. Other government departments and agencies will also benefit from this program. This example further demonstrates that one Department's initiatives can benefit the implementation of the programs of other department and hence underscores the benefits and advantages of a comprehensive WOG strategy.

#### PPP Canada Inc.

The budgets tabled since 2006 disclose the support for the Northern strategy which includes the purchase of new Arctic offshore patrol ships and the construction of a deep-water port in the Arctic (estimated cost \$7.4B). There are also programs to be implemented to protect the Northern environment (cost \$77M). A proposed housing program is in the works that will support economic growth and the life-style in specified areas (cost \$195M).<sup>97</sup> The current government has also announced, in its 2008 budget, new approaches to finance and deliver programs through PPP. In particular, a \$1.257B fund has been created to support PPP projects and the creation of a PPP office with the

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<sup>96</sup> Michael Byers, "Don't sell Off this satellite," *The Tyee*, 7 March 2008, <http://thetyee.ca/Views/2008/03/07/Radarsat-2/>, Internet; accessed 9 March 2008, n.p.

<sup>97</sup> Department of Finance, *2008 Budget announcement* (Ottawa: Canada Communication Group, 2008), <http://www.budget.gc.ca/2008/plan/chap4a-eng.asp>, Internet; accessed 18 March 2008, Chapter 4.

intent of being internationally recognized as a PPP leader.<sup>98</sup> The newly established Crown Corporation, PPP Canada Inc., is responsible for the promotion of PPP contracts exceeding \$50M which are directed to the federal infrastructure plan, and where financing arrangements are to come under the PPP Fund. This office will manage the \$33B “Building Canada Plan” which is directed to fixing current infrastructure and building new roads, public transit, bridges, sewer and water treatment systems, ports, etc. over the next seven years.<sup>99</sup>

Colonel Denys Guerin makes the stark argument that “It will be too late to debate a national strategy when the first super tanker sails through an ice-free NWP.”<sup>100</sup> A coordinated WOG approach could ensure that socio-economic and environmental issues are addressed while eliminating duplication of effort on the part of all the Northern players. Using PPP projects as a precursor to a WOG approach will ensure that federal, provincial and territorial governments do not have to take on the cost of meeting all demands since private sector delivery of some of the necessary infrastructure will mitigate the cost to the taxpayer. The newly created PPP Canada Inc. could be used to put in place the proposed recommendations.

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<sup>98</sup> *Ibid.*, Chapter 3.

<sup>99</sup> *Ibid.*, Chapter 3.

<sup>100</sup> Col Denys Guerin. “‘True North Strong And Free’ - The Need For A National Strategy And Whole-Of-Government Approach To Protect Canada’s Arctic Interests.” (Toronto: Canadian Forces College National security Studies Course Paper, 2006), 25.

## **CHAPTER 5 - RECOMMENDATIONS**

“Perhaps one of the greatest threats to Canada’s national interests in the North is that the renewed enthusiasm by Canadians for the North will fade as Northern matters clash with other priorities; health care, education, the economy and the fight against terrorism; all compete for government’s attention and dollars.”<sup>101</sup> The newly-created PPP Canada Inc. reflects the government’s recognition of two important advantages of the public/private joint venture approach. First, PPP programs attract private sector investors and

estimated at \$9.06M but a three-berth port could easily reach \$100M. Construction is expected to start early 2010, with an end date of 2015.”<sup>102</sup> The CF Evaluation Team informed the Chief of Maritime Staff that basing the project exclusively on a military (national security) concept of operations would be problematic since a dedicated military port would be sure to run into resistance from the local population. The team also pointed out that a shared civil/military partnership would be welcome, since the municipality has no funding for the port.<sup>103</sup>

A PPP approach to the construction of the port benefits from financial, project management and integration perspectives. Firstly, the port is already being used for both private and the public sectors, and that could continue. Secondly, operating as a PPP project would reduce a government expenditure of \$100M in capital funds over a period of approximately 5 years. Thirdly, with commercial vessels using the facility, part of its infrastructure costs could be financed by private-sector companies, which could be repaid through port tariffs. A fourth added benefit is the expectation that a PPP would speed up the management process and construction project schedule. And of the highest significance, such a project if well defined could be expanded to include needed WOG infrastructures including those needed by Fisheries and Oceans Canada, the Coast Guard, the RCMP and DND to name a few. In a nutshell, this PPP project would increase the

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<sup>102</sup> “Harper announces Northern deep-sea port, training site,” *CBC News*, 11 August 2007, <http://www.cbc.ca/canada/story/2007/08/10/port-north.html>, Internet; accessed 19 February 2008.

