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The Nature of the Relationship Between Industry and Defence
In Canada:
Expansion, Modification and Cooperation Regarding the Ottawa Treaty

by

Rita Forte, B.A.(Hons.)

A thesis submitted to
the Faculty of Graduate Studies
in partial fulfilment of
the requirements for the degree of

Master of Arts

Carleton University
Ottawa, Ontario
24 July 1998
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acceptance of the thesis,

**THE NATURE OF THE RELATIONSHIP BETWEEN INDUSTRY AND DEFENCE IN
CANADA: EXPANSION, MODIFICATION AND COOPERATION REGARDING THE
OTTAWA TREATY**

submitted by

Rita Forte, B.A. Hons.

in partial fulfilment of the requirements
for the degree of Master of Arts

Chair, Department of Political Science

Thesis Supervisor

Carleton University
August 31, 1998

The Hidden Covetedness of War

Mine...mine...mine -
what a dangerous path of latent wrath to walk.
I may claim a limb from your body -
or perhaps an extra half -
but for sure there will be loss of blood
before we're through

No longer yours
but mine.

Louise Fabiani
96-12-06

ABSTRACT

In Canada, DND and the defence industries did not contest the negotiations to achieve a global ban despite the stockpiles of anti-personnel mines, the entrenched military doctrine governing the Canadian Forces and the inevitable loss of manufacturing a low-technology weapon to generate revenue. By primarily examining the relationship between industry and defence in the pre-Ottawa Process and the post-Ottawa Process, four distinct reasons are offered, substantiated and analyzed to support the argumentation. October 1996 is used as the definitive line between the pre-Ottawa Process and the post-Ottawa Process. Prior to October 1996, the actors were industry, defence, rehabilitation and an NGO. Subsequent to October 1996, the actors are industry, defence, CIDA, rehabilitation, DFAIT and NGOs. The impetus to secure a signed treaty in less than fifteen months may be attributed to four definitive reasons.

PREFACE

Originally, the purpose of this study was to provide an understanding of the relationship amongst treaty designers, manufacturers of light weapons and national defence with reference to the outcomes of the negotiations which led to the final document of the Convention On The Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, for Canada. At the core of the research design project, I formulated three different questionnaires for each group of individuals possessing expertise within their field.

I conducted a review of the relevant books and journal articles which directly related to the construction of surveys using advanced questionnaire techniques. Additionally, I consulted with the Data Centre at the MacOdrum Library to locate studies which had been conducted that were related to land mines. In September 1997, I was advised that surveys relating to land mines did not exist, currently. I used these techniques to structure the expert interviews in a meaningful way.

The purpose of this step in the literature review process was to ascertain the wording of questions for government and business which had already been used in successful surveys by the academic community. For this purpose, studies held by the Inter-University Consortium for Political and Social Research were used. One of the studies was ordered from the University of Toronto and the other study was printed from an electronic format. Both offered insightful information to obtain the optimum amount of data in the shortest period of time.

For the literature review, I located specific articles from the Applied Journal of Psychology and Public Opinion Quarterly for techniques

about the physical arrangement of the survey instrument once the questions had been formulated. These sources were also useful for identifying techniques about the administration of the questionnaire to achieve the maximum response rate from the elements¹ in the sampling unit.²

Another part of the literature review included a thorough analysis of a one hundred and fourteen page annotated bibliography published by DFAIT. Additionally, I scrutinized information provided by the federal government relating to the Ottawa Process and reviewed the Estimates for DND. Generally, these sources furnished the differing viewpoints of treaty designers, industry and defence personnel with respect to the issue of anti-personnel mines. This information was also used to identify key decision-makers for me to contact regarding questionnaires and interviews.

Finally, I accessed the World Wide Web several times to obtain information. Filtering through the abundance of information available proved to be a daunting task. I visited various URLs in July 1997, August 1997, December 1997, February 1998, April 1998, May 1998 and June 1998. Each time I noticed a growing amount of information related to the dimensions of the new growth industry of humanitarian demining. Information related to the Ottawa Process continued to exist; however, the shift from the stigmatization of land mines to the profitability of mine clearance became conclusively evident.

Despite the amount of research, energy and effort to obtain completed questionnaires from respondents, as of 4 November 1997, I had

¹ Daniel Osabu-Kle, Polimetrics (Peterborough, Ontario: Broadview Press, 1997), 37.

² Osabu-Kle, 37.

received four completed questionnaires from the treaty designer group. To attempt to undertake a successful thesis, I decided to modify the research design by focusing upon interviews with experts, attending expert speaker series and obtaining completed questionnaires from experts in industry, in defence and in the negotiating process. The evidence which forms the basis of this project was obtained after the Convention was formulated in Oslo on 18 September 1997 and before the Convention was signed in Ottawa on 3 December 1997.

Upon individual consent, I have identified the names of individuals I interviewed through footnotes and in Appendix I. The expert speaker series, held at Carleton University, that I attended were publicly announced. The questionnaires were completed anonymously. Although certain individuals identified themselves on the questionnaire, I have not used their names because I did not receive their express consent regarding this matter. The author of the "The Hidden Covetedness of War" retains all copyright for the poem. Finally, to reduce the risk of omitting anyone, I would like to thank each person who contributed to my understanding of the Ottawa Process.

Rita Forte

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INTRODUCTION

In April 1994, Boutros Boutros-Ghali, the Secretary-General of the United Nations(UN), at that time, wrote:

The aim should be to build widespread support for an international agreement on a total ban on the production, stockpiling, transfer, and export of mines and their components. Only in this way can the community of nations begin to make sustained progress against the killing, maiming, and societal destruction caused by these terrible weapons.¹

In December 1997, this objective was fulfilled when at least one hundred and twenty government representatives met in Ottawa to sign the Convention on Anti-Personnel Mines, currently referred to as the Ottawa Treaty. Although the UN had been funding a disproportionate amount of the global clearance activities for countries laden with mines, the negotiations for the global ban were not conducted through a UN forum. Instead, frustrated with the negotiations at the Convention on Certain Chemical Weapons,² the Canadian government, under the auspices of the Minister of Foreign Affairs, Lloyd Axworthy, initiated the Ottawa Process. This thesis attempts to confront the relationship between industry and defence with reference to the "fast track diplomatic process aimed at negotiating and signing a treaty banning the use, production, transfer and stockpiling of anti-personnel mines."³

¹ Boutros Boutros-Ghali, foreword to Clearing the Fields: Solutions to the Global Land Mines Crisis, edited by Kevin M. Cahill (New York: Basic Books and the Council on Foreign Relations, 1995), xiv.

² International Committee of the Red Cross, First Meeting to Discuss a Treaty Banning Anti-Personnel Landmines Opens in Vienna on 12 February 1997 [online], 10 February 1997 [cited 26 July 1997], available from World Wide Web: <<http://www.icrc.org/unicc/icrcnews.nsf/36...0e182c8a4ff6c125643a0037f01?OpenDocument>>.

³ Canada, "The Ottawa Process" (DFAIT, 1997, photocopy), 1.

The outcomes of the negotiations resulted from a collaborative effort from government, governmental organizations, and non-governmental organizations(NGOs). In this thesis, I will attempt to explore the defence facet and the industry side of anti-personnel mines with reference to the diplomatic process to negotiate a global ban. The diplomatic process was spearheaded by a coalition which consisted of government and NGOs. Although the issue is international in nature, I elected to focus upon Canadian defence, Canadian government, Canadian NGOs and Canadian industry to ensure the thesis remained manageable and functional in size.

Unlike the United States(US), in Canada a concerted lobbying effort by defence industries and the Department of National Defence(DND) did not exist to oppose the Government of Canada's support for the anti-personnel land mines treaty. Despite the fact the Canadian Armed Forces possessed stockpiles of anti-personnel mines and military doctrine explicitly called for the use of anti-personnel mines in warfare conditions, five reasons may be identified to support the argument that the DND "dog did not bark" regarding anti-personnel mines. First, one company existed in Canada that was involved in the production of anti-personnel mines. Generally, the production of the weapon was not a very profitable sector for the company. Second, Canadian defense manufacturers are not a large and powerful constituency. Third, the NGOS who formed part of the land mines coalition had privileged access to the Department of Foreign Affairs and International Trade(DFAIT) personnel and to the Minister of Foreign Affairs. Both DFAIT staff and the minister became receptive to the NGOs' position. Fourth, DND may have been distracted by the problems of the Somalia inquiry which occurred during the Summer of 1996. Although this

reason has been identified, I would classify the fourth reason as an extraneous variable because it is not supported by the evidence I gathered. Fifth, a great deal of interest from Canadian industry emerged regarding the potential profits from demining. Summarily, I have devoted three of the chapters to describing four of the five reasons defence industries and DND did not oppose the Government of Canada's support for the anti-personnel land mines treaty.

The first chapter focuses upon DND doctrine by explicitly listing and describing the functions of the weapon. According to DND doctrine, ten functions of anti-personnel obstacles exist. Anti-personnel obstacles may be used to economize force in close terrain, to cause personnel casualties, to provide early warning, to enhance the effectiveness of other weapons by keeping the enemy targets in the beaten zone longer, to delay or canalize enemy forces, to hinder the enemy's use of key areas as landing or drop zones in the rear areas, to provide close protection to defending units, to reinforce existing obstacles, to prevent early or rapid hand breach of anti-vehicle obstacles and to adversely affect enemy morale. Although Canadian doctrine clearly states the appropriate uses of the weapon to accomplish strategic and military objectives, DND did not obstinately oppose the global ban of anti-personnel mines.

The first section of Chapter two addresses the second explanation and the third reason as to why a concerted lobbying effort by the defence industries and DND did not form to oppose Canada's support for the anti-personnel land mines treaty despite the existing stockpiles and the military utility of anti-personnel mines prescribed through DND doctrine. The two reasons addressed in this chapter are: Canada has a weak defence-

industrial base and NGOs which formed part of the land mines coalition had privileged access to DFAIT and to the Minister of Foreign Affairs. By examining the trends in the Canadian defence industries in comparison to the US defence procurement process, the atypical character of the Canadian defence-industrial base becomes obvious. Additionally, three groups of experts were provided with detailed questionnaires requesting their opinions and beliefs. The three groups were: industry, DND and treaty designers. Whereas, the questionnaire for industry consisted of twenty-six questions, the questionnaire for DND consisted of fifty-eight questions. The questionnaire for treaty designers, treaty negotiators and policy-makers consisted of thirty-six questions. By summarizing the evidence from the respondents, the impact of defence and industry upon the Convention on Anti-Personnel Mines completed on 18 September 1997 becomes apparent. Instead of pressing for a weakening of the ban, the evidence clearly suggests Canada has a comparatively weak defence-industrial base and the negotiators were heavily influenced by the Minister of Foreign Affairs.

In the second section of the chapter, which addresses the impact of defence and industry upon the Convention, an audit of the controversy between DND and DFAIT in the pre-Ottawa Process probes how each department's personal agenda was consolidated into a unique governmental policy upheld by DND. Additionally, the implicit support for a burgeoning demining industry becomes noticeable. This section of the chapter analyzes Article 3, Article 4, Article 5 and Article 8 from the Ottawa Treaty. Specifically, Article 5 provides the sole Canadian manufacturer of anti-personnel mines, an academic institution, companies and NGOs in the demining industry with a mandate to earn unlimited income within a ten-

year time frame because of the urgency to eradicate emplaced anti-personnel mines. Since DND objectives and Canadian government objectives are synonymous, the data obtained from industry, DND and the treaty designers demonstrates the impression of defence upon the Convention.

Specifically, in this section which is entitled "The Impact of Defence and Industry Upon the Convention," the bureaucratic politics model untangles the policy choice regarding anti-personnel land mines championed by the federal government. Generally, the bureaucratic politics model may be defined as follows:

[A]n interpretation of policy making that stresses the bargaining and compromises among the contending governmental organizations that exert influence on the foreign policy choices of political leaders.⁴

More specifically, to apply Graham T. Allison's bureaucratic politics model to the Canadian context, Kim Richard Nossal cites five principles to scrutinise the aftermath of foreign policy.

[First,] [g]overnments are not unitary actors, but comprise sets of players holding policy-making positions. [Second,] [d]iverse sets of players within government have diverse interests they wish pursued and translated into policy, and thus have different, and often divergent policy preferences on the same issue. [Third,] [m]otives can be ascribed...to individual players, whose interest will be shaped by their conceptions of the public good or the national interest, by their organizational affiliation, and by their own career ambitions. [Fourth,] [p]layers interact with each other along regularized circuits of the policy process...attempting to ensure that their proposal receives authoritative approval. [Fifth,] [T]he process of interaction among these sets of players determines outcomes.⁵

⁴ Charles W. Kegley, Jr. and Eugene R. Wittkopf, World Politics: Trend and Transformation, 5th ed. (New York: St. Martin's Press, 1995), 598.

⁵ Kim Richard Nossal, "Allison Through the (Ottawa) Looking Glass: Bureaucratic Politics and Foreign Policy in a Parliamentary System," Canadian Public Administration 22 (Winter 1979), 611.

Although Nossal argues that seven of the attributes of the Canadian foreign policy-making process pertain to Canada,⁶ an example of each of the five principles will be offered to demonstrate the appropriateness of the bureaucratic politics model in the pre-Ottawa Process. The policy choice was made prior to Axworthy's announcement on 5 October 1996, to invite the international community to sign a ban treaty, in Ottawa, in December 1997.⁷

Chapter three examines the dimensions of the first reason and the third reason as to why defence industries and DND did not oppose Canada's support for the anti-personnel land mines treaty. First, one manufacturer of anti-personnel mines existed. The third reason encompasses the role of NGOs and DFAIT by examining the expanded and modified relationship between industry and defence to include the Canadian International Development Agency(CIDA), DFAIT, and NGOs. By using James Rosenau's argument that a period of postinternational politics has been entered; whereby, a multi-centric world supplants a state-centric world, an evolutionary shift in the Ottawa Process is delineated.

Using October 1996 as the definitive line between the pre-Ottawa Process and the post-Ottawa Process, the nature of the relationship between industry and defence has been expanded and modified to include new actors as a result of the configuration of the Ottawa Treaty. To

⁶ Nossal, "Allison Through the (Ottawa) Looking Glass," 619-624.

⁷ David A. Lenarcic, Knight-Errant? Canada and the Crusade to Ban Anti-Personnel Land Mines (Toronto, Ontario: Irwin Publishing, 1998), 96.

illustrate the reshaping of the relationship, the fabricating industry of anti-personnel mines has been effectively replaced by the demining industry. Clearly, the satisfactory development of a new product may be exemplified by examining the life cycle of anti-personnel mines in Canada prior to the commencement of the Ottawa Process and by studying the demining process subsequent to the pre-Ottawa Process.

In the pre-Ottawa Process, the actors contributing to the life cycle of anti-personnel mines were industry, defence, rehabilitation and an NGO. SNC Industrial Technologies produced anti-personnel mines which were supplied to DND. DND used the anti-personnel mines primarily for surveillance and early-warning, based upon departmental doctrine. By laying anti-personnel mines which are not capable of self-destructing or self-neutralizing, medical rehabilitation is required to address the casualties of combatants and non-combatants coming into contact with anti-personnel mines. Physical rehabilitation of soil and territory occupied by civilians is required to confront the dilapidation of terrain. This chain continued as industry produced, defence used and civilians and soldiers suffered physical and psychological injuries. Despite the continuation of events, the Vietnam Veterans of America Foundation(VVAF), an NGO, appeared to stigmatize the use of anti-personnel mines by becoming part of the chain.

In the post-Ottawa Process, the actors contributing to the demining process are industry, defence, CIDA, rehabilitation, DFAIT and NGOs. SNC Industrial Technologies is responsible for recycling anti-personnel mines and for demining endeavours. With the infrastructure and the expertise of DND, the departmental personnel began training the deminers for mined

countries. CIDA became involved in the demining process by providing funding. In the demining process, the role of rehabilitation expands to include casualties from the anti-personnel mines and from the remunerated deminers. DFAIT and the NGOs have coalesced to ensure the political viability of the global ban through ratification and to promote the effective eradication of anti-personnel mines in areas abroad. What is uniquely striking about the post-Ottawa Process are the alliances and the associations between at least two of the six actors at any given time, as they work together to accomplish their newly formed goals.

After describing the relationship between defence and industry in the pre- and the post-Ottawa Process, I attempted to respond to a research question. The original research question is as follows: What is the relationship between defence and industry with reference to the maintenance of international security? The findings suggested a supplementary question: Are armaments sold as a profit-seeking venture or are armaments sold to achieve specific foreign policy objectives? For Canada, the answer to this question may be that anti-personnel mines were not sold to earn a profit. Instead, anti-personnel mines were used to achieve two goals, which are not mutually exclusive. Anti-personnel mines were available as an export commodity and were manufactured to meet DND objectives.

What is questionable is whether anti-personnel mines exported from Canada yielded a profit for the sole manufacturer, SNC Industrial Technologies. According to Col. Fitch, Director, Military Engineering, DND, anti-personnel mines are inexpensive to produce and are sold at a low cost, presenting the product as a loss leader. A loss leader is an article

offered below cost to attract customers. This would make sense for the Canadian defence industry because it is closely linked to the US defence industry. To earn a profit, the linkages are essential because Canada is a troop contributing country and a peace-building nation which does not engage in war. Many of the anti-personnel mines exported to Third World countries from the industrialized countries have harmed innocent civilians and provoked the fast-track negotiations to formulate a treaty to globally ban anti-personnel mines. Canada took the lead in this initiative as part of its peace-building foreign policy objectives; however, profit maximization of the Canadian anti-personnel mine industry was not Canada's motive to continue or discontinue the use, production, and stockpiling of anti-personnel mines.

In Canada, manufacturers in the defence industries have supported the initiative. Although DND had to be consulted initially, regarding the ban, DND dug in its heels more than the manufacturer, probably because of the need to locate a substitute for the military use of anti-personnel mines without compromising Canada's role in the maintenance of international security.

Indeed, in the land-mines case, after initial disgruntlement and the impassioned pleas of a core group of military engineers at National Defence Headquarters that Canada not ban outright the CF's highly useful stock of anti-personnel land-mines, DND surrendered the file with astonishing ease.⁸

The deviation towards human security, genuinely ingrained in Canada's international security policy and the destructive human anguish regarding a DND soldier cruelly murdered from an anti-personnel mine seemed to have

⁸ Dean Oliver, "The Canadian Military After Somalia," in Canada Among Nations, Leadership and Dialogue, edited by Fen Osler Hampson and Maureen Appel Molot (Toronto, Oxford and New York: Oxford University Press, 1998), 112.

reassured DND about the deficiency of the military utility of anti-personnel mines.

Surrounding the thesis, Rosenau's theory about the extensive reorganization within the international system, which started following World War II, explains the Ottawa Process. Although the theory functionally illustrates the whole thesis, I used Chapter three to specifically apply the tenants of Rosenau's argument to the case of the Ottawa Process. Rosenau argues that the current transformation, which he terms turbulence, may be equated, exclusively, to the transformation which occurred as a result of the Peace of Westphalia in 1648. According to Rosenau, the era he theorizes about is called postinternational politics or the unimaginable scheme. The term international politics is obsolete. The major components of his argument include three parameters, bifurcation and the impact of technology upon citizens. The three parameters are micro, macro and mixed. Bifurcation refers to a state-centric world and a multi-centric world. Technology refers to the increased capacity to generate and manipulate information and knowledge. His multi-disciplinary approach to postinternational politics draws from history, political science, sociology and economics.⁹

Three themes are central to Rosenau's theory. A substantial break from history; bifurcation of macro-global structures into a state-centric and multi-centric world; and, the macro, the micro and the blend of macro and micro characteristics, are part of the current era. Rosenau argues that technology and interdependency, in addition to the three themes, have

⁹ James N. Rosenau, "Previewing Postinternational Politics," in Turbulence in World Politics (Princeton: Princeton University Press, 1990), 3-20.

fostered a profound transformation in world politics that the lessons of history may no longer be useful. Global life may have entered a period of turbulence; whereby, disorder of this magnitude has not occurred for three hundred years. Even more frightening, the outcome of this era of commotion is unknown and unclear. Consequently, current theories and paradigms do not satisfactorily explain the events which have occurred within the global system. Rosenau's mission is to identify an unimaginable scheme and a conception of turbulence to facilitate empirical explanations, focusing upon these three themes.¹⁰

Since this theory is innovative, initially, several terms must be defined to understand the argument. Postinternational politics refers to the historical era that began after World War II and is continuing to unfold to the present day. The spread of specialized labour and the spread of collective actors constitutes the dynamic interdependence which constitutes postinternational politics. Centralization and decentralization of the world system is changing the identity and the number of actors on the world stage. Following the Peace of Westphalia, the nation-state was the important player on the global field. This system has slowly eroded resulting in the importance of international non-governmental actors and international governmental actors. Structural bifurcation is fostering the changing relationships and balances amongst nation-states, international governmental organizations(IGOs) and NGOs. These precepts define the unimaginable scheme.¹¹

Chapter four, exclusively, addresses the fifth reason why industry

¹⁰ Rosenau, 3-20.

¹¹ Rosenau, 3-20.

did not oppose Canada's support for the anti-personnel land mines treaty. The chapter outlines the features of a new growth industry which has replaced the production of anti-personnel mines. Referred to as humanitarian demining instead of military demining, this currently unregulated industry offers unlimited profits and environmental health and safety hazards depending upon the level of technological sophistication used to conduct demining. In this chapter, I have identified at least four Canadian entities which have capitalized upon the demining market. The four organizations are Med-Eng Systems Incorporated, The Canadian Association for Mine and Explosive Ordnance(CAMEO) Security, Terra Aerospace Corporation and the University of Alberta. Since the ten-year time frame prescribed by the Ottawa Treaty; whereby, anti-personnel mines must be eradicated is unrealistic, the potential for continual revenue in the long-term governs the demining industry.

The conclusion returns to the initial research question: What is the relationship between defence and industry with reference to the maintenance of international security? Since anti-personnel mines are classified as a loss leader in marketing terms, job losses have not occurred as a result of the prohibition of the use, stockpiling and manufacturing of anti-personnel mines. Although Canada does not have an overpowering military-industrial complex, it is inextricably linked to the international market through a dependence upon exports. With the Convention, anti-personnel mines will be substituted with another form of ammunition because of its adjunct role in defence. Consequently, the Ottawa Treaty, upon entry into force, will control supply. Since DND has modified its doctrine and attempted to locate substitutes to accomplish

the military use of anti-personnel mines, a threat to international security may be suggested. With reference to Canadian industry, the financial impact regarding humanitarian demining is positive because of the limitless profit margins and the job creation which demining provides. Instead of threatening international security, the relationship between defence and industry regarding the global ban emerges as an interesting case of military-industrial conversion. Essentially, the gains of conversion appear to outweigh the gains from producing a low-cost military technology originally designed to contribute to international security.

Canadian Foreign Policy-Making Process

An understanding of the argument I have described is possible because of the Canadian foreign policy-making process which broadly describes the political sphere in which the Canadian position for the negotiations of the Convention on Anti-Personnel Mines transpired. Nossal argues:

...a country's foreign policy is forged at the nexus of politics at three levels--international, domestic and governmental--and that to understand foreign policy-making, one must look at the interplay of all three.¹²

Nossal focuses upon the "the foreign policy decisions of the state, not the many other actors that crowd the world stage."¹³ Since this thesis addresses both state actors and societal actors, in both the private and the public sector, a discussion about the traditional Canadian foreign policy decision-making process is critical to understanding the Ottawa

¹² Kim Richard Nossal, The Politics of Canadian Foreign Policy, 3rd ed. (Scarborough, Ontario: Prentice Hall Canada Inc., 1997), xiv.

¹³ Nossal, The Politics of Canadian Foreign Policy, xiv.

Process as one element of Canadian foreign policy.

The Ottawa Process is an excellent example of the coalition-building which is occurring at the international level by middle powers. This is an example of Canada's capacity to play an active and independent role in the world. After being frustrated with negotiations, for a ban on anti-personnel mines, through traditional UN channels, Canada decided to initiate a fast-track approach to a treaty. Although the treaty to ban anti-personnel mines was signed by one hundred and twenty-three states by 4 December 1997,¹⁴ the Ottawa Process continues.

According to a paradigm espoused by Andrew F. Cooper, Richard A. Higgott and Kim Richard Nossal in Relocating Middle Powers: Australia and Canada in a Changing World Order, Canada's involvement in the global ban to eliminate the production and stockpiling of anti-personnel mines, would be classified as heroic and discrete with reference to the intensity and the scope of the initiative.¹⁵ Essentially, this thesis relates to one of Canada's initiatives in international relations. The initiative is a courageous and extravagant enterprise for an issue which is well-defined. The significance of the research relates to one of the dimensions of the global ban on anti-personnel mines.

Historically, what separates land mines from chemical and biological weapons relates to the fact that international law allows the use of land

¹⁴ Canada, Department of Foreign Affairs and International Trade, Final List of Signatures 04 December - 123 [online], 4 December 1997 [cited 22 December 1997; 20:06:20], available from World Wide Web: <<http://www.mines.gc.ca/conpar-e.htm>.

¹⁵ Andrew F. Cooper, Richard A. Higgott and Kim Richard Nossal, Relocating Middle Powers: Australia and Canada in a Changing World Order (Vancouver, British Columbia: UBC Press, 1993), 28.

mines to conduct and accomplish military goals.¹⁶ Although the Land Mines Protocol established in 1981 restricted the use, the protocol is not germane to internal armed conflicts.¹⁷ Rather than ban a family of weapons, the Ottawa Treaty is designed to ban a specific weapon.

To understand why the Ottawa Process is classified as a foreign policy issue, the conception of foreign policy must be defined. Foreign policy may be demarcated in geographical and functional terms.¹⁸ For this reason, the definition of foreign policy becomes debatably controversial. Given the argument in this thesis, the traditional realist definition of foreign policy continues, despite the claim that the line between high politics and low politics becomes blurred when examining current foreign policy issues. Generally, foreign policy is an area which is "mainly concerned with three dominant questions of high politics: international order, peace, and war."¹⁹ When referring to the impact of NGOs, the profit-seeking nature of multinational corporations and the strength of a nation-state's defence-industrial base, the definition must amply describe the actors' activities "beyond the geopolitical boundary."²⁰ For this reason the definition must encompass:

...economics, trade, the environment, and social affairs....
the external objectives of the...government, its orientation
to the international system, its relations with other

¹⁶ Asia Watch, Physicians for Human Rights, Land Mines In Cambodia: The Coward's War (United States: Human Rights Watch and Physicians for Human Rights, 1991), 10.

¹⁷ Asia Watch, 11.

¹⁸ Nossal, The Politics of Canadian Foreign Policy, 5.

¹⁹ Nossal, The Politics of Canadian Foreign Policy, 5.

²⁰ Nossal, The Politics of Canadian Foreign Policy, 5.

governments, its positions and attitudes on world politics, and its actions, programs, and decisions.²¹

Generally, this definition of foreign policy could apply to any nation-state.

To understand why the Canadian state chose the global ban on anti-personnel mines as part of its foreign policy objectives, the determinants of foreign policy must be defined. The individuals who hold the positions designed to formulate foreign policy in Canada have a distinct impact upon Canadian foreign policy. The components of foreign policy-making in Canada are: the prime minister, the ministers, parliament, the bureaucracy, the provinces, the political party system, NGOs and summit diplomacy. First, I will attempt to describe each entity. Second, I will briefly describe how the policy encased within the Convention became entrenched in Canada's domestic law. Four of the five reasons previously identified explain the reason for the Canadian government's decision to make the ban of the weapon a foreign policy objective. The formulation of the argument of the thesis is superimposed upon the Canadian foreign-policy making process.

The focus of foreign policy remains with the prime minister. Historically, each prime minister's personality and background regarding foreign policy has reflected the objectives set by the Canadian government at any point in time. The prime minister is the locus of foreign policy-making because of the powers bestowed upon the position.

A prime minister's appointments are critical to the process of policy-making, domestic and foreign. In deciding who will occupy foreign policy making positions, the prime minister determines the kind of advice on foreign affairs the government will receive, the quality of bureaucratic and ministerial talent that can be summoned to support successful

²¹ Nossal, The Politics of Canadian Foreign Policy, 6-7.

Canadian statecraft, the nature of the interplay among the individuals in the senior reaches of the state upon whom the prime minister must ultimately depend, and the nature and quality of the representation of Canadian interests abroad.²²

When examining the diagram of the Canadian foreign policy-making process, depicted in Appendix II, the prime minister's role supersedes the Minister of Foreign Affairs and International Trade (FAIT), parliament, the Standing Committee on FAIT, the Standing Senate Committee on Foreign Affairs, the bureaucracy, the provinces, the political party system, the NGOs and summit diplomacy.

Foreign policy-making is influenced by the Minister of FAIT. Both the personal objectives and the understanding of foreign policy issues by the minister at any given time determines the course that foreign policy usurps. Although the current government contains a minister for international trade, a minister for foreign affairs and a minister for international cooperation, the Deputy Minister of Foreign Affairs, the Deputy Minister for International Trade, the Secretary of State for Latin America-Africa, the Secretary of State for the Asia-Pacific region and the Minister for International Cooperation and the Minister Responsible for La Francophonie report to the Minister of Foreign Affairs. Both deputy ministers also report to the Minister for International Trade.²³ With a budget of three thousand and four million dollars, the Government of Canada web site, cumulatively, refers to the ministers that serve foreign

²² Nossal, The Politics of Canadian Foreign Policy, 185.

²³ Denis Stairs, "The Policy Process and Dialogues with Demos: Liberal Pluralism with a Transnational Twist," in Canada Among Nations, Leadership and Dialogue, edited by Fen Osler Hampson and Maureen Appel Molot (Toronto, Oxford and New York: Oxford University Press, 1998), 27.

policy interests as the Foreign Affairs Portfolio.²⁴

In the evidence from the treaty designers who completed the questionnaires about the negotiating process, unanimous agreement regarding the influence of Axworthy dominated. According to Denis Stairs,

...Lloyd Axworthy, as Minister of Foreign Affairs, has seemed to be somewhat more assiduous than his predecessor in honouring the substance, as well as the form, of the Liberal commitment to extensive constituency consultation in the development of Canada's foreign policy.²⁵

To acquire the political leverage to affect foreign policy objectives, Stairs argues Axworthy addressed "classless left" elements by incorporating them into the Liberal party and preventing their defection to the New Democratic Party. Consequently, the individual who holds the portfolio has a distinct impact upon foreign policy objectives.

Within Parliament, the House of Commons and the Senate confront foreign policy at different levels. The House of Commons consists of other ministers who "serve foreign policy interests" and other ministers who are not in Cabinet.²⁶

...the prime minister or the ministers directly responsible are likely to exert the most influence in major decisions affecting Canadian foreign policy.²⁷

Additionally, both the Standing Committee on Foreign Affairs and International Trade and the Standing Senate Committee on Foreign Affairs

²⁴ Canada, Foreign Affairs Portfolio [online], June 1997 [cited 23 June 1998; 18:14:04], available from Internet: <http://canada.gc.ca/howgoc/cab/text08_e.html>.

²⁵ Stairs, 44.

²⁶ Nossal, The Politics of Canadian Foreign Policy, 172.

²⁷ Nossal, The Politics of Canadian Foreign Policy, 231.

exist. Although the Standing Senate Committee performs "investigatory work" without taking "direct issue with existing policy,"²⁸ the Standing Committee on Foreign Affairs and International Trade is responsible for the "study and report on all matters relating to the mandate, management and operation"²⁹ of DFAIT. Several types of committees may be used to address foreign policy issues through Parliament.

Varying in terms of reference, mandate and time, six committee categories have been identified.

Committee of the Whole(House).

All of the Members of the House sitting as a committee. Presided over by a chairman rather than by the Speaker, it studies appropriation bills and any other matters referred to it by the House.

joint committee.

A committee made up of a proportionate number of members of both the House of Commons and the Senate. It may be either a standing or a special committee.

legislative committee.

A committee created under the Standing Orders on an ad hoc basis to study a bill in detail after second reading. The committee may only report the bill, with or without amendments.

special committee.

A group of Members, or of Members and Senators, appointed to study a particular matter. Once it has made its final report, the committee ceases to exist.

standing committee.

A permanent committee established in the Standing Orders of the House. It may study matters referred to it by standing or special order or, within its area of responsibility, undertake studies on its own initiative.

²⁸ Nossal, The Politics of Canadian Foreign Policy, 268.

²⁹ Canada, DND, Standing Committee on National Defence and Veterans Affairs, What is a Standing Committee? [online], date unknown [cited 23 June 1998: 19:10:25], available from World Wide Web: <<http://www.dnd.ca/eng/dp/SCONDVA/standing.htm>>.

subcommittee.

A committee of a committee, to which the latter may delegate its powers, except the power to report to the House. Not all committees are granted the power to establish subcommittees.³⁰

The types of committees which may participate in the foreign policy-making process may be identified and described, functionally.

Undoubtedly, the bureaucracy is directly related to foreign policy-making decisions.

Bureaucracies do more than merely implement decisions and administer programs. A bureaucracy's functions include providing policy information and advice to elected leaders, and therein lies a source of potent influence over the shaping of policy decisions.³¹

Traditionally, a new prime minister sets long-term foreign policy objectives which must be achieved. With specific reference to foreign affairs, at this level, the bureaucracy has no influence in the contents of the foreign policy-making process.³² Given the insurmountable amount of activity in the international system, the minister would be unable to observe each task undertaken and required to achieve the foreign policy aims. Consequently, the bureaucracy does not determine Canadian foreign policy. Instead, the bureaucracy exists to manage the "day-to-day realities of statecraft,"³³ requiring bureaucrats to make determinations based upon access to information and experience.

³⁰ Canada, Committees and Legislative Services, Introduction to House of Commons Committees [online], March 1998 [cited 23 June 1998; 18:23:18], available from Internet: <<http://interparl.parl.gc.ca/36/1/parlbus/commbus/house/about-com-e.htm>>.

³¹ Nossal, The Politics of Canadian Foreign Policy, 234.

³² Nossal, The Politics of Canadian Foreign Policy, 255.

³³ Nossal, The Politics of Canadian Foreign Policy, 257.

The political party system's influence upon foreign policy may be measured in terms of the influence of members of parliament from the official opposition and from the non-governing parties. Historically, political party platforms have contained differing foreign policy objectives regarding trade relations, membership in international organizations, peace, war and international order. Since the foreign policy objectives are traditionally determined by the leader of the governing party, members of parliament from various political parties have not been able to influence the foreign policy-making process. Entrenched within the political party platform are systemic values and beliefs. Certainly, these systemic views contrast because of the sensitive and critical importance of foreign policy decision-making to occur in the upper echelons of government.

Although international relations is the constitutional responsibility of the federal government, provinces have introduced foreign policy, independently. The provinces are playing an expanding role in government policy because of their autonomous position. Sovereignty is shared between the federal government and the provincial governments because Canada is a federalist state. Since provinces cannot be abolished legally, each province possesses a certain degree of "self-government."

The existence of provincial governments with parochial interests to project and maintain, and a Constitution that does not explicitly deny the provinces the possibility of an international role, has precluded unilateralism in any but the high issues of war and peace. (And even then, electoral demands will on occasion propel provincial governments into pronouncing on those issues.)³⁴

The jurisdiction each province exercises within the context of federal-

³⁴Nossal, The Politics of Canadian Foreign Policy, 309.

provincial relations is significantly different.

Within the Constitution Act, 1867, the provinces are responsible for natural resources, transportation, housing, agriculture and training, with reference to international trade agreements. The British Privy Council supported this authority in a decision rendered in 1937.³⁵ Despite this legal entitlement to engage in foreign policy development, the federal government has overridden provincial initiatives. Section 132 of the Constitution Act, 1867, states:

132. The Parliament and Government of Canada shall have all Powers necessary or proper for performing the Obligations of Canada or of any Province thereof, as Part of the British Empire, towards Foreign Countries, arising under Treaties between the Empire and such Foreign Countries.³⁶

Since foreign policy is subjugated by federal jurisdiction, the provinces have extended their responsibilities beyond what Canadian federalism dictates. Inevitably, the jurisdiction between the provincial governments and the federal government, with respect to foreign policy, is blurred when examining the Constitution.³⁷

The federal government incorporates the interests of the provinces into the national foreign policy. Canada's recognition at the international level precludes the provinces from undermining the sovereignty of the Canadian state. Any province enters into foreign

³⁵ Rheal Seguin, "Quebec Signals Its Approval of Free Trade," Globe and Mail, 20 December 1994, A4; Nossal, The Politics of Canadian Foreign Policy, 297.

³⁶ Canada, Department of Justice, A Consolidation of the Constitution Acts 1867 to 1982, 1 September 1993.

³⁷ Gregory S. Mahler, "Quebec and Foreign Policy: Overseas Options for a Province in a Federal System," Quebec Studies 17 (Fall 1993-Winter 1994), 60; Kim Richard Nossal, The Politics of Canadian Foreign Policy, 2nd ed. (Toronto, Ontario: Prentice-Hall, 1989), 260.

relations with a sovereign state under the auspices of the federal government. Although public recognition may not blatantly specify this control, when national sovereignty is at stake, the Canadian government has readily intervened. If a province does not deliver on an agreement ratified with a foreign country, the federal government is liable. Furthermore, the provinces do not have the jurisdictional right to introduce an action at the International Court of Justice(ICJ) or at the World Trade Organization(WTO), to resolve disputes amicably.

Although Canada is a country in which the provinces jealously keep track of federal power, the field of foreign policy is one in which the central government is permitted greater leadership by the provincial governments than virtually any other.³⁸

NGOs have a small impact upon the foreign policy-making process. The Canadian Centre for Foreign Policy Development was formed in 1995 to coincide with the federal government's objective to democratize the foreign policy-making process. To ensure civil society participates in this evasive process, which has traditionally shunned citizen participation in favour of a dominant group of senior officials in the upper echelons of government, the Centre has set specific goals and objectives.

The Centre shares a strategic goal with the Minister, the Department of Foreign Affairs and International Trade, Parliamentarians and others: better foreign policy for Canada. The Centre's other strategic goal is process change in the development of foreign policy: adding to the menu of policy options, and democratic legitimization of foreign policy, by integrating a public dimension into foreign policy making activities.³⁹

³⁸ Mahler, "Quebec and Foreign Policy," 61.

³⁹ Canadian Centre for Foreign Policy Development, Annual Report of the Canadian Centre for Foreign Policy Development 1996/1997, 2.

The Centre consists of project partnerships with academics, experts and partner organizations, NGOs, indigenous peoples and youth.⁴⁰ When dividing the total number of projects by policy area interest, six percent of the funding was allocated to land mines and disarmament, in the mid-1990s.⁴¹ Mines Action Canada(MAC) received funding to arrange "NGO participation and public awareness building/outreach for the Ottawa Landmines Conference."⁴² Located in the Pearson Building with DFAIT, measuring the input of the Centre to Canadian foreign policy-making is difficult to appraise.

Employed by the prime minister, summit diplomacy offers both bilateral and multilateral opportunities for the discussion of foreign policy on the global stage. Summits may become institutionalized by meeting periodically.

[Some] summits have become highly regularized: the economic summit of the leaders of the seven Western industrial states, the G-7, is held annually, as is the meeting of the Asia-Pacific Economic Cooperation(APEC) forum; the Commonwealth Heads of Government Meetings and the Conférence des chefs d'État ayant en commun l'usage de français(Summit of Heads of State and Government having the use of French in Common) are held biennially.⁴³

As a member of the Group of Eight, Canada possesses the critical opportunity to influence the direction of the global system. This meeting of chiefs of governments ranks highest in the foreign policy-making process.

⁴⁰ Canadian Centre for Foreign Policy Development, 10.

⁴¹ Canadian Centre for Foreign Policy Development, 18.

⁴² Canadian Centre for Foreign Policy Development, 28.

⁴³ Nossal, The Politics of Canadian Foreign Policy, 196.

Seven parts of the foreign-policy making strategy explain how interactions amongst these components manifested one governmental policy regarding land mines in the pre-Ottawa Process. With reference to this policy the elements which influenced the outcome of the policy are: the functional overlap between DND and DFAIT; the coordinative function between DND and DFAIT which resulted in a settlement position for members of both departments; the power of central agents such as deputy ministers regarding the policy outcome; the cohesiveness of the senior civil service within DND and DFAIT; the linkages and exchange between ministers and deputies in the bureaucracy where the nexus of the decision-making process exists; the varying influences of ministers within Cabinet towards colleagues; and, the interest of provincial governments in foreign policy and international affairs.⁴⁴ When examining the pre-Ottawa Process, the first six elements measurably contributed to the selected policy option of Canada's lead and support for the ban. This policy existed when the Ottawa Process was ceremoniously initiated on 5 October 1996.

Legislating Foreign Policy

The policy contained in the Convention on Anti-Personnel Mines became entrenched in Canada's domestic law through Bill C-22.⁴⁵ An Act to implement the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction

⁴⁴ Nossal, "Allison Through the (Ottawa) Looking Glass," 619-625.

⁴⁵ House of Commons of Canada, "An Act to implement the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction," Bill C-22, Thirty-sixth Parliament, 1st Session, 1997 (As Passed by the House of Commons 24 November 1997).

received royal assent on 27 November 1997.⁴⁶ Although the Convention becomes international law, ratification of the treaty required domestic legislation.

Two examples where Canada had to modify provisions from the Convention to comply with the configuration of domestic law relates to Article 8, Facilitation and Clarification of Compliance and to Article 2, Definitions. First, the Canadian Charter of Rights and Freedoms was effectively incorporated into the legislation. At the Standing Senate Committee on Foreign Affairs, on 26 November 1997, Axworthy explained:

We had to make provision in the legislation for a fact-finding mission to come to Canada to allow investigations of charges of non-compliance. We wanted to be very careful that any inspection activity be consonant with the Charter. That is why we introduced into the bill a requirement that any act to ensure compliance would be done through a court, not simply by ministerial action. We would request a court to make those decisions so that it would be done properly and appropriately and would respect the Charter.⁴⁷

Another example which clearly demonstrates the modifications required when legislating the Convention and Canadian foreign policy relates to the definition of anti-personnel mines. The Minister of Foreign Affairs asserted:

We have also provided a tighter definition of anti-personnel mines in the legislation. That is meant to provide Canadian courts with greater ease of interpretation. We have made the convention definition even tighter than it is in our old

⁴⁶ Canada, House of Commons, Bill C-22 [online], date unknown [cited 28 June 1998], available from World Wide Web: <<http://www.parl.gc.ca>>.