<sup>103</sup> Department of National Defence, *Visit to Iqaluit, Nunavut, 12-14 July 2006*, Report of the CMS RECCE Team, (3371-7600-1 (DMI 2/RDMIS# 80805), 31 Jul 06), 3.

presence in the area, promote collaboration between all actors and encourage economic development.

### Training Centre

The government has announced the establishment of a multi-purpose Canadian Forces Arctic Training Centre in Resolute Bay. This centre will be used for cold-weather training and act as a staging area for southern military and Canadian Rangers to conduct year-round patrols in the Arctic. It is anticipated that the government will initially inject \$4M and use existing infrastructure at the site. The Minister of National Defence intends to complement the center with additional buildings in the future. The personnel resources, with an estimated annual cost of \$2 million, will be managed by twelve persons from the Joint Task Force North. The intent is to have up to 100 army personnel being trained at any given time.<sup>104</sup> It is expected that the Training Centre will significantly increase Canadian military and civilian operational expertise in the Arctic and the overall Canadian military presence in the North.

Again, this project would be ideal for a PPP consideration. The primary goal of the Centre is “to provide a multi-use facility capable of supporting a command and control centre for regional military and civilian disaster-response operations” which includes the participation of numerous Northern actors at all levels.<sup>105</sup> Aside from the Rangers, the

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<sup>104</sup> “Northerners divided over proposed Antimilitary facilities,” *CBC News*, 13 August 2007, <http://www.cbc.ca/canada/calgary/story/2007/08/13/Arctic-reax.html>, Internet; accessed 18 February 2008.

<sup>105</sup> Government of Canada, *Backgrounder, Expanding Canadian Forces Operations in the Arctic* (Ottawa: Canada Communication Group, 10 August 2007), [http://www.pm.gc.ca/includes/send\\_friend\\_eMail\\_print.asp?id=1785](http://www.pm.gc.ca/includes/send_friend_eMail_print.asp?id=1785), Internet; accessed 21 February 2008.

CF has no Arctic expertise to train its members and depends largely on the cooperation of Northern experts such as indigenous people and civilian scientists. For example, Operation NUNALIVUT 08 will include “air surveillance and Canadian Rangers patrols along the Northern most permanent settlement in the world and will assist International Polar Year scientists to conduct research on ice shelves.”<sup>106</sup> A PPP approach would be practical since DND and the Department of Natural Resources Canada currently own the existing federal government buildings and the land, facilities and maintenance responsibility could be transferred to one or more private sector companies who could, in exchange, manage the operation and future development of the site to include additional players as arranged. By doing so, operating costs and capital investment can be shared amongst users, including the private industry, and consequently reduce the overall cost to the government.

Financially, this PPP project would again reduce the initial government capital expenditure, in this case by \$4M. Since other organizations would use this facility, collaboration would increase between actors. In addition, each user could, on a cost recovery basis or fee for services, finance part of the infrastructure development. The Arroyo Center,<sup>107</sup> the only federally-funded research and development center in the

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<sup>106</sup> “Canada Asserts Sovereignty in the High Arctic,” *vivelecanada.ca*, 27 March 2008, <http://www.vivelecanada.ca/article/235929792-another-military-exercise-in-the-Arctic>, Internet; accessed 11 April 2008.

<sup>107</sup> The Arroyo Center is located in Santa Monica CA. This Centre assists Army Materiel Command by creating a strategy for managing the development of advanced technologies. A review of this partnership trial showed that the Army has had significant opportunities to do collaborative research with industry and to generate revenues from research and development (R&D) opportunities. The study concluded that this PPP project provided numerous additional advantages such as better infrastructure assets.

United States is operated as a PPP entity. It has been demonstrated that PPP allows collaboration between participants and creates opportunities to leverage and create assets, reduce costs and create new assets and generate new sources of revenues.<sup>108</sup>

#### Unmanned Aerial Vehicles (UAVs)

The government also announced the acquisition of a fleet of remote-controlled aircraft to patrol the Arctic. The UAVs are to be equipped with cameras, radar, radios, and electronic sensors. They will fly surveillance flights over the Canadian Arctic. Operators can be stationed thousands of kilometres away. UAVs are ideal tools for scientific research, resource exploitation and/or search and rescue operations.

UAVs can serve a variety of uses from public responsibility (Canadian Forces, Coast Guard, and other requirements from Federal, Provincial and municipal governments) to private sector economic development (such as resources exploitation). Potentially attractive to a variety of interested parties, the UAVs could be managed like RADARSAT-2 where industry would own the equipment and clients, including the CF, could have predetermined time allocated. This contract could also complement the agreement that the CF has with the Airborne Maritime Surveillance Division of Provincial Airlines Limited (PAL).<sup>109</sup> While this project would not increase the human

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Ike Chang et al., Use of Public-Private Partnerships to Meet Future Army Needs, Rand Monograph Report, 2003, [http://rand.org/pubs/monograph\\_reports/MR997/](http://rand.org/pubs/monograph_reports/MR997/), Internet; accessed 23 February 2008, 2-6.