⁴⁷ Canada, Parliament, Proceedings of the Standing Senate Committee on Foreign Affairs: Issue 4 - Evidence [online], 26 November 1997 [cited 23 June 1998; 18:32:55], available from World Wide Web: <[http://www.parl.gc.ca/36/1/parlbus...bus/senate /com-e/fore-e/04ev-e.htm](http://www.parl.gc.ca/36/1/parlbus...bus/senate/com-e/fore-e/04ev-e.htm)>.

legislation so the courts will not have any ambiguities.⁴⁸

For example, in the Convention, Article 2 defines an anti-personnel mine as:

...a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons. Mines designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped.⁴⁹

In Article 2 of Bill C-22, the definition reads:

...a mine that is designed, altered or intended to be exploded by the presence, proximity or contact of a person and that is capable of incapacitating, injuring or killing one or more persons. Mines that are designed, altered or intended to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, and that are equipped with anti-handling devices, are not considered to be anti-personnel mines as a result of being so equipped.⁵⁰

The ratification instrument deposited with the UN must conform to domestic law and international law to ensure enactment of the Convention with reference to a nation-state's foreign policy.

Since Bill C-22 was passed without any amendments, the Canadian support for the anti-personnel land mines treaty has briskly progressed from the lack of opposition by DND, industry and the actors which make-up the foreign policy decision-making process. In less than fifteen months, an historical treaty was negotiated and signed. The contribution to Canada's wealth stemming from the development of a new growth industry for

⁴⁸ Canada, Parliament. Proceedings of the Standing Senate Committee on Foreign Affairs.

⁴⁹ "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction," 18 September 1997.

⁵⁰ House of Commons of Canada, Bill C-22.

demining inevitably expedited the process. By combining the foreign policy issues of war and peace with the social issues of socioeconomic and material well-being, the convergence between high politics and low politics occurred without opposition in Canada.

CHAPTER ONE - MILITARY USE OF ANTI-PERSONNEL MINES

Canadian military doctrine explicitly calls for the use of anti-personnel mines in warfare conditions. As a result of the Ottawa Treaty, military doctrine had to be rewritten and the Canadian Forces had to be introduced to the philosophy of the Convention on Anti-Personnel Mines. Although the Ottawa Treaty defines an anti-personnel mine, DND had to operationalize this information by examining the contents of the inventory and by eliminating the anti-personnel mines which contravened the treaty.⁵¹ Given the variety of land mines held in inventory, the weapons had to be categorized according to function. Although mines are categorized as acceptable and unacceptable, certain mines must be assessed on an individual basis corresponding to the impact upon personnel coming in contact with the anti-personnel mine and depending upon the detonation method employed.⁵² Notwithstanding the need for the Government of Canada to use anti-personnel mines for international security measures, DND did not oppose the Government of Canada's support for the anti-personnel land mines treaty.

This chapter will focus upon Canadian government doctrine with reference to the use of anti-personnel mines in the pre-Ottawa Process. Prior to embarking upon a discussion of anti-personnel obstacles, I will attempt to provide a brief history of anti-personnel weapons at the general level. Subsequently, I will attempt to briefly describe the evolution of anti-personnel mines from the original anti-tank mines.

⁵¹ Canada, DND, "Understanding the Ban: A Guideline on the Implications of the Ottawa Convention Banning AP Mines," (DND, 13 May 1998, photocopy), 1.

⁵² Canada, DND, "Understanding the Ban," 1.

Finally, I will attempt to describe Canada's historical role in mine clearance prior to discussing the reasons why Canada used anti-personnel mines in the pre-Ottawa Process. Additionally, I will attempt to incorporate the strategic uses of anti-personnel mines with reference to their technological composition, prescribed by Canadian military doctrine.

History of Anti-Personnel Mines

Anti-personnel weapons are responsible for most of the casualties in modern warfare.⁵³ In addition to anti-personnel mines, this family of weapons includes cluster bombs, fuel-air explosives, bullets that tumble in the body and shells that are fired from an artillery piece and break open, unfastening thousands of small finishing nails with fins at the blunt end.⁵⁴ To understand the origin of the anti-personnel mine, the source of the anti-tank mine must be addressed.

Although anti-tank mines were developed between 1919 and 1939 in the US, the Union of Soviet Socialist Republics(USSR) and the United Kingdom(UK), the Teller mine developed by Germany in 1939 was the precursor to the technological development of heavy mines which were capable of incapacitating the track of a tank. Earlier anti-tank mines contained approximately five pounds of TNT; whereas, later mines contained twice the amount of TNT. The twelve pound mine would require three hundred pounds for initiation. Eventually, heavy anti-tank mines weighing twenty pounds were modified to be light enough to be carried by soldiers in their

⁵³ Eric Prokosch, The Technology of Killing: A Military and Political History of Antipersonnel Weapons (London and New Jersey: Zed Books, 1995), 8.

⁵⁴ Prokosch, 4 and 8.

pockets. Instead of TNT, these mines contained tetrytol. Soldiers could use the mines for tanks by lumping several together or they could use them, individually, against vehicles. Through development, this model was equipped with a secondary fuze which would operate under the weight of a person. The anti-tank mine started to serve a dual purpose for tanks and for personnel.

Two types of anti-personnel mines were developed. Containing less than sixteen ounces of explosives, a bounding mine and a fixed mine were developed. The bounding mine pitched a shell into the air before detonating; whereas, the fixed mine blasted at the same location. Whereas Germany was responsible for the development of the bounding mine, Russia was responsible for the fixed mine. Eventually, the amount of the explosives or the fragmentation was increased by developers which imitated the bounding and the fixed mine. One of the fifty models used by the Soviet army during World War II included a cardboard "scatter" mine approximating the size of a shoe-polish can. This mine resembled the models used by the UN in Korea. These anti-personnel mines could cause an individual to be killed or to have one of his hands or one of his feet blasted off.

Canada's Historical Role in Mine Clearance

Prior to the commencement of the Ottawa Process, DND made contributions to post-conflict peace-building relating to land mines. To advance international security in other countries, the Canadian government has supported multilateral missions involving land mine removal.

Past instances...include...the use of engineers to rebuild infrastructure and remove land mines. Following the Soviet

withdrawal from Afghanistan, Canada took the additional step of training refugees to recognize and disarm land mines.⁵⁵

Additionally, the 1994 Defence White Paper states:

Canada will retain the capability to make a significant and responsible contribution to international peace and stability...in coalitions of like-minded countries. To this end, the Canadian Forces will:...support the verification of existing arms control agreements and participate in the development of future accords.⁵⁶

If anti-personnel mines had been used according to NATO doctrine, the phenomenon addressed by the Ottawa Process would not have surfaced. Havoc occurred through terrorist armies, gangsters, learned terror, mayhem and the proliferation of non-regulated armies.⁵⁷

As a result,...[mines] are commonly used by insurgent groups, paramilitary formations, and criminal organizations that lack the logistical infrastructure of well-developed military forces.⁵⁸

Specifically, the present quandary originated and emanated from Cambodia,⁵⁹ primarily as a result of accumulation.

...the land mine crisis as it exists today is a function of the accumulation of unsophisticated mines, emplaced either without regard for their effects on civilians or for the very purpose of attacking civilians, and is largely a product of long-running internal wars...⁶⁰

⁵⁵ DND, 1994 Defence White Paper (Ottawa, Ontario: Canada Communication Group, 1994), 33.

⁵⁶ 1994 Defence White Paper, 38 and 39.

⁵⁷ Col. Fitch, DND, interview by author, 1 December 1997.

⁵⁸ Andrew Latham, "Taking the Lead? Light Weapons and International Security," International Journal 52, no.2 (Spring 1997), 319.

⁵⁹ Col. Fitch, interview; Lt. Col. Levert, DND, interview by author, 1 December 1997.

⁶⁰ Kenneth Anderson, "An Overview of the Global Land Mines Crisis," in Clearing the Fields: Solutions to the Global Land Mines Crisis, edited by Kevin M. Cahill (New York: Basic Books and the Council on Foreign Relations, 1995), 20.

Manufacturers produced a weapon which was to be used according to the laws of war. These laws were abused in many countries, particularly in the developing world.

Functions of Anti-Personnel Mines

Based upon DND doctrine, anti-personnel mines have numerous uses. The various uses may be collapsed under two headings. The two headings are: surveillance and early-warning.⁶¹ To adequately describe the functions of anti-personnel mines, the term anti-personnel obstacles clearly captures the role of this weapon for military use eliminating any misconceptions about its role as a weapon designed to independently assault an individual or an object.

It is clear that there are many ways to limit the impact of mines, but, also, unfortunately, just as many ways to multiply their devastating effects....technology has led to mines that planes, artillery, and "vehicle-mounted mine dispensers" can scatter easily and indiscriminately over large areas so that the old image of minefields laid and mapped in geometric order is obsolete.⁶²

DND doctrine prohibits indiscriminate methods of distributing anti-personnel mines. Map-laying strategies are vital. Consequently, the purpose of the anti-personnel mine is significantly different from a chemical or a biological weapon and different from the methods used by other governments.

According to Canadian government doctrine the functions of anti-personnel obstacles are as follows:

⁶¹ Col. Fitch, interview.

⁶² Kevin M. Cahill, introduction to Clearing the Fields: Solutions to the Global Land Mines Crisis, edited by Kevin M. Cahill (New York: Basic Books and the Council on Foreign Relations, 1995), 10.

- 1) An economy of force measure in close terrain.
- 2) To cause personnel casualties.
- 3) To provide early warning.
- 4) To enhance the effectiveness of other weapons by keeping the enemy targets in the beaten zone longer.
- 5) To delay or canalize enemy forces.
- 6) To hinder the enemy use of key areas as landing or drop zones in the rear areas.
- 7) To provide close protection to defending units.
- 8) To reinforce existing obstacles.
- 9) To prevent early or rapid hand breach of anti-vehicle obstacles.
- 10) To adversely affect enemy morale.⁶³

To clearly describe the perception of the use of anti-personnel mines, a general, during the American Civil War was quoted as saying: "This is not war, this is murder." Essentially, no one had seen people afraid to put a foot down because of the repercussions.⁶⁴ Although, mines originally protected tanks, the use of anti-personnel mines became a derivative of the anti-tank mine. Since the treaty specifically addresses anti-personnel mines, exclusively, I will attempt to describe the ten functions of the anti-personnel mine in turn.

First, the anti-personnel mine may be used as an "economy of force" measure in close terrain. "Mines provide a means to achieve economy of

⁶³ Col. Fitch, interview.

⁶⁴ Col. Fitch, interview.

force, surprise, and security."⁶⁵ In any military operation, a direction of main effort exists. For example, by locating four anti-personnel mines around a tank, the anti-personnel mines will discourage the enemy from attacking the tank if the combatants have to encounter an obstacle to strike the tank. In this manner, anti-personnel mines perform an adjunct role as opposed to a primary role.

Second, anti-personnel mines can cause enemy casualties. Although this is not the primary function of anti-personnel mines, according to Canadian military doctrine, in the pre-Ottawa process, if the enemy does not accept the will of the ally then casualties are probable. Accepting the will of the ally without casualties is the ideal situation.

Third, the purpose of the anti-personnel mine is to provide early warning. Essentially, the combatants need a warning to foretell that someone is in their perimeter. Anti-personnel mines are effective for this purpose because the individual triggers the weapon.

Bombs can be aimed at military targets and bullets fired by soldiers against soldiers, but land mines are radically different, lying in wait--as they do--until triggered by the target.⁶⁶

With an early warning, the appropriate measures may be taken to deter the enemy.

Fourth, anti-personnel mines enhance the effectiveness of other weapons by keeping the enemy targets in the beaten zone for a lengthier period of time. A beaten zone refers to an unfamiliar territory. When an

⁶⁵ Richard H. Johnson, "Why Mines? A Military Perspective," in Clearing the Fields: Solutions to the Global Land Mines Crisis, edited by Kevin M. Cahill (New York: Basic Books and the Council on Foreign Relations, 1995), 25.

⁶⁶ Cahill, introduction, 6.

anti-personnel mine is detonated and a member of the enemy is injured, the opponent is delayed. The enemy is detained because the wounded person must be carried out of the war zone. The purpose is not to kill the individual. Instead, the purpose is to slow the enemy down so the ally knows that someone is near.

Fifth, an important function of anti-personnel mines is to delay or to canalize enemy forces. If there is a mined area ahead, the person may veer to the left or to the right to avoid the mined area. Essentially, the enemy forces will be constrained to follow a path that has been chosen by the allied forces to accomplish a specific objective.

...antipersonnel mines were seen as weapons of the defense--to make it harder for an attacker to break through ground, to slow down an attacker, and to channel the attacker's forces to ground where they could most easily be destroyed.⁶⁷

If the objective is to have the enemy proceed in a particular direction, the process requires soldiers to arrange a marked minefield; whereby, the enemy sees the field and is forced to avoid the field by proceeding to the left or to the right.

Sixth, the function of an anti-personnel mine is to hinder the enemy's use of key areas when landing. An enemy helicopter requires a location to land. By placing six posts in a circular fashion and by stringing fishing wire from each pole to its opposite pole, the fishing lines cross at the centre. In two opposite poles, two cans are placed. Each can is inserted with an anti-personnel mine. When the helicopter decides to land, the fishing line will appear invisible. The helicopter proceeds to land at the centre, between the two anti-personnel mines

⁶⁷ Anderson, 19, quoting Lt. Col. P.R. Courtney-Gree, Ammunition for the Land Battle (London: Brassey's, 1991).

detonating the mines and causing an explosion. This method frustrates the enemy from using a key area. An example of this function was employed during the Vietnam war.

Seventh, anti-personnel obstacles can provide close protection to defending units. One of the reasons for the effectiveness relates to the durability and the resistance of anti-personnel mines to seasonal conditions, despite the disadvantages.

...with land mines, the potential exists to attack nonhostile targets in probably a greater proportion than with aimed ordnance, such as artillery projectiles, bombs, or even hand grenades.... [however] most mines, like all unexploded ordnance, work in all weather and light conditions.⁶⁸

Performing defensive functions in any environment is the reason DND depended upon anti-personnel mines.⁶⁹

The eighth function relates to the reinforcement of existing obstacles. If the obstacle is a river line, the river can be mined to slow the boats down. This technique is effective because boats traversing the river must be mindful and observant to avoid the anti-personnel obstacles.

Mines used for defense are most effective when employed as part of other obstacles and watched over by direct and indirect fires; mines become one element of an integrated combat plan.⁷⁰

"Mines provide added capability with little cost in manpower and other resources."⁷¹

The most critical role of the anti-personnel obstacle is to prevent

⁶⁸ Johnson, 27.

⁶⁹ Col. Fitch, "Anti-Personnel Mine Ban Treaty Notes" (DND, 1 December 1997, photocopy), 4.

⁷⁰ Johnson, 32.

⁷¹ Johnson, 33.

early or rapid hand breach of anti-vehicle obstacles. The original purpose of the anti-personnel mine was to protect anti-tank mines by clustering anti-personnel mines around the anti-tank mines. Used in the American Civil War, the method was referred to as fougasse. Fougasse may be defined as a land mine in which the charge is overlaid by stones or other missiles. The land mine is specifically located so it is hurled in the desired direction.

Finally, the tenth function is to adversely affect enemy morale. The degree of mental or moral confidence of an individual or a group of individuals is critical to performance. When the enemy unexpectedly confronts a fenced and labelled field of anti-personnel mines following emplacement, the impact to the spirit of the team, will inevitably be affected because anti-personnel mines may exist in the surrounding area which could be triggered by an individual. Since the type of initiation may be caused by pressure, tripwire, anti-disturbance, tilt rod, remote, electrical or tension release,⁷² the direction of the explosion is unknown because normally the mines are encased near the surface or below the surface of the ground. Enemy morale may be negatively jarred by dividing the shared purpose and the fellowship of the group.

Reasons For Canada to Use Anti-Personnel Mines in the Pre-Ottawa Process

With specific reference to Canada, a stock of anti-personnel mines was maintained. Although this stock was maintained, Canada did not have occasion to use it. Essentially, in Canada, demand for anti-personnel mines was not guaranteed by production. Despite Canada's lack of need for

⁷² Asia Watch, 46-50.

using anti-personnel mines, three circumstances existed to cause the use of anti-personnel mines. The main reasons Canada used anti-personnel mines were: operational, shelf life and training.⁷³

Operational use of anti-personnel mines refers to physically going out and placing the weapons using a mine-laying strategy. DND doctrine specifically explains where, how and when to place land mines. For example, doctrine dictates the distance between the mines located on the field. Under NATO doctrine, once anti-personnel mines have been placed, the field must be fenced. A tremendous amount of regulation is required to meticulously lay the mines. The completion of laying reports and the conduction of surveys is essential to Canadian doctrine. The particular circumstances of a "theatre of war" determines the mine-laying strategy. Although this explains Canadian doctrine, the problem which prompted the current anti-personnel land mine crisis stems from armies who do not have these reports for the operational use of anti-personnel mines.⁷⁴

The second circumstance which would cause the use of anti-personnel mines relates to shelf life. Anti-personnel stocks must be rotated once every ten to twenty years. One method of eliminating aged stock is to explode the anti-personnel mines under controlled conditions.⁷⁵

The third circumstance which would cause the use of anti-personnel mines relates to training. Anti-personnel mines must be used to demonstrate the aftermath of detonation because of the salutary effects for soldiers to understand what an anti-personnel mine accomplishes. In

⁷³ Col. Fitch, interview.

⁷⁴ Col. Fitch, interview.

⁷⁵ Col. Fitch, interview.

Canada, anti-personnel mines had a zero operational use; whereby, a few dozen mines were used annually for training demonstrations.⁷⁶ For the future, Canadian soldiers will not be trained to use anti-personnel mines in operations. Instead, the training process requires that soldiers understand how anti-personnel mines may be laid so the weapons may be located and destroyed. Consequently, anti-personnel mines will be used to create enhanced mine awareness and to improve mine detection systems through research and development.⁷⁷

Without the agreement of DND, the elimination of anti-personnel mines would not have occurred. Essentially, in the pre-Ottawa Process, if the armed forces required anti-personnel mines, the manufacturer provided. The military was consulted, initially, before Canada participated in the movement towards the elimination of the weapon. Although the Ottawa Treaty is not a military treaty, the document is a humanitarian pact. Once the treaty was signed, messages were sent to troops that the use of anti-personnel mines would be prohibited.⁷⁸ Members of the Canadian Forces, who are not fully informed of the facts, may express some difficulty with this change. Significant support for the treaty has been noted from members of the Canadian Forces who operated in a mined environment and are aware of the indiscriminate use of anti-personnel mines.⁷⁹ Accordingly, revised DND doctrinal manuals will be published in 1998 to reflect the ban.

⁷⁶ Col. Fitch, interview.

⁷⁷ Col. Fitch, "Anti-Personnel Mine Ban Treaty Notes," 5.

⁷⁸ Col. Fitch, interview.

⁷⁹ Col. Fitch, "Anti-Personnel Mine Ban Treaty Notes," 6.

Conclusion

The military use of anti-personnel mines originated from the US, the USSR and the UK. Abuse of the weapon by insurgent groups and criminal organizations, specifically from Cambodia, occurred. Canadian doctrine clearly states the appropriate use of the weapon to accomplish strategic objectives. According to DND doctrine, ten functions of anti-personnel obstacles exist. Canada used anti-personnel mines for operational reasons. Additionally, the Canadian Forces detonated anti-personnel mines to eliminate aged inventory and to train soldiers. Before addressing the specific uses of anti-personnel mines in Canada, in the pre-Ottawa Process, I attempted to provide a brief history of the origins of the anti-personnel mine.

Although Canadian doctrine explicitly traces the appropriate uses of anti-personnel mines to accomplish strategic and military objectives, DND did not obstinately oppose the global ban of anti-personnel mines. By providing an understanding of the importance of anti-personnel mines for Canadian defence, this chapter served to describe the rationale for the use of the weapons by Canadian soldiers before October 1996. Despite stockpiles and entrenched military doctrine, the next chapter examines two reasons why DND supported the ban to eliminate anti-personnel mines.

CHAPTER 2 - CONVENTION ON ANTI-PERSONNEL MINES

COMPLETED ON 18 SEPTEMBER 1997

Broadly divided, this chapter consists of two segments. The first part examines the trends in the Canadian defence industries in comparison to the US defence procurement process. The atypical character of Canada's defence industries becomes apparent. Canada's weak defence-industrial base introduces one reason why defence industries did not oppose the Government of Canada's support for the anti-personnel land mines treaty. Comparatively, the US did not sign the Ottawa Treaty in December 1997 because of the defence industries' opposition. Additionally, by summarizing the findings from detailed questionnaires and interviews regarding the Convention from industry, DND and the land mines coalition consisting of treaty designers, treaty negotiators and policy-makers, the opinions and beliefs support the contention that Canada has a comparatively weak defence-industrial base and the land mines coalition was strengthened by DFAIT and the Minister of Foreign Affairs. Given the responses from experts, I will attempt to address the evidence from industry, DND and the treaty designers, together, in the first segment.

The second part examines the articles in the Convention on Anti-Personnel mines with reference to defence and industry. This section of the chapter examines the regulation of land mines, according to beliefs and opinions espoused by industry, DND and treaty designers. Unanimity amongst the three groups emerged regarding proper government regulation of anti-personnel mines. Furthermore, the evidence obtained from the three groups describes the mark of defence upon the Convention by analyzing Article 3, Article 4, Article 5 and Article 8 from the Ottawa Treaty.

Using the bureaucratic politics model, the contention between DND and DFAIT in the pre-Ottawa Process is addressed. Before October 1996, each department's personal agenda was consolidated into a governmental policy upheld by DND. Although the subject of the demining industry is not fully explored until Chapter 4, the implicit support for a burgeoning industry becomes recognizable when examining Article 5 with reference to the demining process of anti-personnel mines.

Comparing Defence Industries in Canada and the US -- US Procurement

In the US, the procurement of defense weapons may be theoretically summarized using four milestones.⁸⁰ At Milestone 0, "the military service will explore a particular problem and seek a remedy."⁸¹ At the next turning point, Milestone I, a document entitled the Decision Coordination Paper is prepared to evaluate and appraise the costs, the advantages, the disadvantages and the technological dangers connected with the development of "a new weapons system."⁸² Milestone II is critical because the determination to create a model signifies the intent by the Department of Defense (DoD) to adopt the weapons system.⁸³ The final landmark requires "production and deployment."⁸⁴ Undoubtedly, at each stage in the cycle, external controls from industry have contributed to the US defence

⁸⁰ Fen Osler Hampson, Unguided Missiles: How America Buys Its Weapons (New York and London: W.W. Norton & Company, 1989), 10.

⁸¹ Hampson, 9.

⁸² Hampson, 11.

⁸³ Hampson, 15.

⁸⁴ Hampson, 15-16.

program. The influences are bureaucratic politics, domestic politics, presidential politics, technological change and governmental resource limitations allocated to defense production.⁸⁵ At the conclusion of the four milestones, reassessment and reevaluation conclude the cycle to ensure the weapons system operates properly.⁸⁶

In 1991, a report entitled Integrating Commercial and Military Technologies for National Strength: An Agenda for Change was commissioned to recommend a solution to maintain the viability of the defence-industrial base in the US. The key recommendation was named commercial-military integration.⁸⁷

Integration implies that many industries could employ the same technologies, personnel, administrative procedures, research, and production facilities for both commercial and military customers.⁸⁸

Advocating a fundamentally different approach to defense procurement prevents the erosion of the defense-industrial base by expanding its size and eliminating its economic dependency upon DoD.

Currently, the Under Secretary of Defense for Acquisition and Technology, the Honorable Jacques S. Gansler, is the top civilian acquisition expert in the US. The office, entitled the Office of the Under Secretary of Defense for Acquisition and Technology, advises the Secretary

⁸⁵ Gordon Adams and Randal Humm, "The US Military-Industrial Complex and National Strategy," in Strategic Power USA/USSR, edited by C.G. Jacobsen (New York: St. Martin's Press, 1990), 288-291.

⁸⁶ Hampson, 16.

⁸⁷ Jeff Bingaman, Jacques Gansler and Robert Kupperman, Integrating Commercial and Military Technologies for National Strength: An Agenda for Change (Washington, D.C.: The Center for Strategic and International Studies, 1991), 85.

⁸⁸ Bingaman, Gansler and Kupperman, ix.

of Defense regarding circumstances pertaining to DoD's acquisition process. Additionally, the Office governs "the development and research of advanced technology, as well as assessing impacts the DoD has on the environment and the civilian world."⁸⁹ When examining the recommendations from the 1991 report from the Center for Strategic and International Studies Steering Committee on Security and Technology, the implementation of the policy of commercial-military integration has occurred to strengthen the defense-industrial base of the US.

Projections for defense spending in the US are expected to increase. In 1996, the US government spent two hundred and sixty-five billion dollars supporting national defense. Projections for 1999, 2000, 2001 and 2002 suggest modest increases in defense spending by allocating two hundred and sixty-nine billion dollars, two-hundred and seventy-five billion dollars, two hundred and eighty-one billion dollars and two-hundred and eighty-nine billion dollars, respectively.⁹⁰ Since the end-user does not completely govern the division between "investments in technology and facilities,"⁹¹ DoD procurement has changed to accommodate the defense-industrial base in the US by uniting the military and the commercial sector in applicable areas.⁹²

⁸⁹ United States, Office of the Under Secretary of Defense for Acquisition and Technology, ACQWeb Introduction [online], date unknown [cited 9 February 1998; 18:02:34], available from World Wide Web: <<http://www.acq.osd.mil/acqweb/intro.html>>.

⁹⁰ United States, Budget of the United States Government: Fiscal Year 1998, 137.

⁹¹ Bingaman, Gansler and Kupperman, x.

⁹² Bingaman, Gansler and Kupperman, 1-2.

Comparing Defence Industries in Canada and the US -- Canadian Defence-Industrial Base

Referring to the book Canadian Defence Industry in the New Global Environment, I will attempt to summarize trends in the Canadian defence industry to emphasize its atypical character.

...[the] medium- to long-term prospects of much of the Canadian defence industrial base are strongly influenced--and even determined, at times--by the impact of changes in the international demand and supply for defence equipment and not just by decisions made by the federal government or in corporate head offices elsewhere in the country.⁹³

Canada does not possess a defence-industrial base or a military-industrial complex analogous to the US or to the larger European countries.⁹⁴

At the macroeconomic level, the Canadian defence industry has a restricted manufacturing capacity. This assertion may be proven when examining the defence industry as a percentage of GNP of trade or as a percentage of the total domestic workforce.⁹⁵ The Canadian defence industry cannot meet the equipment requirements of the Canadian Forces. Consequently, the distinctive nature of the "domestic defence industrial base" must be accommodated from external sources.⁹⁶ Productive strengths are aerospace, electronics and communications. The industry consists of small and medium-sized firms which are dependent upon exports. Sixty

⁹³ Alastair D. Edgar and David G. Haglund, The Canadian Defence Industry in the New Global Environment (Montreal and Kingston: McGill-Queen's University Press, 1995), xiv.

⁹⁴ Edgar and Haglund, 75.

⁹⁵ Edgar and Haglund, 76, quoting Serge Caron, The Economic Impact of Canadian Defence Expenditures (Kingston, Ontario: Centre for Studies in Defence Resources Management, 1994) and P.H. Wall, The Economic Impact of Canadian Defence Expenditures, FYI 1989/90 Update (Kingston, Ontario: Centre for Studies in Defence Resources Management, 1991), 5-16.

⁹⁶ Edgar and Haglund, 85.

percent of the defence industry consists of foreign ownership.⁹⁷ Geographically concentrated in the "golden triangle" outlined by Toronto-Ottawa-Montreal,⁹⁸ Canadian firms are inextricably linked to the US market through production sharing agreements. Moreover, certain Canadian defence industries are globally renowned for expertise. The areas include:

...flight simulators, gas turbines, major aircraft components, inertial navigation systems, microwave land systems, and other technologies geared towards specialized needs in aerospace and naval subsystems or components.⁹⁹

These niche markets may become eroded through competition in the future from suppliers in specific Asian countries.¹⁰⁰ Finally, firms within the defence industries will focus upon the development of current products rather than investing in research and development into the creation of new products.¹⁰¹ Inevitably, the declining strength of Canadian defence personnel from a total of one hundred and fifty-one thousand in 1989 to a targeted decrease of one hundred and three thousand in 1999,¹⁰² will inevitably coincide with globalizing changes in the defence industry. For example:

In the future, Canada's potential role in ballistic missile defence will not be determined in isolation, but in conjunction with the evolution of North American and possible NATO-wide aerospace defence arrangements.¹⁰³

⁹⁷ Edgar and Haglund, 76.

⁹⁸ Edgar and Haglund, 77.

⁹⁹ Edgar and Haglund, quoting Canadian Defence Products Guide.

¹⁰⁰ Edgar and Haglund, 78.

¹⁰¹ Edgar and Haglund, 85.

¹⁰² 1994 Defence White Paper, 46.

¹⁰³ 1994 Defence White Paper, 25.

Industry

By referring to the microeconomic level, Canadian industry believes the international trade of anti-personnel mines should not continue. Restrictions should be placed upon the types of anti-personnel mines manufactured, upon the types of anti-personnel mines used and upon the countries who purchase anti-personnel mines. By banning the production of the weapon, a loss of employment will not occur in Canada. Given the contents of the Ottawa Treaty, the research and the development of anti-personnel mines will not continue.

Since the production of anti-personnel mines is not unethical, the suppliers should not be held accountable for the end-use of anti-personnel mines. Manufacturers do not control the use of anti-personnel mines during an armed conflict. Instead, the state is responsible for the demand of anti-personnel mines. The diminished ability of troops is one of the arguments proffered by DND as a consequence of the ban. Overall, the defence industry in Canada has not been deregulated; however, moderate protection should be maintained.

In terms of the production process, anti-personnel mines are not complicated to manufacture. The size of the company does not determine the manufacturing potential of anti-personnel mines. Potentially, developing anti-personnel mines which have a discriminating capacity is possible.

Technologically, land mines have advanced as much as, if not more than, almost any other weapon system over the past twenty years. Landmines that are programmed to self-destruct or, failing that, have a "fall-back" self-neutralizing capability already exist. It is foreseeable that land mines may be developed that can be predeployed (where necessary), but that can be "switched" on or off when required. Other devices may be possible that will make mines "intelligent" enough to discriminate the difference between, for example, a tank and

other vehicles.¹⁰⁴

Col. Fitch contends that no distinction exists between smart mines and dumb mines. Mines are classified as dumb or dumber. All mines are dumb because of the inability to discriminate amongst civilians, combatants or vehicles.¹⁰⁵ The research and development into the technological advancement of anti-personnel mines is not expected to continue, given the Ottawa Treaty.

The land mines manufacturing industry did not influence the Ottawa Process. Manufacturers do not contribute to the mine-laying strategy prescribed through DND doctrine. Instead, the mine-laying strategy is determined by military needs. More specifically, in Canada, the strategy is determined by DND doctrine which normally coincides with NATO doctrine.¹⁰⁶ Furthermore, the light weapons industry did not contribute to the Ottawa Process. Overall, the document produced for signature in December 1997 does not reflect industry interests regarding the demand for anti-personnel mines.

Since anti-personnel mines may be classified as a light weapon, addressing the impact upon other members of the defence industry is imperative. Although the definition of light weapons encompasses anti-personnel mines, the category is classified separately for multilateral disarmament agreements.¹⁰⁷ For the purposes of this thesis, which

¹⁰⁴ W. Hays Parks, "The Humanitarian Outlook," in Clearing the Fields: Solutions to the Global Land Mines Crisis, edited by Kevin M. Cahill (New York: Basic Books and the Council on Foreign Relations, 1995), 55.

¹⁰⁵ Col. Fitch, interview.

¹⁰⁶ Col. Fitch, interview.

¹⁰⁷ Latham, 318.

addresses industry and defence, land mines will be classified as a light weapon. Light weapons are:

...armaments that are used in intercommunal and intrastate conflict and that fall below the threshold of major conventional weapons systems(that is, those weapons encompassed by the seven categories of the United Nations Register of Conventional Arms: battle tanks, armoured combat vehicles, large calibre artillery, combat aircraft, attack helicopters, warships, and missiles/launchers). At one end of the spectrum are "small arms" such as pistols, assault rifles, and light machine guns. At the other end are crew-served armaments such as recoilless rifles, mortars, light artillery, and even some missile systems. Strictly speaking, the term includes landmines,...¹⁰⁸

Ease of accessibility, culture of violence, culture of militarization, communal violence, humanitarian and prolonged social conflict are the dimensions of light weapons.¹⁰⁹ Although Andrew Latham argues that the last dimension clearly depicts anti-personnel land mines, because of their persistent effects upon civilians decades following the pause of hostilities, the nature of anti-personnel mines conforms to light weapons.

DND

DND rationally believes technological developments have contributed to the effectiveness of anti-personnel mines. Additionally, to the same extent, DND believes manufacturers have influenced the demand for anti-personnel mines in Canada. Despite these beliefs, commercial interests have not contributed to the Ottawa Process. The availability of anti-personnel mines contributes to military use. Consequently, the banning of the weapon has prompted the rewriting of DND doctrine to coincide with the

¹⁰⁸ Latham, 318.

¹⁰⁹ Latham, 320-323.

Ottawa Treaty.¹¹⁰

As of December 1997, the publications which provide direction about planning and using anti-personnel mines had been amended. The documents will be issued to troops, in 1998. Although the initial priority for the planning process of the doctrine was the removal of the weapon from use, near-term, mid-term and long-term objectives have been set for teams to develop new doctrine for follow-on. In the near-term, the objective calls for increased use of barbed wire with command detonated anti-personnel munitions. In the mid-term, non line-of-sight surveillance and early warning target acquisition and command must be introduced. Additionally, the reliance upon logistically heavy wire must be replaced. In the long-term, to reduce the risk to non-combatants, the removal of lethal systems from the obstacle and the replacement of the anti-personnel obstacle with enhanced target acquisition and increased indirect fires capability will occur. A new doctrine was developed for anti-personnel mines to provide the same security and defensive measures without the cost of civilian casualties.¹¹¹

Treaty Designers/Treaty Negotiators/Policy-Makers

Treaty designers must have confronted a number of factors which probably had an impact upon the momentum gained to negotiate a treaty to globally ban anti-personnel mines. Generally, treaty negotiators were not influenced by Princess Diana's personality despite the media coverage instigated by her visits accompanied by the International Committee of the

¹¹⁰ Col. Fitch, interview.

¹¹¹ Col. Fitch, "Anti-Personnel Mine Ban Treaty Notes," 4.

Red Cross(ICRC). Treaty designers were not heavily influenced by the Canadian International Demining Centre(CIDC), the Cambodia Mine Action Centre(CMAC), the NGO Committee on Disarmament, the Global Information Network in Education--Land Mine Awareness Education, the Organization of American States(OAS) and the environmental NGOs. Alternatively, treaty designers were strongly influenced by the ICRC, the VVAF and MAC. Human rights NGOs moderately influenced treaty designers. Treaty designers acknowledged certain external factors.

Varying from moderately influential to strongly significant, the UN influenced treaty designers. Specific Conventions which are deposited with the UN Security Council influenced treaty designers during the Ottawa Process. The Geneva Conventions, the Geneva Protocol, the Chemical Weapons Convention, the Limited (Partial) Test Ban Treaty, the Comprehensive Nuclear Test Ban Treaty and the Non-Proliferation Treaty influenced policy-makers.

In terms of manufacturers, treaty designers were either strongly influenced by manufacturers of anti-personnel mines or they were not influenced at all by industry. This division suggests several findings. First, manufacturers from other countries may have approached treaty designers on an individual basis prompting individuals to formulate a personal opinion regarding the impact of a ban upon anti-personnel mines. Manufacturers from other countries who have manufactured anti-personnel mines include Technovar and Valsella from Italy; Alliant Tech Systems and Thiokol from the US; and, Expal from Spain.¹¹² Second, misinformation or

¹¹² SNC Industrial Technologies Inc, The Convention on Certain Conventional Weapons: Final Report of a Study of the Technological and Cost Implications of Retrofitting Landmines with Fuses Incorporating Self Destruct or Self

different information may have been transferred from manufacturers to individuals resulting in inconsistencies. Third, the Canadian manufacturer of anti-personnel mines did not pose an obstacle to initiating the fast track approach to the signing of the global ban, demonstrating that production of the weapon in Canada is not of the utmost importance to profit maximization. Consequently, the manufacturer of anti-personnel mines in Canada was not a factor.

Instead of examining specific NGOs, influences relating to groups of individuals who may be identified by a specific profession adds another dimension to the influences upon the negotiations. Humanitarian groups, physicians and casualties of anti-personnel mines unquestionably influenced treaty designers. Humanitarian groups and physicians have shared their experiences regarding the rehabilitation process by explaining, educating and demonstrating the multifarious medical requirements of the anti-personnel mine victim. At the same time, the history of the weapon, the nature of the weapon, the military utility or the lack of military utility of anti-personnel mines, the health care implications and the long-term costs for communities contributed to the factors which swayed treaty negotiators. Although these overwhelming influences existed, treaty designers achieved their initial objectives during the negotiating process.

Specific countries which have been targeted as requiring humanitarian demining assistance influenced treaty designers. Afghanistan, Angola, Cambodia, Iraq, Laos, Bosnia, Croatia, Georgia, Mozambique, Myanmar, Nicaragua, Somalia, Sri Lanka, Sudan, Armenia, Azerbaijan, Chad,

Columbia, Cuba, El Salvador, Ethiopia, Eritrea, Falklands/Malvinas and Guatemala have suffered from unplanned mapping strategies resulting in randomly scattered mines. From these twenty-four countries, Canadian treaty designers were mostly influenced by Afghanistan, Angola, Cambodia, Bosnia, Croatia, Mozambique, Nicaragua, Somalia and Columbia. The impact of anti-personnel mines within these nine countries also tended to influence treaty designers.

As of 28 May 1997, sixty-four states unilaterally supported a global ban on the production, stockpiling, transfer and use of anti-personnel mines. At that time, sixteen states had ordered the destruction of national stockpiles through legislation or had decided to set guidelines ranging from the end of 1997 to 2005 to totally or partially destroy stockpiles through a government decision.¹¹³ According to treaty designers, twenty-six governments demonstrated widespread agreement about support for the ban. The governments were: Austria, Belgium, Burkina Faso, Cambodia, Canada, Costa Rica, Denmark, France, Germany, Holy See, Honduras, Iceland, Ireland, Italy, Jamaica, Malaysia, Mozambique, New Zealand, Norway, Panama, Philippines, South Africa, Swaziland, Sweden, Switzerland and Zambia. Treaty designers observed eleven of these governments support the ban during negotiations. Additionally, these eleven governments unilaterally initiated action towards a ban by 28 May 1997. Consequently, support expressed for the ban does not necessarily presuppose action towards achieving the ban.

¹¹³ International Committee of the Red Cross, Towards a Global Ban on Anti-Personnel Mines: List of States Unilaterally Supporting a Global Ban on the Production, Stockpiling, Transfer and Use of Anti-Personnel Mines [online], 28 May 1997 [cited August 1997], available from World Wide Web: <<http://www.icrc.org/icrcnews/490e.htm>>.

Although the treaty required consensus between DFAIT and DND for the Government of Canada to lead the initiative, treaty designers were influenced by DFAIT and were not influenced by DND. Essentially, treaty designers were strongly influenced by Axworthy, the Canadian Minister of Foreign Affairs. The treaty designers were not influenced by the Defence White Paper, published under the auspices of a Minister of Defence.

The 1994 Defence White Paper is a critical document because it is a "comprehensive review of Canadian defence policy."¹¹⁴ Inevitably, DFAIT and DND had to coordinate their position before embarking upon a multilateral treaty that would have an impact upon Canada's global security activities. In 1993, David Collenette, Minister of National Defence wrote:

I co-chaired, with my colleagues the Ministers of Foreign Affairs and of International Trade, a National Forum on Canada's International Relations. Together, we established a process that allowed the Foreign Policy Review and Defence Policy Review to proceed in harmony. I followed closely the work of the Special Joint Committee Reviewing Canada's Foreign Policy, whose recommendations have been carefully assessed in preparing this White Paper. The Prime Minister, the Minister of Foreign Affairs and I also exchanged views with our Alliance partners, both on a bilateral basis and at NATO meetings.¹¹⁵

Despite the fact that a Liberal government under the auspices of Axworthy's predecessor, André Ouellet, consulted with the Minister of National Defence regarding the appropriateness of a global ban of a specific weapon which was a part of DND doctrine, the above passage depicts the necessity for DND and DFAIT consultations. These consultations occurred and affected the Canadian government's decision to invite the

¹¹⁴ 1994 Defence White Paper, 1.

¹¹⁵ 1994 Defence White Paper, 1.

international community in October 1996 to Ottawa in December 1997 to sign the Convention on Anti-Personnel Mines.¹¹⁶ Regardless of the political make-up of the governing party, Canada is a "strong advocate of multilateral security institutions."¹¹⁷

In terms of global affairs, treaty designers believe the ratification of the treaty will be conducted according to the time limits specified in the Convention. Additionally, signatories will be able to satisfy the criteria for ratification of the document. Despite the confidence placed in the spirit of the Ottawa Treaty, the belief that compliance will occur upon entry into force remains guarded even though the final document from the Ottawa Process was strengthened to comply with a global ban of anti-personnel mines.

Treaty designers strongly believe the current stage of globalization has contributed to the time frame in which the Ottawa Process was initiated. Globalization may be defined as:

A social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding.¹¹⁸

Additionally, the Ottawa Process contributes to the convergence of national states. The convergence coincides with postinternational politics characterized by globalization and multi-centrism.

Regulation of Land Mines

Regulation of anti-personnel mines must remain with the government.

¹¹⁶ Col. Fitch, interview.

¹¹⁷ 1994 Defence White Paper, 28.

¹¹⁸ Malcolm Waters, Globalization (London, England: Routledge, 1995), 3.

This view was expressed consistently by the three groups. Governments must regulate the private sector which remains unharmed by deregulation. Although NGOs cannot possibly regulate private enterprise, NGOs could be responsible for monitoring. To prioritize the significance of regulation, the hierarchy of compliance would include individual states and NGOs. Individuals states as signatories to the Ottawa Treaty would be responsible for verification through international law and the UN. Subsequently and complementarily, NGOs are responsible for ensuring that these institutions perform. Although the applicability of the Ottawa Treaty pertains to signatories, exclusively, an additional legal influence applied to non-signatories exists, based upon international law. Relatedly, international law is embodied through international organizations. Primarily, the UN is responsible for enforcing international law through the ICJ, numerous conventions, the General Assembly and the Security Council. Summarily, states are responsible for verification; whereas, NGOs are responsible for observing that regulating institutions execute effectively to support the ban.