<sup>108</sup> *Ibid.*, 2-6.

<sup>109</sup> Standing Senate Committee, *Canada's coastline: the longest undefended borders in the world* (Ottawa: SCONSAD, Volume 2, Part 1, Appendix III, October 2003),



presence in the North, it would promote our sovereignty through its surveillance (Canadian presence) and would increase cooperation between all Northern actors through the sharing of information. Major Richard Comtois demonstrate very well, that without strong government/industry partnership, the government will not achieve the desired effect.<sup>110</sup>

## CHAPTER 6 - CONCLUSION

The first responsibility of a government is to protect its citizens. R.J. Sutherland, stated that “security and the protection of vital national interests remain for every nation a constant preoccupation of policy.”<sup>111</sup> Prime Minister Harper mentioned that his government was committed to address Canadians directly on the challenge of protecting our free and open society with a statement on national security. The “changing world order” requires that we continuously review our environment to ensure that our security policies adapt appropriately. Lessons from recent history shows the difficulties of keeping up with the rapid security changes in the North. During the Cold War, it was possible to identify the policy rationale for Canadian involvement in the global situation. Today, “[t]he danger from a physical threat has been replaced by threats without

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<http://www.parl.gc.ca/37/2/parlbus/commbus/senate/com-e/defe-e/rep-e/rep17vol2part1-e.htm#APPENDIX%20III>, Internet; accessed 22 February 2008.

<sup>110</sup> Major Richard Comtois, “Un aéronef à rotors basculants canadien, le meilleur choix pour l’Arctique. Une approche basée sur les « effets »” (Toronto: Canadian Forces College Joint Command and Staff Programme, 2007), 63-64.

<sup>111</sup> Quoted in G.C.E. Theriault, “Reflections on Canadian Defence Policy and its Underlying Structural Problems,” *Canadian Defence Quarterly*, 22, no. 6 (July 1993), 3-10.

enemies.”<sup>112</sup> The consequences of neglecting the North may seem negligible at the moment, but there is the real possibility that inattention to the issues may be disastrous in the future.

Societal needs and interests, specially the economic factor, can serve to elevate security policies to the top of a government’s agenda. However, because of the lack of perceived physical threat and the feeling that the harsh environment in the North will continue to protect this “hidden heaven,” security policies have been subsumed in the economic policies needed to support trade. As we have seen, there are legal actions or bilateral agreements that could resolve sovereignty threats but Canada has not taken any actions to resolve these issues. The more pressing challenges are related to security, environmental and economical issues. While the government speaks about sovereignty, it admits that its electoral promises regarding the Canadian Arctic “will also benefit communities throughout the region by creating jobs and opportunities and enhancing the safety and security of the people who live [t]here.”<sup>113</sup> What is required for the North is to have cooperation between all Northern actors and increase their presence through economic development.

The WOG approach must be followed to ensure that the relationship between all the implicated organizations work in such a way that each understands the patterns of

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<sup>112</sup> Andrew F. Cooper, *Canadian Foreign Policy: Old Habits...*, 5.

<sup>113</sup> Chris Windeyer, “Resolute bay to get new Arctic military training centre,” *Nunatsiaq News*, 17 august 2007, [http://www.nunatsiaq.com/archives/2007/708/70817/news/nunavut/70817\\_414.html](http://www.nunatsiaq.com/archives/2007/708/70817/news/nunavut/70817_414.html), Internet; accessed 20 February 2008.

specific and global responsibilities and that there is profound coordination among all officials. Since most departments are not adequately funded to fully realize the various initiatives, the private sector must be brought into the equation. Industry can bring needed monetary support and provide the continuity required for stability in the area. Only when all departments are located together and share the same information, can they start working as a team and understand the roles and responsibilities of each other – the sine qua non of a WOG approach.

The newly created federal PPP Canada Inc. could assist by being a centralized focal point for all Northern actors including all levels of government, agencies, NGOs and the private sector. If this were to happen, the government would at last secure its commitment to the North while still having the fiscal resources to deal with other pressing issues such as health care, education, the economy and the fight against terrorism. Since the government has acknowledged that it remains committed to implementing a Northern Strategy, considers the WOG worth continuing and has funded the creation of PPP Canada Inc. to leverage private industry, it can be argued that all elements are there to establish the foundation of a future WOG approach to the North. It may be an opportune time for Harper's government to re-evaluate its "Canada First" plan.

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