The Impact of Defence and Industry Upon the Convention

Undoubtedly, DND had an impact upon the decision to support a treaty banning anti-personnel mines. This decision occurred in the pre-Ottawa Process. The impact may be explained using the bureaucratic politics model because the policy option which was selected depended upon the number of supporters. Once the option was selected, based upon a significant amount of support for the ban in comparison to other options, the "organized

forces [took a] step back in to shape alternatives and outcomes."¹¹⁹ Essentially, a controversy occurred between DND and DFAIT,¹²⁰ in the pre-Ottawa Process. Its resolution led to one governmental policy when entering the post-Ottawa Process. Although the initiative started as an export moratorium of the weapon, the unclouded support for a ban on the production and the use of anti-personnel mines influenced DND's impact upon specific articles in the Ottawa Treaty.

In the bureaucratic politics model, governments are sets of players clutching policy-making stances.¹²¹ For Canada, the sets of players were immersed in DND and in DFAIT. At the beginning, neither department established the land mines issue as a priority.

Responsibility for the mines issue within Canada's national federal government was divided, as might be expected, between the Department of National Defence(DND) and the Department of Foreign Affairs and International Trade(DFAIT). Within DFAIT, the issue was buried in the Non-proliferation, Arms Control and Disarmament Division(IDA) within the Department's International Security Bureau(IDD)....[A]nti-personnel mines were not a priority in DFAIT.¹²²

For DND, the issue of a change in the military doctrine regarding anti-personnel mines would not have been a priority because of the existing rigid rules which governed the mine-laying strategies. The issue of anti-personnel mines overlapped between DND and DFAIT, prior to the commencement of selecting a specific policy outcome.

A second tenet of the bureaucratic politics model states that

¹¹⁹ Brian W. Tomlin, "On a Fast-Track to a Ban: The Canadian Policy Process," Canadian Foreign Policy 5, no.3 (Spring 1998), 6.

¹²⁰ Tomlin, 3.

¹²¹ Nossal, "Allison Through the (Ottawa) Looking Glass," 611.

¹²² Tomlin, 3.

different players have different policy preferences upon the same issue.¹²³ Commencing in 1994, the stance between DND and DFAIT regarding a ban on anti-personnel mines became factious. At that time, Ouellet, the Minister of Foreign Affairs, encouraged Jean Chrétien, the Prime Minister to support a ban.¹²⁴ Additionally, the minister urged Collenette, the Minister of National Defence, to revise the department's policy on anti-personnel mines. Although both ministers were in Cabinet and both ministers served Canadian foreign policy interests, the influence of the Minister of Foreign Affairs did not weaken the Minister of National Defence's policy position. DND could not modify Canadian military doctrine because the defensive functions served by anti-personnel mines could not be accomplished by an alternative method.

Any discussion of the merits of banning anti-personnel land mines always comes back to the question of whether they are essential instruments of warfare. In many ways, the debate about the military utility of APLs is at the heart of the whole ban issue.¹²⁵

The differing policy preferences and the clashing ideologies at the nexus of the decision-making process anchored each minister's position upon the same policy issue, impermanently.

The third tenet of the bureaucratic politics model states that the differing players have dissimilar conceptions of the definition of the public good or the national interest depending upon organizational affiliation and career ambitions.¹²⁶ In January 1996, Axworthy became the

¹²³ Nossal, "Allison Through the (Ottawa) Looking Glass," 611.

¹²⁴ Tomlin, 8.

¹²⁵ Lenarcic, 46.

¹²⁶ Nossal, "Allison Through the (Ottawa) Looking Glass," 611.

Minister of Foreign Affairs. When Axworthy was designated the portfolio, the issue of anti-personnel mines intensified. The minister institutionalized departmental personnel into the policy development process of anti-personnel mines. Not only did Axworthy incorporate the NGO community into the issue, he "elevated the mines issue to the decision agenda, where policy choices would be made."¹²⁷ Axworthy's response differed from Ouellet's posture because Axworthy addressed "classless left" elements by incorporating them into the Liberal Party and preventing their defection to the New Democratic Party.¹²⁸ Consequently, his conception of the national interest coincided with his career ambitions to maintain and support the governing political party. Alternatively, DND had not committed to destroying its stockpiles of anti-personnel mines, by the Summer of 1996.¹²⁹ For DND, the national interest was defined by the 1994 Defence White Paper which called for combat capable forces and a reduced workforce. Undoubtedly, the military personnel objectives espoused by DND signified the defining national interest and the ambitions of senior civil servants within DND, in comparison to the Minister of Foreign Affairs' national interests and career ambitions.

The fourth tenet of the bureaucratic politics model asserts that differing players interact with each other along regularized circuits of the policy process attempting to ensure each respective proposal receives authoritative approval.¹³⁰ Although senior civil servants and ministers

¹²⁷ Tomlin, 11.

¹²⁸ Stairs, 44.

¹²⁹ Tomlin, 11 and 15.

¹³⁰ Nossal, "Allison Through the (Ottawa) Looking Glass," 611.

from both DND and DFAIT were involved from the onset of the policy development process, despite differing viewpoints, the anti-personnel mines issue was steered by policy entrepreneurs in the Non-proliferation, Arms Control and Disarmament Division(IDA), initially.¹³¹ With reference to the decision for Canada to commence the Ottawa Process, Ralph Lysyshyn, Director General, International Security Bureau, broached the concept to have Canada host a treaty signing conference in December 1997 with Paul Heinbecker, the Assistant Deputy Minister, of Global and Security Policy of DFAIT. At that time, Heinbecker consulted with Gordon Smith, Deputy Minister of Foreign Affairs, to confirm the cost and to ensure that Axworthy would be briefed upon this initiative.¹³² Although the correct channel was followed by Lysyshyn to ensure the fulfilment of authoritative approval, "Axworthy ha[d] some idea of what was being proposed, and had agreed to go along."¹³³ From an account of the events, DND appears to not be contributing to the Ottawa Process; however, the commencement of the Ottawa Process could not have happened without senior level management in both DND and DFAIT supporting the placement of the land mine issue as a policy option.

Finally, the bureaucratic politics model ascertains the policy outcome depends upon the interactions amongst the differing players.¹³⁴ Before Axworthy, the current Minister of Foreign Affairs, could formally initiate the Ottawa Process, in October 1996, the Government of Canada had

¹³¹ Tomlin, 12.

¹³² Tomlin, 19.

¹³³ Tomlin, 20.

¹³⁴ Nossal, "Allison Through the (Ottawa) Looking Glass," 611.

to have a clear policy choice. The policy option to lead the support for a treaty mandating the ban of the production and the use of anti-personnel mines descended from the interactions amongst the varying ministers, the senior civil servants, the officials in IDA and the NGOs. In November 1995, DND provided the political space for IDA to move on the issue when Collenette publicly speculated that a total destruction of Canada's stockpiles of anti-personnel mines should occur.¹³⁵ On 17 January 1996, DFAIT announced a complete ban on the production, transfer and use of anti-personnel mines.¹³⁶ DND may have reviewed its policy to discern that the functions of anti-personnel obstacles could be accomplished without anti-personnel mines. Additionally, DND was conducting demining activities abroad to eradicate the weapon without modifying Canadian military doctrine.¹³⁷ The fruition of interactions and the definitive policy stance by the Government of Canada formulated a position to end the pre-Ottawa Process and to commence the post-Ottawa Process.

DND objectives are reflected in the final document of the Convention signed in December 1997 because government objectives are DND objectives.¹³⁸ Essentially, the military exists to support Canadian diplomatic objectives. Since the Austrian draft from 13 May 1997 was used as the basis for the negotiations in Oslo, overall, the draft withstood the changes participating governments attempted to modify to weaken the agreement. Two examples reflect the durability of the Austrian draft and,

¹³⁵ Tomlin, 9.

¹³⁶ Tomlin, 10.

¹³⁷ Tomlin, 9.

¹³⁸ Col. Fitch, interview.

in turn, reflect DND objectives.

The first example relates to the US delegations' objectives in Oslo. The US attempted to have the definition of anti-personnel mine changed. Although the American military had a stake in securing the definitional change, its bid was unsuccessful. In consultation with their militaries, governments from other countries achieved their objectives. Consequently, the definition of anti-personnel mine remained intact.¹³⁹

"Anti-personnel mine" means a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons. Mines designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped.¹⁴⁰

This definition must not be confused with "anti-handling device" which:

...means a device intended to protect a mine and which is part of, linked to, attached to or placed under the mine and which activates when an attempt is made to tamper with or otherwise intentionally disturb the mine.¹⁴¹

A second example relates to the number of anti-personnel mines which a nation may maintain for training purposes.¹⁴² The Austrian draft states the number of anti-personnel mines a nation can have on hand. According to Col. Fitch, Military Advisor to the Canadian delegation in Oslo, a permissible figure of anti-personnel mines on hand, should not exceed two thousand. In Oslo, Italy wanted the number increased to two hundred thousand. Germany created a formula setting the acceptable figure at one

¹³⁹ Col. Fitch, interview.

¹⁴⁰ "Convention on Anti-Personnel Mines."

¹⁴¹ "Convention on Anti-Personnel Mines."

¹⁴² Col. Fitch, interview.

percent of the number of combatants of the force since the weapons would be used for training purposes. Emerging from the discussion was a disputation regarding the definition of a combatant.¹⁴³ Both Italy and Germany are manufacturers and sellers of land mines. As of September 1997, Canada was not part of the group of twenty-four countries manufacturing and selling anti-personnel mines.¹⁴⁴

In the Ottawa Treaty, Article 3 states:

...the retention or transfer of a number of anti-personnel mines for the development of and training in mine detection, mine clearance, or mine destruction techniques is permitted. The amount of such mines shall not exceed the minimum number absolutely necessary for the above-mentioned purposes.¹⁴⁵

Although specific numbers are not stated in the Ottawa Treaty, the second tentative Austrian draft of 14 March 1997 includes a third paragraph which is not found in the 18 September 1997 Convention, which was signed in December 1997. The paragraph which was eliminated stated that the number of anti-personnel mines on hand must be registered annually with the Secretary-General of the UN, the Depositary of the Convention.¹⁴⁶ Consequently, DND retains control of the permissible number of anti-personnel mines without any verification methods to accommodate DND objectives.

DND contributed to the Ottawa Process in two ways. First, DND

¹⁴³ Col. Fitch, interview.

¹⁴⁴ Jeff Sallot, "Axworthy Land-Mine Initiative Applauded," Globe and Mail, 13 September 1997, A10.

¹⁴⁵ "Convention on Anti-Personnel Mines."

¹⁴⁶ Austria, Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (Second Tentative Austrian Draft) [online], 14 March 1997 [cited 28 July 1997; 17:44:53], available from World Wide Web: <<http://www.vvaf.org/landmine/icbl/treaty.htm>>.

provided military specialists to IDA because instances emerged when technical expertise was required.¹⁴⁷ Second, DND contributed by being a moral army. Essentially, Canada's army does not intentionally cause casualties amongst civilian populations.¹⁴⁸ DND contributed to the negotiations through these two meaningful practices.

In terms of the eradication of anti-personnel mines, DND will be involved in the destruction and demining combination. To accomplish destruction and demining together, five components are involved. First, DND will play a role in the cessation of placing new mines in the ground. The second component involves destroying stockpiles and manufacturing capabilities. Third, victims must be assisted through reintegration of the individual into society. Additionally, the family of the victims must be assisted to cope and adapt to the victim's loss of mobility or death as a result of the contact with anti-personnel mines. Fourth, DND assists indirectly through training to pull the mines out of the ground that currently exist.¹⁴⁹ Fifth, DND will contribute by establishing the Centre for Mine-Action Technologies at the Defence Research Establishment Suffield (DRES). Seventeen million dollars will be allocated to the initiative.¹⁵⁰ Although the Minister of Foreign Affairs specifically described the fifth component as "a partnership between defence and industry that recalls the spirit of partnership established during the

¹⁴⁷ Col. Fitch, interview.

¹⁴⁸ Col. Fitch, interview.

¹⁴⁹ Col. Fitch, interview.

¹⁵⁰ Canada, "Ministers Announce Creation of Centre for Mine-Action Technologies," News Release, no.200 (25 August 1998), 1.

Ottawa Process,"¹⁵¹ this statement may be applicable to the first four components identified.

According to the Canadian Forces, the destruction and the demining of anti-personnel mines consists of three categories. The three categories are breaching, clearing and humanitarian demining.¹⁵² Breaching and clearing is conducted for military purposes and assumes risk is inherent after mines have been removed. These two methods are conducted in the face of the enemy involving rapid violence and high risk. Specifically, minimum clearing is conducted to clear a path out of the area from the enemy or to set up an observation point. Although time is important, it is less of the essence. Humanitarian demining refers to the "other side of the coin" and assumes zero risk after mines have been removed. Realistically, 99.4 percent to 99.6 percent will be cleared to suggest that once a ground is contaminated with anti-personnel mines, one hundred percent clearance is impossible. Contributing to the impossibility of achieving zero risk is unexploded ordnance. Essentially, unexploded ordnance means that ten percent of the anti-personnel mines will not function correctly.¹⁵³ Table 1 provides a comparison between the two broad classifications of breaching and demining.

It's important to distinguish military mine clearance, usually referred to as "mine field breaching" from post-conflict humanitarian demining. Military breaching involves opening a lane through which troops and vehicles can advance. Perfect clearance is not possible, and some casualties are accepted to

¹⁵¹ Canada, "Ministers Announce Creation of Centre for Mine-Action Technologies," 1.

¹⁵² Col. Fitch, interview.

¹⁵³ Col. Fitch, interview.

achieve the tactical advantage of rapid advance.¹⁵⁴

The Ottawa Treaty calls for humanitarian demining as prescribed under Article 5, entitled Destruction of Anti-Personnel Mines In Mined Areas.¹⁵⁵

Table 1
Comparing Military Demining and Humanitarian Demining

Military Minefield Breaching	Humanitarian Demining
Anti-tank mines	Anti-personnel mines
Mined areas	Individual mines, wherever located
Clear lanes for troop/vehicle advance	Clear all mines in area
As tactics dictate; all-weather	Minimise risk to deminers
Casualties accepted	No risk after demining complete
Recently-laid mines	Mines laid long ago, possibly migrated/degraded
Current adversary mine types	Old mines, perhaps many types

Source: John Walker, 22 November 1996 [cited 4 May 1998],
<<http://www.fourmilab.ch/minerats/hackers96/sld013.html>>.

DND believes a portion of the knowledge and technology must be transferred to civilians. Soldiers will not be performing and will not be involved in the demining. Accordingly, NGOs have entered the market of demining as a result of the Ottawa Treaty. Instead, DND will train contractors and indigenous forces and teach individuals how to organize a humanitarian mine clearance operation. For example, prior to the

¹⁵⁴ John Walker, Breaching vs. Demining [online], 22 November 1996 [cited 4 May 1998; 19:34:55], available from World Wide Web:
<<http://www.fourmilab.ch/minerats/hackers96/sld013.html>>.

¹⁵⁵ "Convention on Anti-Personnel Mines."

initiation of the Ottawa Process, in 1990, Canada started providing knowledge to individuals on the Afghanistan-Pakistan border. For cultural reasons women from DND had to be involved in training female refugees. In accordance with the Ottawa Treaty, the capacity in which DND will support the Ottawa Treaty, in the post-Ottawa Process, will focus upon the training of deminers abroad by sharing knowledge and expertise.¹⁵⁶

Article 8 refers to Facilitation and Clarification of Compliance. The Ottawa Treaty has been criticized as a multilateral treaty which does not possess a forceful compliance mechanism.

In relation to multilateral treaties, compliance methodology can be defined as the study of systems and methods by which treaty parties can be induced or persuaded to comply. Where a violation does occur,...compliance methodology turns to searching for the means by which the violator can be persuaded to rectify its behaviour. Compliance methodology concerns itself primarily with systems that can be installed within treaties.¹⁵⁷

According to DND, multinational teams have been instituted to ensure States Parties meet their obligations under the Convention on Anti-Personnel Mines. DND admits the Convention possesses a gentler kind of compliance regime. The regime cannot be rigorous because of the nature of the weapon.¹⁵⁸

The Convention outlines, under Article 4, that the destruction of stockpiled anti-personnel mines must be destroyed within four years upon entry into force. For Canada, this time frame is realistic because of the

¹⁵⁶ Col. Fitch, interview.

¹⁵⁷ The Markland Group, Compliance Matters: Recent Developments Relating to Compliance with Multilateral Treaties in the Area of Disarmament and International Security 23, no.2-3 (December 1996-May 1997), 35.

¹⁵⁸ Col. Fitch, interview.

financial status of the country. For a poor government, which would have to put an inordinate amount of money into destroying stockpiles, meeting the four-year time frame would be unrealistic.¹⁵⁹ Unquestionably, Canadian industry did not have a bearing upon the contents of this article because the stockpiles were destroyed before December 1997.

Two methods exist for the destruction of stockpiles. First, stockpiles can be exploded. To blow up large quantities of the weapon this method is unsuitable. Second, the individual weapons can be demanufactured. This method is suitable for large quantities. Profit generation is a favourable characteristic to manufacturers when using this method. Essentially, anti-personnel mines are recyclable into by-products and fertilizer. Demanufacturing is not used in Canada.¹⁶⁰ Despite the secondary profits which may be earned from the destruction of anti-personnel mines, Canadian industry would not have had an impact upon Article 4 which addresses the destruction of stockpiles within its jurisdiction.

Article 5 requires that each state must destroy anti-personnel mines in mined areas under its jurisdiction within ten years, upon entry into force. Irrefutably, this provision is unrealistic according to DND estimations. The article allows for a State Party to request subsequent extensions if the provision cannot be met.

Such an extension may be renewed upon the submission of a new request....In requesting a further extension period a State Party shall submit relevant additional information on what has been undertaken in the previous extension period pursuant to

¹⁵⁹ Col. Fitch, interview.

¹⁶⁰ Col. Fitch, interview.

this Article.¹⁶¹

Extensions will be easily obtained because the technology to eliminate mined areas at that speed does not exist. The determining factor for each country laden with mines will be dependent upon the means available to conduct humanitarian demining.¹⁶² Benefitting from the ten-year time frame are the industrialized countries who are investing millions of dollars into technological advancement for demining equipment. Article 5 feeds the new growth industry of demining in Canada through exports to the Third World in the name of humanitarianism.

Conclusion

By surveying industry, DND and treaty designers, the impact of industry and defence upon the process to negotiate the final convention may be sketched. Consensus emerged amongst the three groups regarding the regulation of land mines by government rather than by NGOs. With reference to the impact of industry upon the final document, the three groups provided insight regarding the doubtful impact of industry upon the negotiations from a Canadian perspective. First, Canadian defence industries did not forcefully oppose Canada's support for the ban. Second, privileged access to DFAIT and to the Minister of Foreign Affairs by NGOs intensified the global ban. These are two of the reasons why the Ottawa Treaty was negotiated and signed by one hundred and twenty-three countries in less than fifteen months without opposition from Canadian industry and Canadian defence.

¹⁶¹ "Convention on Anti-Personnel Mines."

¹⁶² Col. Fitch, interview.

To understand the impact of DND and industry upon the Convention on Anti-Personnel Mines, a discussion of the circumstances which led to the land mine issue becoming a policy outcome in the pre-Ottawa Process, examined the controversy between DND and DFAIT. To conceptualize the characteristics of the policy selection, the five tenets of the bureaucratic politics model was used in conjunction with specific features of the Canadian foreign-policy making decision strategies. Initially, both DND and DFAIT were not interested in the land mine issue. Subsequently, deviating policy positions emerged branding each organization's conception of the national interest. Finally, DND did not oppose the ban. DND located methods to accomplish the purposes of anti-personnel obstacles without relinquishing Canada's role in the maintenance of security. The position communicated to the international community and reflected in the Ottawa Treaty proposed a Canadian policy outcome which supported a ban on the production, the transfer and the use of anti-personnel mines.

By examining specific articles from the Convention on Anti-Personnel Mines, the evidence suggests the fabrication of anti-personnel mines did not have a bearing upon the final document, for Canada. Instead, the demining industry certainly thrives from the time limits set for mine eradication. Data obtained from industry, DND and treaty designers demonstrates the imprint of defence upon the Convention. Although this chapter examined specific articles from the Convention, the next chapter analyzes additional dimensions for two of the reasons why industry and defence did not oppose the anti-personnel land mines treaty.

CHAPTER 3 - INDUSTRY AND THE MANUFACTURE OF ANTI-PERSONNEL MINES

This chapter analyzes two of the reasons the defence industries and DND did not oppose Canada's support for the anti-personnel land mines treaty. First, SNC Industrial Technologies was the only manufacturer of anti-personnel mines in Canada, in the pre-Ottawa Process. In the post-Ottawa Process the role of this manufacturer was modified to include deminer training funded through CIDA. Consequently, the company would generate revenue from the demining process. The other reason which this chapter investigates relates to the expanded role of civil society in a multi-centric world. By focusing upon the actors contributing to the demining process of anti-personnel mines, this chapter explains new alliances between NGOs and DFAIT. Although the relationship between NGOs and DFAIT will be addressed, additional alliances unfolded between DND and DFAIT; DND and industry; industry and CIDA; DND and NGOs; industry and NGOs; and, NGOs and rehabilitation. These two reasons sustain the argument that defence and industry did not oppose the Government of Canada's support for the anti-personnel land mines treaty.

By addressing state capacity, the pre-Ottawa Process, the post-Ottawa Process and the application of the Ottawa Process to Rosenau's theory of postinternational politics, this chapter attempts to respond to several questions. The major questions are as follows: What is the relationship between industry and defence in the pre-Ottawa Process? What is the relationship between industry and defence in the post-Ottawa Process? What associations and alliances exist in the expanded and modified relationship between industry and defence in the post-Ottawa Process? Does the vitality of the success of the demining process in the

post-Ottawa Process lie in the potentially informal and changeable alliances and associations amongst the actors? Appendix III and Appendix IV pictorially explain the relationships amongst the actors in the life cycle of anti-personnel mines in the pre-Ottawa Process and the demining process in the post-Ottawa Process.

Assessing State Capacity

The means required to achieve the global ban transfixes the existence of states. State capacity consists of two dimensions. The two dimensions are efficiency and responsiveness.¹⁶³ Both dimensions are mutually supportive.

Pervasive personal insecurity, a result of the spread of cheap and therefore "democratic" weaponry such as...land mines, undermines norms that support savings, maintenance, and investment. At issue in [this case] is not policy per se but the very existence of states.¹⁶⁴

Consequently, with reference to the post-Ottawa Process, the existence of the state is questioned rather than the policy featured within the Ottawa Treaty because NGOs are assigned duties which have been traditionally handled by the state. Threatening state capacity relates to the expansion and modification of the relationship between defence and industry with the involvement of additional actors. Forming a multi-centric world, these actors include CIDA, rehabilitation and NGOs. The most extensive example of aggraving the state relates to the compliance mechanism within the Ottawa Treaty.

¹⁶³ Jennifer A. Widner, "States and Statelessness in Late Twentieth-Century Africa," Daedalus 124, no.3 (1995), 132.

¹⁶⁴ Widner, 129.

Within the Ottawa Treaty, under Article 8, Facilitation and Clarification of Compliance, a State Party may request a fact-finding mission consisting of qualified experts. Although the state ultimately allows the mission to enter its territory, the mission is ultimately responsible for collecting information relating to the compliance issues. Additionally, the mission is responsible for reporting through the Secretary-General of the UN. Normally, states or UN-sponsored missions report directly to the Secretary-General. In the Ottawa Treaty, the mission is endowed with powers normally bestowed upon a state.

16. All information provided in confidence and not related to the subject matter of the fact-finding missions shall be treated on a confidential basis.

17. The fact-finding mission shall report, through the Secretary-General of the United Nations, to the Meeting of the States Parties or the Special Meeting of the States Parties the results of its findings.¹⁶⁵

Unlike an arms control treaty where the UN sets up the mechanism for compliance, civil society will be responsible for compliance in the field.¹⁶⁶

Throughout the negotiations leading to the treaty, NGOs were allowed to be observers and were given official status. NGOs were fully incorporated into the negotiations. For example, an NGO had the same status as Russia and China at the negotiations.¹⁶⁷ The Canadian government gave NGO representatives diplomatic status and financed travel and expenses for the negotiating sessions. Within the Ottawa Treaty,

¹⁶⁵ "Convention on Anti-Personnel Mines."

¹⁶⁶ Steve Goose, US Campaign to Ban Landmines, Norman Paterson School of International Affairs(NPSIA) Speaker Series, 3 November 1997.

¹⁶⁷ Steve Goose, NPSIA Speaker Series.

reference to NGOs is cited six times within the twenty-two articles. In Articles 11, 12 and 13, the most meaningful inclusion of NGOs is affirmed.

Article 11, Meetings of the States Parties, reads:

States not parties to this convention, as well as the United Nations, other relevant international organizations, regional organizations, the International Committee of the Red Cross and relevant non-governmental organizations may be invited to attend these meetings as observers in accordance with the agreed Rules of Procedure.¹⁶⁸

Under Article 12, observer status continues to be granted to NGOs when the Review Conference is held five years after the Convention enters into force.

....relevant non-governmental organizations may be invited to attend each Review Conference as observers in accordance with the agreed Rules of Procedure.¹⁶⁹

Furthermore, amendments, as outlined in Article 13 also permit "States not parties to this Convention" to participate in proposed amendment conferences by granting observer status "in accordance with the Agreed Rules of Procedure." Observer status, in this treaty, renders full diplomatic status equivalent to official state diplomats. Since the global treaty which outlines the policy for anti-personnel mines will eventually become international law, the observer has powerful implications for state capacity.

Prior to becoming international law, forty signatories must ratify the treaty, nationally. Since Canada has ratified the treaty, the participation of NGOs, in Canada, is entrenched in domestic law. Using

¹⁶⁸ "Convention on Anti-Personnel Mines."

¹⁶⁹ "Convention on Anti-Personnel Mines."

Canada's "diplomatic capital"¹⁷⁰ the movement from state-centrism to multi-centrism exemplifies the proposition by James Rosenau that the Ottawa Process is occurring in an era of postinternational politics.¹⁷¹ NGOs would not have been allowed to participate at the same status of a state in the obsolete era of international politics. Described as a "challenge to all of the Cold War era," representatives from three NGOs, Jody Williams, Steve Goose and Valerie Warmington, from the International Campaign to Ban Land Mines, the US Campaign to Ban Landmines and MAC, respectively, personify a new way of doing things after the Cold War.¹⁷² The involvement of NGOs continues regarding the ratification process.

Pre-Ottawa Process

In the pre-Ottawa Process, the life cycle of anti-personnel mines consists of industry, defence, rehabilitation and the VVAF. Industry was responsible for the production of anti-personnel mines. The location of the power structure or the engineers which determine the type of technology used to manufacture an anti-personnel mine is found in the manufacturing industry. Joint interaction existed between industry and defence regarding need and technology.¹⁷³ The strategic use of anti-personnel mines contributed to the mission of DND. Overall, the mission of DND and the Canadian Forces is:

¹⁷⁰ Jody Williams, International Campaign to Ban Landmines, NPSIA Speaker Series, 3 November 1997.

¹⁷¹ Rosenau, 3-20.

¹⁷² Bob Lawson, Department of Foreign Affairs and International Trade, NPSIA Speaker Series, 3 November 1997.

¹⁷³ Col. Fitch, interview.

...to defend Canada and Canadian interests and values while contributing to international peace and security. Capable armed forces remain an essential component of national and multilateral responses to possible challenges to sovereignty, transgressions of international law and order, and the fulfilment of our commitments to the international community. Canada's defence policy calls for the maintenance of multi-purpose, combat-capable forces to meet Canada's security needs at home and abroad.¹⁷⁴

In the event that combatants became wounded, medical rehabilitation was available. Physical rehabilitation of soil and territory occupied by civilians is required to confront the dilapidation of terrain. As the life cycle of anti-personnel mines continued, the VVAF, appeared to stigmatize the use of anti-personnel mines by becoming part of the life cycle. The roots of the VVAF stem from the overwhelming mine casualties during the Vietnam war.

There was widespread use of mines and booby traps against U.S. forces. The use of antipersonnel mines against dismounted troops in Vietnam achieved the desired effect of delaying and inflicting casualties on the enemy while defending friendly positions. Estimates of mine casualties suffered by the United States are as high as one-third of the total, witness to the utility of mines and booby traps in insurgency situations.¹⁷⁵

Significant changes were realized in October 1996 when the Minister of Foreign Affairs invited the international community to Ottawa to sign an agreement to ban anti-personnel mines, rejecting the traditional UN channels to accomplish multilateral disarmament.

DND doctrine specifically and meticulously explains the accepted use of anti-personnel mines and anti-tank mines. First, the completion of survey reports are mandatory. The distance between the emplacement of

¹⁷⁴ Canada, Department of Finance, National Defence Estimates, 1997/1998, 2-3.

¹⁷⁵ Johnson, 37.

weapons in the field is specified. Second, within, NATO, a mine-laying strategy requires all mine fields to be fenced. Third, the Rules of Engagement restrict the types of weapons which can be used in a theatre of war.¹⁷⁶ Within the Ottawa Treaty, anti-tank mines are not prohibited because the military utility and the humanitarian disaster potential caused by anti-tank mines is the flip side of the military utility and the humanitarian disaster potential caused by anti-personnel mines. Measurably, anti-personnel mines have a low military utility and a high humanitarian disaster effect; whereas, anti-tank mines have a high military utility and a low humanitarian disaster effect.¹⁷⁷

In terms of necessity to sustain national security, anti-personnel mines would be classified as necessary sixty percent of the time. Similarly, the weapon has moderately evolved to become a strategic weapon. The ease of transportability strongly contributes to the military utility of anti-personnel mines eighty percent of the time. Although the cost of anti-personnel mines strongly contributes to the use, the substitutability of anti-personnel mines as an instrument of war is slightly greater than the cost. Given the belief by DND that a global land mines crisis certainly exists, DND strongly believes countries should comply with the Ottawa Treaty fully.

Post-Ottawa Process

Undoubtedly, contributing to the crisis, civilians are affected by the weapon. Although the weapon may be modestly fatal, "one million

¹⁷⁶ Col. Fitch, interview.

¹⁷⁷ Col. Fitch, "Anti-Personnel Mine Ban Treaty Notes," 5.

landmines exploded under Third World victims in the last fifteen years."¹⁷⁸ DND would strongly concur with this figure. Countries of the Third World perceive anti-personnel mines are a genuine instrument of self-defence. DND does not believe the use of anti-personnel mines contributes to defending Canada or to defending North America. Although the completion of mine-laying reports are mandatory, the belief exists that mapping strategies have not been employed one hundred percent of the time. For these reasons, the relationship between industry and defence in the demining process, in the post-Ottawa Process, has been expanded and modified to include additional actors as a result of the impact upon civilians.

In the post-Ottawa Process, the demining process consists of industry, defence, CIDA, rehabilitation, DFAIT and NGOs. Gradually, the original roles of industry and defence have changed. Industry is responsible for anti-personnel mine recycling and for demining endeavours. With the infrastructure and the expertise of DND, the departmental personnel began training the deminers for countries laden with mines. CIDA became involved in the demining process by providing funding. In the demining process, the role of rehabilitation expands to include casualties from the anti-personnel mines and from the remunerated deminers. DFAIT and the NGOs have coalesced both to ensure the political viability of the global ban through ratification and to promote the effective eradication of anti-personnel mines in areas abroad. What is uniquely striking about the demining operation in the post-Ottawa Process are the alliances and

¹⁷⁸ Stephen Gill, "Globalisation, Market Civilisation, and Disciplinary Neoliberalism," Journal of International Studies 24, no.3 (1995), 408.

the associations between at least two of the six actors at any given time; whereby, overlap originates in their needs and objectives to accomplish their newly formed goals, based upon revised and updated doctrine, to begin conforming to the Ottawa Treaty. Several examples substantiate the relationships and the common objectives of these six actors.

First, a relationship exists between DND and DFAIT to maintain the momentum towards ratification of the treaty. DND policy requires:

The Department and the CF will: maintain a capability to assist the Department of Foreign Affairs and International Trade(DFAIT) in the protection and evacuation of Canadians from areas threatened by imminent conflict.¹⁷⁹

This is one practice; whereby, DND and DFAIT, collectively contribute to international security. Building upon this policy and before the Canadian government could initiate the Ottawa Process, consensual agreement between DND and DFAIT had to occur. Although two different departments are decisively involved, the position presented to the international community must be one federal governmental position. Consequently, the relationship between DND and DFAIT was integral for the inception of the Ottawa Process.

Second, a relationship between DND and industry exists to conduct effective training of mine clearance. Virtually, every advanced industrial country has been a supplier of anti-personnel mines. Three hundred to four hundred variations may be found. Within a defence budget, the military views anti-personnel mines as economically viable because the weapon is a cheap effective device to purchase and to transport. Manufacturers have influenced the demand for anti-personnel mines in the normal commercial

¹⁷⁹ National Defence Estimates, 1997/1998, 2-8.

sense. Commercial interests did not contribute to the Ottawa Process in the Canadian military experience. Inevitably, the availability of anti-personnel mines contribute to military use because availability relates to economics. Since the manufacturing of anti-personnel mines became illegal in Canada, as of 2 December 1997, based upon jurisdictional control, the economic relationship between industry and defence based upon anti-personnel mines ceased.¹⁸⁰

Third, a continual relationship emerged between DFAIT and NGOs. The land mines initiative engaged civil society from the outside; whereby, MAC was the most important trigger in Canada before the policy could be formulated. A political space exists between the provocation and the policy. Initially, Ouellet grasped the issue. Second, two political Foreign Affairs ministers were appointed, sequentially. The components of a successful policy may be attributed to Ouellet, Axworthy and a willing democracy. By inviting the international community to Ottawa, Axworthy recognized the opportunity to push the issue forward.¹⁸¹

Another important dimension to the relationship between DFAIT and NGOs relates to the negotiating sessions. For this reason, the questionnaire I prepared was targeted towards treaty designers, treaty negotiators and policy-makers. This category constituted respondents from both DFAIT and NGOs in Canada because of the comparable role played by government and non-government to achieve the sole objective of a global ban of anti-personnel mines and to employ global compliance measures in

¹⁸⁰ Col. Fitch, interview.

¹⁸¹ Michael Pearson, Former Senior Policy Advisor to Minister of Foreign Affairs, Expert Speaker Session, 1 December 1997.

the post-Ottawa Process.

Fourth, a relationship exists between industry and CIDA with reference to the conduction of the humanitarian mine clearance objective. SNC Industrial Technologies, the former manufacturer of anti-personnel mines, has developed an association with CIDA. The company is teaching individuals how to identify and destroy anti-personnel mines. Whereas CIDA provides foreign development assistance, the private sector contributes the knowledge about where the weapons have been exported to ensure demining is conducted. CIDA could become subordinate to DFAIT in the future prompting a shift from "development and poverty-focused objectives towards global human security projects"¹⁸² This shift could channel additional funding to humanitarian mine clearance to meet CIDA's security objectives.

Fifth, a relationship exists between DND and NGOs. DND possesses expertise and knowledge regarding military demining. These techniques are applicable to humanitarian demining. Since the demining industry is deregulated and DND will not use soldiers to conduct mine clearance, DND will continue to train NGOs to conduct demining activities abroad.¹⁸³ Repeatedly, government and non-government are driving towards common goals in the post-Ottawa Process.

Sixth, a relationship exists between industry and NGOs. Within Canada, Terra Aerospace and Med-Eng are two companies which have expanded to provide mine clearance equipment to NGOs. For example, CAMEO Security,

¹⁸² Cranford Pratt, "DFAIT's Takeover Bid of CIDA: The Institutional Future of the Canadian International Development Agency," Canadian Foreign Policy 5, no.2 (Winter 1998), 12.

¹⁸³ Col. Fitch, interview.

an NGO decreed to conduct demining, will require equipment and technology to conduct a demining operation. Since CAMEO Security is a non-profit organization, the equipment will be transferred to the receiving government at the end of the project so the indigenous population may continue the demining operation. With this relationship, the face of a new growth industry emerges which combines both profit and non-profit seeking ventures.

Seventh, a relationship exists between NGOs and rehabilitation. Medical personnel are required to successfully conduct demining operations. Whereas in the pre-Ottawa Process, injuries and casualties occurred from unmarked mine fields, in the post-Ottawa Process injuries and casualties occur to both victims and to demining workers.

Too often, well-intentioned but inept medical efforts complicate war wounds and result in more extensive amputations....The loss of productive human labor, the burden of large, disabled populations, and the diversion of resources from primary health services only hint at the enormous price that mines extort from societies they infest.¹⁸⁴

Health care professionals contribute to the burgeoning new growth industry of humanitarian mine clearance in the post-Ottawa Process.

Finally, the relationship established between the US-based International Campaign to Ban Landmines, US citizens and Canadian governmental officials occurs in the demining process of anti-personnel mines, in the post-Ottawa Process. The US government's position to refuse to sign the treaty is inconsistent with the US' philosophy to engage in mine clearance because the current US position remains to continue manufacturing land mines to protect troops. The US philosophy supports

¹⁸⁴ Cahill, introduction, 12.

banning land mines without signing the Ottawa Treaty. Simultaneously, the US contends land mines will continue to be used discriminately. This serves to demonstrate the collaboration which has ensued between varying individuals from differing states for a common mission.

Theorizing About Postinternational Politics

Essentially, the two worlds of world politics may be used to explain and predict the relationships which emerged in the Ottawa Process. In the post-Ottawa process, a clear example of a bifurcated world which consists of state-centrism and multi-centrism exists.

...the state-centric world is much more coherent and structured than is its multi-centric counterpart. It is to some degree anarchic and decentralized, because of the lack of an overarching world government, but that anarchy is minimal compared to the chaos that results from the much greater decentralization that marks the multi-centric system. Not only are there many fewer points at which action originates in the state-centric than in the multi-centric system, but action and interaction in the former is also considerably more subject to formal procedures and hierarchical precepts than in the latter. In the multi-centric world, relations among actors are on more equal footing, are more temporary and ad hoc, and more susceptible to change, but are less symmetrical and less constrained by power differentials, formal authority, and established institutions.¹⁸⁵

When examining the post-Ottawa Process, in the state-centric world, the players which interact include the US, the Third World, the European Union, IGOs and international non-governmental organizations(INGOs). Alternatively, in the multi-centric world, IGOs, INGOs, state bureaucracies and transnational actors exist. These two worlds exist in postinternational politics.

Specific references to Canada may be discerned from the generic

¹⁸⁵ Rosenau, 249.

terms Rosenau offers for the multi-centric world. The NGO of MAC would be classified as a subgroup of the INGO of the International Campaign to Ban Landmines. These organizations interacted with the state bureaucracy of IDA of the International Security Bureau of DFAIT. An example of the transnational actors would include the companies and the NGOs which constitute the demining industry. Although the multi-centric world interacts with the state-centric world, bifurcation is "intended to serve as a continual reminder that the global system has structure even though it lacks unity."¹⁸⁶

The origins of the concept to globally ban anti-personnel mines began in October 1992. Six NGOs came together to successfully begin an international campaign. These NGOs called upon governments to unite.¹⁸⁷

As the world shook off the icy grip of the Cold War, human rights and medical aid groups in the early 1990s were able to focus international attention on a subject that had gained scant specialty interest before. Initiated more or less jointly by six groups--Handicap International, the Vietnam Veterans of America Foundation, Human Rights Watch, Medico International, Physicians for Human Rights, and the Mines Advisory Group--the international campaign to ban mines chalked up rapid successes that surprised veteran peace campaigners and government officials alike.¹⁸⁸

Shortly before the signing of the treaty in Ottawa, one thousand NGOs in over sixty countries were working in a coalition. This is an historic process for two reasons. First, a specific weapon has never been banned before. Second, NGOs that do not normally work together formed the

¹⁸⁶ Rosenau, 11.

¹⁸⁷ Jody Williams, NPSIA Speaker Series.

¹⁸⁸ Philip C. Winslow, Sowing the Dragon's Teeth: Land Mines and the Global Legacy of War (Boston: Beacon Press, 1997), 139.

coalition.¹⁸⁹ Initiated in a decentralized manner by non-state actors, interdependence amongst the NGOs to form a collective offered a solution to an issue which had not been addressed fully by government and the UN. Clearly, the nation-state was not the most important actor on the global field. The process which started in October 1992 represents structural bifurcation fostering a changing relationship between Canada, a middle power, the UN and the International Campaign to Ban Land Mines.

Turbulence refers to the tensions and changes that develop when the structures and processes that sustain world politics are unsettled and appear to be undergoing reorganization. During the commotion which accompanies these shifts, new processes evolve resulting in disequilibrium. Turbulence is revealed through technological breakthroughs, authority crises, consensus breakdowns, revolutionary chaos, generational conflicts and other causal factors that restructure the human landscape in which they erupt. Turbulence is characterized by uncertainty, rapidity, complexity, dynamism and boundary changes when applied to global politics. The changes have been wrought by global turbulence.¹⁹⁰

The Ottawa Process addresses Rosenau's concept of turbulence. From the six ways in which turbulence is revealed, five are applicable to the dimensions of the global land mines crisis. First, technological breakthroughs have occurred in the funding for research and development to produce safe mine clearance equipment. For Canada, the Department of Mechanical Engineering at the University of Alberta, through the DRES,

¹⁸⁹ Jody Williams, NPSIA Speaker Series.

¹⁹⁰ Rosenau, 3-20.

supported the project to identify land mines.¹⁹¹ Second, authority crises occurred between the federal government and the International Campaign since governments are exclusively responsible for negotiating multilateral disarmament treaties normally under the auspices of the UN. Third, consensus breakdowns occurred between middle powers and great powers. Although the US supports the viability of the demining industry and the ban on anti-personnel mines, the US refused to sign the treaty in December 1997. Russia, China and the US rejected the banning of anti-personnel mines; whereas, a core group of middle powers embraced the global ban. Fourth, generational conflicts occurred because of the impact of anti-personnel mines upon children and adults.

The success of the Ottawa process highlights the potential of a new form of multilateralism predicated on the use of emerging sources of diplomatic influence in the post-cold war era. International public opinion, transnational NGOs, and revolutions in telecommunications and the mass media have eroded the traditional boundaries and prerogatives of diplomatic praxis.¹⁹²

Finally, the potential growth and profitability of the demining industry contributed to the speed in which the global ban materialized. When embarking upon a new way of accomplishing objectives on the global stage, the Ottawa Process confronted turbulence.

Internal and external variables contribute to global turbulence. According to Rosenau, global politics is conceptualized according to three internal parameters. The three parameters are: orientational or skill;

¹⁹¹ University of Alberta, Mechanical Engineering, A Mechanical Means of Land Mine Detection: Continuing Work... [online], date unknown [cited 4 May 1998: 14:13:22], available from World Wide Web: <<http://www.mece.ualberta.ca/landmine/continue.html>>.

¹⁹² Bob Lawson, "Towards a New Multilateralism: Canada and the Landmine Ban," Behind the Headlines 54, no.4 (Summer 1997), 22.

structural; and, relational.¹⁹³ I will attempt to briefly describe each parameter with reference to the Ottawa Process.

The orientational or skill parameter operates at the micro level. It consists of the orientations and skills by which citizens of states and members of non-state organizations connect themselves to the macro world of global politics. The analytical skill of individuals has increased to a point where it currently plays a significant role in world politics, intensifying the processes of structural bifurcation, and the breakdown of authority relations.¹⁹⁴ With reference to the Ottawa Process, MAC, is the Canadian link to the International Campaign to Ban Landmines.

Founded in 1994, MAC is a coalition of more than 40 Canadian-based development, social justice, faith, health, labour, peace, disabled people's support groups, educational, legal and disarmament organizations...¹⁹⁵

Although MAC is designed to preserve and deliver information at the Canadian level, its skills empower connection to the macro world of global politics.

The structural parameter operates at the macro level. It refers to the constraints located within the distribution of power amongst and within the collectivities of the global system. The transformation is marked by a bifurcation in which a state-centric system coexists with a multi-centric system. The state-centric world refers to the state-system, which was developed through the Peace of Westphalia, which existed in

¹⁹³ Rosenau, 3-20.

¹⁹⁴ Rosenau, 3-20.

¹⁹⁵ Mines Action Canada, About the Mines Action Canada Coalition [online], date unknown [cited 18 April 1998], available from World Wide Web: <<http://www.minesactioncanada.com/aboutmac.html>>.

1945. A state-system, dominated by bipolarity, between the US and the USSR, existed, at that time. During the 1960s and the 1970s, centralizing and decentralizing dynamics resulted in a coexistence of the two great powers, the third world, IGOs and NGOs. This is based upon five sources of global turbulence. They are: a shift from an industrial to a postindustrial order; an emergence of issues (pollution, terrorism, drug trade, currency crisis, AIDS), as a result of interdependence; a reduced capability of states and governments to provide satisfactory solutions to the major issues; a weakening of whole systems with the strengthening of subsystems; and, an increase in the analytical skills of the average citizen in understanding world politics at the end of the twentieth century. Paradoxically, the two worlds are a reminder that the global system has structure and disunity. The structural parameter functioning at the macro level has resulted in a possibly irreversible bifurcation.¹⁹⁶

At the macro level, the Ottawa Process continues the initial work initiated by the International Campaign to Ban Landmines. Coalitions from each country were brought together to pressure governments from different angles. As one NGO pressured its home government, the information was transferred to the rest of the coalition. By placing pressure upon governments, competition between governments emerged. For example, the coalition for France placed pressure upon the French government. The French government placed pressure upon Belgium. This momentum continued until a competition emerged within the European Union. Eventually, Canada placed its diplomatic weight behind the campaign through the initiation of

¹⁹⁶ Rosenau, 3-20.

the Ottawa Process in October 1996.¹⁹⁷ This structural parameter crossed authority boundaries rendering a bifurcation; whereby, a state-centric and a multi-centric world coexist before multi-centrism emerges at the global level.

The relational parameter operates at the micro and at the macro level. This mix of parameters focuses upon the nature of authority relations that prevail between individuals at the micro level and the collectivities that prevail at the macro level. With increasingly developed analytical skills, citizens will not succumb to authority. With reference to the Ottawa Process, the UN Security Council was opposed to Canada's objectives.¹⁹⁸ NGOs were given official status by being fully incorporated into the negotiations.¹⁹⁹ Non-compliance and questioning of authority leads to controversy and commotion. With these newly acquired skills, a decentralized global structure evolved from the centralized structure, which existed from the Peace of Westphalia. The decentralized global structure resembles the shifted and changing location of NGOs, international inter-governmental organizations and government on the global playing field as a result of turbulence.²⁰⁰ Unlike an arms control treaty where the UN sets up the mechanism for compliance, citizens will be responsible for compliance,²⁰¹ combining the micro and the macro

¹⁹⁷ Jody Williams, NPSIA Speaker Series.

¹⁹⁸ Bob Lawson, NPSIA Speaker Series.

¹⁹⁹ Steve Goose, NPSIA Speaker Series.

²⁰⁰ Rosenau, 3-20.

²⁰¹ Steve Goose, NPSIA Speaker Series.

parameters. During peacetime, the three parameters remain fixed.²⁰²

Although three external forces to global turbulence exist, technology becomes the most powerful. Rosenau argues technology is the most powerful force of postinternational politics because of the increased capacity to generate and manipulate information and knowledge.²⁰³ Underlining the three parameters of the Ottawa Process is technology. Geography and social distances that move people, ideas and goods across space and time has diminished. Telematics was responsible for the dispersal and distribution of information between the micro levels and the macro level of the post-Ottawa Process.

Telematics and globalization have emerged as fundamental forces in the reorganization of economic space. This reorganization ranges from the spatial virtualization of a growing number of economic activities to the reconfiguration of the geography of the built environment for economic activity....[I]n electronic space..., this reorganization involves institutional and structural changes.²⁰⁴

Additionally, service industries have replaced manufacturing industries as the mainstay of society. With the emergence of the new growth industry of demining, in the post-Ottawa Process, a service is replacing the manufacturing of anti-personnel mines. Technology is responsible for the interdependence of the micro, the macro and the mixed micro and macro communities.

Periods of peacetime and wartime are not characterized by turbulence because people have experienced peace and war before. Consequently, people

²⁰² Rosenau, 3-20.

²⁰³ Rosenau, 3-20.

²⁰⁴ Saskia Sassen, "The Spatial Organization of Information Industries: Implications for the Role of the State." in Globalization: Critical Reflections, edited by James Mittleman (Boulder: Lynne Rienner, 1996), 34.

know how to respond and know what to expect. In postinternational politics, turbulence may be a pre-war or a post-war condition; whereby, citizens do not know how to respond.

Moreover, because the damage mines do to humanity continues long after wars have ended, new generations fall victim to conflicts in which they were not even involved.²⁰⁵

Under turbulence, the slightest fluctuations may seem significant. Each shift confirms that change is the norm, patterns are fragile and expectations may be frustrated, endlessly. The current transformation has resulted in a multilateral, decentralized world. As well, he argues that "clear skies" will follow the turbulence so problems may be confronted more coherently and astutely.²⁰⁶

When a civilian steps on a land mine, it is neither a time of war nor a time of peace. Although war has ended in Afghanistan, Angola, Central America, Cambodia, Western Sahara and the Persian Gulf, the era may be akin to turbulence because the potential for injury or death has not stopped. Turbulence may be a pre-war or a post-war condition; whereby, citizens do not know how to respond. Successful ratification of the Ottawa Treaty and the ability of the new growth industry of demining to accomplish global mine clearance would coincide with Rosenau's prediction of optimism following the turbulence.

Unfortunately, Rosenau provides a dissatisfactory explanation about the dangers involved in a multi-polar world. Historically, every previous multi-polar system has collapsed. The end of every previous great-power war followed by a united formation of institution-building focused upon a

²⁰⁵ Cahill, introduction, 8.

²⁰⁶ Rosenau, 3-20.

new order which included the winners in the struggle for power. Each new order that resulted from the conclusion of a multi-polar period's war proved to be short-lived. Unquestionably, force was used to change things. Fighting for hegemonic supremacy occurred and ended in another war.²⁰⁷ Each war was worse than the next. This counters Rosenau's position that by moving towards a multi-centric world, a departure from history has occurred. Placing nation-states, international NGOs, NGOs, the Third World, sub-groups and transnational actors on the same level playing field, as a result of the technological revolution, which diminishes space and time, may not lead to an unprecedented global structure.

With respect to the originality of bifurcation, the state-centric world and the multi-centric world could be analogous to realism and liberalism. Realism, based upon nation-states as the dominant actor, could correspond to the state-centric world. Additionally, liberalism, based upon a mixed actor system could be analogous to the multi-centric world. Since realism did not sufficiently explain the development of global processes and global structures, liberalism was introduced. Rosenau is arguing that an encompassing paradigm is essential to explain the past, the present and the future. Convincingly, his theory, inevitably, builds upon the major paradigms of international relations theory.

Rosenau also argues that an increase in the analytical abilities of citizens as a result of industrialization is the primary reason the current regimes have been challenged.²⁰⁸ While this expansion of skills

²⁰⁷ Charles W. Kegley, Jr. and Eugene R. Wittkopf, World Politics: Trend and Transformation, 5th ed. (New York, St. Martin's Press), 107.

²⁰⁸ Rosenau, 3-20.

is occurring in non-Western societies, citizens in the Western world are experiencing deskilling as a result of the microelectronic revolution. Furthermore, service industries have not replaced manufacturing. Perhaps, the process in which goods are manufactured has changed and the service industry has expanded; however, a displacement from manufacturing to servicing has not occurred. Rosenau appears to argue that if people in non-Western worlds remained deskilled and unaware of Western societies, turbulence would not have occurred. Rosenau does not explain how industrialization could increase the analytical and emotional capabilities of citizens in global civil society.

Consistent with Rosenau, David Held argues that global democracy and democratic citizenship may only occur in a democratic international world. In a democratic international world, individuals would eventually become international citizens. With time, the nation-state would not be the dominant actor and sovereignty, subsequently, would be redefined.²⁰⁹ If sovereignty is redefined, then state capacity is changing. Decision-making centres do not necessarily have to be nation-states. This coincides with Rosenau's argument regarding the coexistence of a state-centric world and a multi-centric world. Although Rosenau does not explicitly state that the multi-centric world is more democratic, Held argues that a political basis exists to build a more systematic democratic future for citizens.

According to both theorists, the free market is the only mechanism for determining collective choice on an individual basis. Furthermore, Held argues that to reinforce global democracy, international

²⁰⁹ David Held, Democracy and the Global Order: From the Modern State to Cosmopolitan Governance (Stanford: Stanford University Press, 1995), 221-286.

organizations and institutions should be given responsibilities to oversee the entrenchment of global democracy. Currently democratic deficits exist, globally. Although Rosenau does not address democratic deficits, Held's argument coincides with the multi-centric world which is exemplified through the post-Ottawa Process and the redefinition and expansion of the relationship between industry and defence to include new actors in the demining process. Although traditional channels to negotiate the ban were ineffective, the driving force to initiate the acceleration of a fast-track strategy was the approaching and impending emergence of a new growth industry to foster economic liberalization.

Conclusion

The definition of state capacity features the responses to the questions posed at the beginning of this chapter. The relationship between industry and defence in the pre-Ottawa Process was standardized; whereby, industry produced the weapon and defence used the weapon. In the post-Ottawa Process the relationship changed because the role of industry expanded and the position of defence modified additional actors on the global stage. Associations and alliances with CIDA, rehabilitation, DFAIT and NGOs will contribute to the endurance of the demining process in the post-Ottawa Process. Relationships between DND and DFAIT; DND and industry; DFAIT and NGOs; industry and CIDA; industry and NGOs; and, NGOs and rehabilitation illustrate the erosion of state capacity to conform to the configuration of the Ottawa Treaty.

Fundamentally, this chapter clearly supports the argument that SNC Industrial Technologies, the sole manufacturer of anti-personnel mines,

did not present any barriers to the Canadian government's position to lead and support the global ban. Additionally, the affiliations between at least two actors in the post-Ottawa Process serves to prove the strength of the surfacing growth industry of demining in Canada. Given the analysis, these two reasons clearly maintain the argument that a concerted lobbying effort by defence industries and DND in Canada did not occur to oppose the Government of Canada's support for the anti-personnel land mines treaty.

CHAPTER FOUR - DATA ANALYSIS FOR THE DEMINING INDUSTRY

In this chapter, I will attempt to focus upon the different products being technologically designed within Canada to accommodate the face of the growth industry which has emerged from the original aim of the prominent political lobbyist perspective to ban anti-personnel mines. The relationship between defence, espoused through military doctrine with reference to combat, and industry, espoused through commercial interests with reference to profitability, has its roots in the theoretical foundations of war. According to Carl von Clausewitz, war may be compared to commerce more than to the arts and sciences. Clausewitz writes:

We therefore conclude that war does not belong in the realm of arts and sciences; rather it is part of man's social existence. War is a clash between major interests, which is resolved by bloodshed--that is the only way in which it differs from other conflicts. Rather than comparing it to art we could more accurately compare it to commerce, which is also a conflict of human interests and activities; and it is still closer to politics, which in turn may be considered as a kind of commerce on a larger scale.²¹⁰

Consequently, according to the greatest writer on war, commerce and war have been inextricably linked.

In Canada, anti-personnel mines have not been produced since the first part of the 1990s. The last time DND purchased anti-personnel mines was in 1988/1989. The purchase was equivalent to one and one-half million dollars, including transportation and administration costs. Forty thousand C3A1 Elsie, which contain thirty grams of explosives, were purchased at thirty-five dollars each. Small amounts of explosives impede the enemy because the person must be transported for medical attention. Although

²¹⁰ Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret (New York and Toronto: Alfred A. Knopf, Inc., 1993), 173.

DND, eventually, did not require this stock, since the company had the order, DND paid for the mines.²¹¹ Given these figures, SNC Industrial Technologies continued to produce anti-personnel mines from 1989 to the beginning of this decade.

The demand for anti-personnel mines has been eliminated by the Ottawa Treaty. Article 1 of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and On their Destruction explicitly declares:

1. Each State Party undertakes never under any circumstances: a) To use anti-personnel mines; b) To develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, anti-personnel mines;...²¹²

Under the rule of industry, the construction of anti-personnel mines has been replaced with the clearance of anti-personnel mines. Consequently, Canadian industry is attempting to benefit from the post-Ottawa Process, actively, by coalescing with CIDA with reference to mine clearance.

There are four growth areas which form the basis of the mine clearance industry in Canada. The first two areas may be combined and referred to as mine neutralization. Mine neutralization, which is the generic term for mine removal, includes exploration by using mechanized equipment and labour-intensive physical removal by hand. The third area where Canadian industry will profit is through medical and psychological rehabilitation for the mine victims from countries abroad which are laden with mines. The fourth area of growth will occur through service providers. These are companies which attempt to pass themselves off as

²¹¹ Lt. Col. Levert, interview.

²¹² "Convention on Anti-Personnel Mines."

demining companies in a new industry where regulation is nonexistent.²¹³ Legislated rules, principles and conditions do not govern the procedures or the behaviours of demining firms. Sums of money have been contributed to the mine clearance objectives contained in the Ottawa Treaty. When a new industry begins in a deregulated manner, it proves to be exceedingly lucrative for the individuals pioneering the trade. The new industry consists of four segments.

Under Article 5 of the Convention, a time limit of ten years from the treaty's entry into force has been promulgated.

2. Each State Party shall make every effort to identify all areas under its jurisdiction or control in which anti-personnel mines are known or suspected to be emplaced and shall ensure as soon as possible that all anti-personnel mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all anti-personnel mines contained therein have been destroyed.²¹⁴

Canada has contributed one hundred million dollars to the mine clearance fund. On 21-22 May 1998, the Global Humanitarian Demining Conference was held in Washington to pursue additional contributions for mine eradication.²¹⁵ Funding for mine clearance activities may be obtained through the UN.

²¹³ Lt. Col. Levert, interview.

²¹⁴ "Convention on Anti-Personnel Mines."

²¹⁵ Canada, DFAIT, National Statement of the United States, Ambassador Karl F. Inderfurth, Special Representative to the President and Secretary of State for Global Humanitarian Demining [online], 4 December 1997 [cited 22 December 1997; 20:09:49], available from World Wide Web: <http://www.mines.gc.ca/XUS_b.html>.

New Growth Industry

Essentially, the new growth industry may be divided between "rid" and "help."²¹⁶ "Rid" refers to mine elimination. Mine elimination consists of information, detection, neutralization and protection. Information refers to the databases which must be set up in each country, to assess and evaluate the location and the spread of anti-personnel mines, geographically. Detection refers to the methods available to remove anti-personnel mines. Hand, vehicle and motorized are the primary methods of detection. Neutralization refers to a generic term used to remove mines. Mechanized and hand exploration are the primary methods of neutralization. Protection refers to the medical and psychological consequences which deminers may experience in the course of their work because of unexploded ordnance.²¹⁷ Once a ground has been contaminated by anti-personnel mines, zero risk is inconceivable. Moreover, when applied to anti-personnel mines, ten percent will not function according to the manufacturer's specification.²¹⁸ Since a reassurance of zero risk cannot be given, occupational injuries may occur. Resolving the plight caused by anti-personnel mines and providing victim assistance are competing objectives and complementary goals.

"Help" refers to the medical and sociological assistance which is required to rehabilitate and reintegrate combatants and non-combatants into society after suffering the loss of a limb. Medically, seven days are required for the training of new techniques with the use of adaptive

²¹⁶ Lt. Col. Levert, interview.

²¹⁷ Col. Fitch, interview.

²¹⁸ Col. Fitch, interview.

equipment to restore independence in most functions with or without a prosthesis. The victims are the scapegoats of anti-personnel mines. Psychological and sociological difficulties cannot be confronted in isolation from the disability. The primary role of the victim in society will determine the perception of the disability. In turn, the perception will determine the individual's ability to surmount medical and sociological barriers in the environment. Conflict, anxiety and stress will determine the victim's coping strategies in the adjustment process to a traumatic amputation. These responses may be consciously or unconsciously manifested and positively or negatively revealed. In certain countries victims of anti-personnel mines are being trained to conduct the labour-intensive demining process; whereby, a spike is used on a four-centimetre grid to prod the ground for undetected anti-personnel mines which must be removed. Both "help" and "rid" are depicted in Table 2.

Financial Issues in Mine Clearance

The Canadian government announced a contribution of one hundred million dollars to the Canadian fund which will be administered to clear mines. The bureaucratic question arises as to which governmental organization will administer the program in Canada. Competition between DFAIT and CIDA has surfaced regarding ownership of the administration.²¹⁹ Debate has also surfaced regarding the allocation of funds between "rid" and "help." The new growth industry consists of these two categories.

CIDA was created to control affairs for foreign assistance.

²¹⁹ Lt. Col. Levert, Department of National Defence, follow-up telephone interview by author, 13 January 1998.

Functioning as a crown corporation, the organization functions independently from government. Since its scope of responsibility centres upon Canadian aid in foreign countries, the organization contends that it should be responsible for the administration of the fund. Additionally, since CIDA uses the UN agency in Geneva, transportation costs for shipped wares are equivalent to three percent. Consequently, CIDA may argue that it should manage the money for equipment and supply purchases in Canada which are transported to the foreign countries where mine clearance and medical assistance is provided.²²⁰

Table 2
New Growth Industry

		Primary Methods	Service
Rid	Information	Verbal, Written	DND, industry, DFAIT
	Information	Databases	CAMEO
	Detection	Hand Vehicle Motorized	CAMEO, CIDA Terra Aerospace Corporation
	Neutralization	Exploration/ Mechanized Hand	CAMEO, University of Alberta, CIDA
	Protection	Person Vehicle	Med-Eng, CAMEO
Help	Medical/ Sociological	Public Health	CAMEO, NGOs

Sources: Lt. Col. Levert, interview.

CAMEO Security, 1997 [cited 24 December 1997],
<<http://www.cameo.org/projects/mozambique.html>>.

I identified the specific services for "Rid" and "Help" and the Primary Methods for Information and Medical/Sociological.

²²⁰ Lt. Col. Levert, follow-up interview.

Alternatively, DFAIT manages matters with the UN headquarters in New York. Transportation costs for shipped wares are higher because the rate set by the UN headquarters equals thirteen percent.²²¹ The administration of funding relates integrally to the allocation of financing. Determining which goods and services must be purchased inevitably reflects decisions based upon the need of victims or the need of communities to eliminate fields laden with mines for sustainment. Although antibiotics, prostheses and medical professionals are essential,²²² rehabilitation of a nation's terrain for future generations cannot be overlooked. The competition between DFAIT and CIDA regarding ownership of the administration of the demining fund represents one dimension of the face of the growth industry.

Technological Initiatives in Mine Clearance

Technological developments have contributed to the effectiveness of anti-personnel mines. Through the years, the mines have become cheaper, smaller and more lethal. Essentially, manufacturers have progressively offered "more bang for your buck."²²³ Located in the advanced industrialized countries, suppliers of anti-personnel mines have been able to offer, increasingly, more selection depending upon the desired function. Approximately three hundred to four hundred variations may be identified. The industrial design of the anti-personnel mine symbolizes the nation-state. When deminers identify a mine, the location of the manufacturer may be readily described by an expert. Since technological

²²¹ Lt. Col. Levert, interview.

²²² Lt. Col. Levert, follow-up interview.

²²³ Col. Fitch, interview.

development is the responsibility of nations, armies are not responsible for demining.²²⁴

The location of the power structure that determines the type of technology used to manufacture an anti-personnel mine is located in the defence industry. These engineers possess the information required to locate and remove anti-personnel mines. Consequently, the co-operation from industry is imperative. Moreover, the financial share of demining is a critical issue in the face of the emerging demining industry.

...the many companies that manufacture landmines should be required to contribute to the cost of demining, as opposed to the situation where many are now beginning to receive second profits by de-mining countries after selling them their mines.²²⁵

One of the issues which surfaces when describing the growth of a new industry relates directly to the manufacturers who were initially responsible for manufacturing a product which became jurisdictionally illegal to fabricate on 2 December 1997. Although the issue of secondary profits may apply to any industrialized nation, this situation exists in Canada.

In Canada, anti-personnel mine production ceased in 1990 to prepare for the global ban of anti-personnel mines. The stockpiles have been destroyed. SNC Industrial Technologies "designs and manufactures high-quality products for military, paramilitary and industrial markets in Canada and abroad."²²⁶ Currently, SNC Industrial Technologies is working

²²⁴ Col. Fitch, interview.

²²⁵ Brian Owsley, "Landmines and Human Rights: Hold Producers Accountable," Syracuse Journal of International Law and Commerce 21, no.203 (1995), 224.

²²⁶ SNC Lavalin Group, Reaching Out to Our Clients (Annual Report 1995), 7.

in conjunction with CIDA to destroy anti-personnel mines. Essentially, the company teaches people how to identify mines to ultimately destroy the weapons. In Canada, one manufacturer of anti-personnel mines existed.

With reference to the relationship between CIDA and the private sector, in terms of demining in the post-Ottawa Process, the relationship may be classified as treacherous. The private sector is indispensable for demining because it knows where the mines were sold. Essentially, the relationship between these two entities and the process of demining must be characterized by two fundamental dimensions. Both the relationship and the process must be characterized by extreme care, quietness and subtlety to innocuously function. Since 1993-1994, CIDA has contributed two million, four hundred and twenty-three thousand dollars to demining in Angola. Three million, seven hundred and fifty thousand dollars was contributed to demining in Afghanistan. Two hundred and fifty thousand dollars was contributed for the period of 1996-1997 to demining and mine-awareness in Laos. Assistance to Cambodia totalled two million, nine hundred thousand dollars in 1993-1994.²²⁷ Since SNC Industrial Technologies receives money from CIDA for providing the location of mines, and the process of demining is a potentially deadly process, the nature of the relationship is a stealthy operation.

Another issue arises as to whether the nations that were sold the mines are the nations that are using the anti-personnel mines. This becomes an issue because anti-personnel mines are manufactured by industrialized countries; however, the weapons are primarily emplaced in

²²⁷ CIDA, (Backgrounder) Anti-Personnel Landmines and Development: CIDA's Approach [online], November 1997 [cited 24 December 1997; 10:48:20], available from Internet: <<http://w3.acdi-cida.gc.ca>>.

the Third World. Through numerous treaties, a mechanism amongst defence departments exists for borrowing materials. For example, Canada has exported Elsie to Kuwait and to Britain. This practice stopped approximately ten years ago.²²⁸ Without clear and accessible records regarding sales, location and emplacement, demining becomes increasingly expensive.

Canadian industry is attempting to actively participate in the deregulated "post-Ban the Land Mines Treaty."²²⁹ I have identified at least four entities which have capitalized upon the demining market, in Canada. The four organizations are Med-Eng Systems Incorporated, CAMEO Security, Terra Aerospace Corporation and the University of Alberta.

Med-Eng Systems Incorporated

Located in Ottawa, Med-Eng "design[s] and sell[s] protective clothing and EOD tools for bomb disposal and mine clearance."²³⁰ The role of this company strengthens "the international communities' efforts in achieving a landmine treaty on the manufacturing, stockpiling and sale of anti-personnel mines."²³¹ By providing the industrial protective suits for the labour-intensive task of demining, this company addresses the financial constraints imposed upon the funding for mine clearance. Additionally, demining may be conducted by astronomically priced

²²⁸ Lt. Col. Levert, interview.

²²⁹ Lt. Col. Levert, interview.

²³⁰ Med-Eng Systems Inc., Frequently Asked Questions [online], date unknown [cited 24 December 1997; 11:21:30], available from World Wide Web: <http://www.med-eng.com/index.cgi?page=0_faq>.

²³¹ Med-Eng Systems Inc., Frequently Asked Questions.

mechanized robots. To effectively accomplish demining, technologically advanced protective equipment is available through Med-Eng.

Expanding in scope, the company "presents the world's most advanced body protection systems for EOD/IED, Land Mine Reconnaissance and Mine Clearance duties."²³² What is striking about this company is the diversification from body protection systems to mine clearance duties. Given the labour-intensive nature of demining; whereby, an individual is required to prod the ground on a four-centimetre grid, the appropriateness of the need for engineers to expand their scope in this deregulated industry contributes to the face of the growth industry. The potential for large earnings exists for these systems.

Products distributed by Med-Eng include the MCS-4 Mine Clearance Suit, the SRS-5 Search and Reconnaissance Suit, the MCH-4/SRS-5 Helmet and the BCS-3A/BCS 3R Body Cooling Systems. All of the equipment is particularly designed to protect the deminer from environmental conditions which the individual may confront in extreme heat for extended periods of time.²³³ With reference to protection from unexploded ordnance, the mine clearance products, as a sub-set of the growth industry, cannot provide guarantees.

CAMEO Security

Organized as a non-profit organization, this NGO, specifically

²³² Med-Eng Systems Inc., Welcome [online], date unknown [cited 24 December 1997: 11:21:30], available from World Wide Web: <<http://www.med-eng.com/>>.

²³³ Med-Eng Systems Inc., Mine Clearance Products [online], date unknown [cited 22 December 1997; 23:05], available from World Wide Web: <<http://www.med-eng.com/index.cg>>.

formed to conduct humanitarian land mine clearance and explosive ordnance disposal, uses former military engineers to transfer Canadian technology to countries laden with anti-personnel mines. Located in Cornwall, this organization was formulated in February 1997.

CAMEO Security is being formed at the request of concerned Canadians as well as with the encouragement of the Government of Canada to enable direct Canadian civilian participation in the elimination of the scourge of land mines, the principal victims of which are women and children. CAMEO Security will utilize Canadian industrial capacity to respond to this threat, and will actively seek to transfer Canadian technology to the victimized country to enable them to establish and sustain their land mine clearance programs.²³⁴

From a review of a project proposal for the Republic of Mozambique, CAMEO Security encapsulates both humanitarian demining and medical personnel to offer a single package which boasts Canada's leading edge technology in "GIS-based digital mapping and remote sensing and detection of land mines."²³⁵

By providing a Management and Support Team, a Clearance Team and a Training and Quality Control Team, the project requested funding for sixty individuals to undertake the transfer of equipment and technology to Nampula Province, Mozambique. The total cost of the project is approximately five million, six hundred thousand dollars for a three-year period.²³⁶

²³⁴ CAMEO Security, Background of CAMEO Security [online], 1997 [cited 22 December 1997; 19:10:04], available from World Wide Web: <<http://www.cameo.org/general/background.html>>.

²³⁵ Cameo Security, Cameo Security Project Proposal: Humanitarian Land Mine and Unexploded Ordnance Clearance [online], 1997 [cited 24 December 1997; 11:01:04], available from World Wide Web: <<http://www.cameo.org/projects/mozambique.html>>.

²³⁶ Cameo Security, CAMEO Security Project Proposal.

Project personnel for these three teams are as follows:

Management and Support Team

- 1xCanadian Project Director
- 1xCanadian Operations Manager
- 1xCanadian Logistics Specialist
- 1xLocal Logistics understudy(and stores person)
- 1xCanadian Medical Officer (RN with MPH degree)
- 1xLocal Paramedic understudy
- 1xCanadian mechanic/electrician
- 1xLocal mechanic/electrician understudy
- 1xLocal Office Manager/Clerk
- 1xLocal Accounts Officer/Translator
- 2xLocal Drivers/interpreters

Clearance Team

- 1xCanadian Team Leader (Land mine/UXO specialist)
- 6xGurkha supervisors (Land mine/UXO specialist)
- 1xMalawian paramedic (until local person trained)
- 1xLocal Land Mine Awareness instructor
- 1xLocal Cook/Camp supervisor
- 2xLocal Drivers/Interpreters/Storepersons
- 30xLocal Deminers (hired as training time permits)

Training and Quality Control Team

- 2xCanadian Land Mine/UXO specialists
- 2xLocal understudies (after six months demining)
- 1xSouth African paramedic instructor
- 1xLocal Driver/Interpreter²³⁷

By outlining the employee requirements of one project, the diversity and the scope of the occupational categories encompassed within the growth industry may be demonstrated.

Educational levels and working conditions vary depending upon the occupations which are required for a mine clearance operation. The educational skill base includes reasoning, mathematics and language. Various levels of university, college, vocational training, apprenticeship and on-the-job training are required to accomplish the project. Adaptability to extremes of heat, wetness, humidity, noise, vibrations, risk, fumes, odours, ventilation and both an inside work location and an outside work location characterize the environmental work conditions.

²³⁷ CAMEO Security, CAMEO Security Project Proposal.

Strength, climbing, balancing, body dexterity, use of upper extremities, talking, hearing, seeing and eye-hand-foot coordination must be considered to varying degrees depending upon the individual's role in the project. Since the largest growth will be seen in the number of deminers, all of the perils mentioned could potentially apply to a mine clearance operation.

Finally, the ability to work with data, people and things and the aptitude for numeracy, spatial perception, form perception, motor coordination, finger dexterity, manual dexterity and colour discrimination are essential to minimize the risk of the deminer. Temperament factors including repetitiveness, specific instructions, independent action, physical isolation and precision are required for demining. By training inhabitants from the countries laden with mines, both physical and mental capabilities are required to varying degrees.

Terra Aerospace Corporation

Located in Ottawa, this company, conceived in 1987, is retained by DND for creating and designing solutions to specified requirements. The company addresses the engineering, design and manufacturing of equipment. This company infiltrated the "EOD/tactical product market with many new and unique products designed to meet the needs of the field technician, from explosive crimpers and search mirrors to full size robotic vehicles and systems."²³⁸

²³⁸ Terra Aerospace Corporation, About Our Company [online], date unknown [cited 24 December 1997; 11:19:46], available from World Wide Web: <<http://www.smarteod.com/profile.htm>>.

University of Alberta - Mechanical Engineering

At the University of Alberta, in 1996, a project was undertaken through DRES in the Department of Mechanical Engineering. The purpose of the project was:

to design an innovative mechanical method to detect non-metallic (i.e. plastic) land mines. Methods to be considered included, but were not limited to, instrumented prodders, thermal, acoustic and vibration systems as well as air and water jets.²³⁹

The industry recognizes that mine clearance includes electronic detectors, biological detection schemes and manual prodders.

Generally, the location of the mine in relation to the surface of the ground determines the method of detection for demining. The method depends on whether the anti-personnel mine is hidden beneath the surface of the soil or whether the weapon is buried.²⁴⁰ Table 3 describes and compares High-tech Methods and Hand-Prodding with reference to disadvantages, accuracy and reliability, cost, false alarm rate and level of danger.

As part of the "rid" component of mine clearance, a direct relationship between high technology and cost appears to exist. The more extensive the technology required to eradicate mines, the more expensive the eradication process becomes. At the same time, this system is less effective when attempting to identify the anti-personnel mines in order to

²³⁹ University of Alberta, Mechanical Engineering, A Mechanical Means of Land Mine Detection [online], date unknown [cited 22 December 1997; 20:42:27], available from World Wide Web: <<http://www.mece.ualberta.ca/landmine.html>>.

²⁴⁰ University of Alberta, Mechanical Engineering, A Mechanical Means of Land Mine Detection: Present Detection Methods [online], date unknown [cited 4 May 1998; 13:53:41], available from World Wide Web: <<http://www.mece.ualberta.ca/landmine/present.html>>.

Table 3
Detection Methods for Mine Clearance

	High-Tech Methods	Hand-Prodding
Method	<p>Passive infra-red, Microwave, Electrical Conductivity, Ground Penetrating Radar</p> <p>When a mine has been identified, an Explosive Ordnance Disposal(EOD) team comes in to uncover the object.</p>	<p>Probe is manually inserted into the soil at a thirty degree angle, approximately every five centimetres. When a solid object is detected, several more probings are conducted to get a feel for the shape and size of the object. If the object is determined to be a potential mine, a mine clearing team comes in to uncover the object.</p>
Disadvantage	<p>A benign object, such as a rock or a tree root can be mistakenly identified as a mine.</p> <p>When an EOD team comes in to uncover the object, the process takes approximately fifteen minutes. During this time, no other activity can take place in the area.</p>	<p>Deminer can normally perform this task for twenty minutes before requiring a rest.</p>
Accuracy and Reliability	Low	High
Cost	High	Low
False Alarm Rate	High	Low
Level of Danger	Low	High

Source: University of Alberta, Mechanical Engineering, date unknown [cited 4 May 1998], <<http://www.mece.ualberta.ca/landmine/present.html>>.

achieve full eradication of a mined area. Alternatively, the more labour-

intensive the technology required to eradicate mines, the less expensive the cost required to neutralize mines. At the same time, this system offers increased effectiveness when attempting to identify anti-personnel mines, to achieve full eradication of a mined area, with a greater risk to loss of life. As a Canadian partner in the development of mine clearance technology, each method must include techniques for detection, removal and disposal.²⁴¹

Databases for Anti-Personnel Mines

Considering that manufacturers have influenced the demand for anti-personnel mines, commercial interests did not contribute to the Ottawa Process in Canada. Additionally, the availability of anti-personnel mines contributed to their military use. The transportability of the indiscriminate weapons encourages the military utility of anti-personnel mines. Although anti-personnel mines have been located with mapping strategies, the root of the problem comes from the mines which were haphazardly distributed. For this reason, databases must be organized to maintain records of areas in a particular country which has been contaminated by anti-personnel mines before commencing the demining operation. Once the databases are initiated, the information is continuously added and transferred to the community for continual registration of mine locations. These databases contribute to the face of the growth industry. Although anti-personnel mines do not contribute to defending Canada or to defending North America, the plight has become the

²⁴¹ University of Alberta, Mechanical Engineering, A Mechanical Means of Land Mine Detection.

responsibility of the industrialized countries.

Summary of the Growth Industry

Both charitable and non-charitable organizations; whereby, profit and non-profit varieties exist, make up the growth industry of demining. Consequently, the rules which govern a profit-seeking corporation and an NGO sponsored by the government are fundamentally different. Competition would continue to exist; however, the potential for mismanagement of mine clearance funding exists. When all of the benefactors of a new industry are governed by the same set of rules, the motives behind the industry are clearly identified. Combining NGOs and corporations, which essentially provide the same services, leads to a potentially unsporting panorama of questionable practices.

Although the ultimate objective is to minimize the costs and to maximize the returns relating to the numerous components of mine clearance, the occupational hazards, when physically clearing mines, could prove detrimental to a victimized country.

Another concern in mine clearance is how clearance workers are treated. Are foreign workers insured when local workers are not? Is there adequate investment in the development of safe technology, which can then be managed and used by trained local populations.²⁴²

Alternatively, the earnings potential for any growth industry which has not reached the apex for regulation is limitless. Health care, which has become increasingly privatized in Canadian provinces, stands to gain exponentially from the project proposals offering humanitarian demining.

²⁴² Canada, DFAIT, Integrating Mine Action and Development [online], December 1997 [cited 22 December 1997; 20:18:32], available from World Wide Web: <http://www.mines.gc.ca/roundtable/19-final_b.html>.

Professionally educated engineers, physicians, nurses and managers may participate because of their integral role in the "rid" and "help" components of mine clearance. Unskilled and deskilled labour may be hired to manually demine or may be trained to use vehicles for the occupationally hazardous task of demining.

Since the industry is unregulated and the work is conducted abroad, the legislation which will govern sanitation and safety may not be regulated. Since regulation usually requires standards to be met to ensure consistent principles are upheld, the unchecked nature of humanitarian demining contributes to the revenue generated for profit-seeking corporations. Alternatively, NGOs are usually offered minimal support staff and limited funding to meet the bare essentials. The attempts at cutting costs are limitless. One NGO's missions reads:

To establish sustainable indigenous demining capacities in mine polluted countries world wide in order to reclaim socio-economic resources with the minimum of foreign assistance.²⁴³

The mission statement for the Canadian International Demining Centre clearly exemplifies the "minimal" cost-cutting concern of accomplishing the demining process.

Fundamentally, the media has virtually ignored the growth industry by focusing upon the scapegoats of anti-personnel mines and their predicament. During the round table discussion held during the signing conference in Ottawa, Lt. Gen. Robert Gard commented that "economic will,

²⁴³ Canadian International Demining Centre, Mission Statement [online], date unknown [cited 24 December 1997; 10:28:29], available from Internet: <<http://eagle.uccb.ns.ca/demine/>>.

rather than political will,...is needed."²⁴⁴ According to a newspaper article in The Seattle Times, which appeared on 4 December 1997, about the relationship between the Canadian Department of Industry and the demining industry, the Conference held at the beginning of December in Ottawa included corporate demonstrations of technological devices available for purchase to conduct demining in countries. This newspaper article is rare in comparison to the abundance of media coverage focused upon the victims of anti-personnel mines, contrived to educate the public.

Additionally, the action by Canadian representatives exemplifies the industry which has emerged from the original aim of the prominent political lobbyist perspective to ban anti-personnel mines.

Hoping to profit from the campaign against land mines, companies are hawking an array of high-tech and low-tech devices to delegates signing the historic mine-banning treaty....There's a \$500,000 remote-control mine detector, a supersonic air shovel, even a Superman mine-awareness comic book. As delegates from the last batch of 125 countries lined up to sign the treaty today, delegates were focusing their discussions on the next phase of the campaign - removing the estimated 100 million anti-personnel mines scattered in about 60 countries around the world....The Canadian government, which played a pivotal role in rallying support for the land-mine ban, also was active on the salesmanship front. Industry Minister John Manley helped demonstrate Canadian de-mining technologies yesterday at a hotel next to the conference venue. There were detectors that use radiation to find buried explosives, ground-penetrating radars to pinpoint mines, scanners mounted on wheeled robots, and explosive hoses to blow lanes through mine fields. Also on display were advanced forms of prosthetic devices for mine victims. Much of the Canadian and U.S. equipment is still in the development stage. But with nations round the world pledging to contribute to a huge mine-clearing effort, companies sense the start of a growth industry. Much of the new equipment is high-priced, which worries anti-landmine activists....John Leggat, research chief for Canada's defense department, said no single device

²⁴⁴ Canada, DFAIT, The Military vs. The Humanitarian Cost of Anti-Personnel Mines [online], December 1997 [cited 24 December 1997], available from World Wide Web: <http://www.mines.gc.ca/roundtable/1-final_b.html>.

or system can detect all types of mines in all types of terrain. "Where it's possible to use simple solutions, I think we should and I think we will," he said....With existing technology, mine-clearing can be both costly and deadly. Red Cross documents distributed here say 83 mine-clearers were killed in Kuwait in an \$800 million effort to remove several million land mines left over from the Gulf War.²⁴⁵

Medical equipment, demining equipment, cost-cutting measures, occupational death and technological development depict and portray the face of the growth industry.

The president of International Demining Consultants, Canada, predicts that the threat of anti-personnel mines may be eliminated by 2010.²⁴⁶ Considering the treaty allows ten years, beyond entry into force, for absolute mine clearance, this estimate appears realistic. Unfortunately, scepticism about the ability to achieve the ten-year limit in the treaty exists. The provision of ten years for each state to destroy anti-personnel mines in mined areas is not realistic because the technology does not exist to complete the task within the designated amount of time. The treaty allows for extensions which will be easy to secure.²⁴⁷ Additionally, technology which is easily transferable does not currently exist, spreading reservations upon the completion of humanitarian mine clearance by 2010.

The Convention on Anti-Personnel Mines responds to the limitations

²⁴⁵ Seattle Times Company, Mine-Clearing Technology Gets Big Boost From Treaty [online], 4 December 1997 [cited 22 December 1997; 19:21:26], available from World Wide Web: <http://www.seattletimes.com/extra/browse/html97/mine_120497.html>.

²⁴⁶ Canada, DFAIT, Mine Clearance: Perspectives and Challenges [online], December 1997 [cited 22 December 1997; 20:14:48], available from World Wide Web: <http://www.mines.gc.ca/roundtable/6-final_b.html>.

²⁴⁷ Col. Fitch, interview.

inherent in global humanitarian demining. Article 5, Destruction of anti-personnel mines in mined areas states:

3. If a State Party believes that it will be unable to destroy or ensure the destruction of all anti-personnel mines referred to in paragraph 1 within that time period, it may submit a request to a Meeting of the States Parties or a Review Conference for an extension of the deadline for completing the destruction of such anti-personnel mines, for a period of up to ten years.²⁴⁸

Consequently, the treaty designers were probably cognizant of the technological limitations involved in the demining process to achieve complete eradication. "Although humanitarian mine clearance is still in its infancy, the problem is not particularly complicated: it requires managerial capacity, international funds, the right tools and coordination."²⁴⁹ By including Article 5, extensions may be legally obtained to accommodate the new growth industry which has emerged in the post-Ottawa Process.

Conclusion

A useful device to understand the demining industry requires a separation between "rid" and "help." Whereas "rid" refers to mine elimination, "help" refers to the medical and sociological assistance required to rehabilitate and reintegrate civilians and combatants into society following the loss of a limb. Although several firms form the demining industry in Canada, four entities were considered to illustrate the new growth industry. The evidence suggests a deregulated industry characterized by unlimited profits and immeasurable environmental and

²⁴⁸ "Convention on Anti-Personnel Mines."

²⁴⁹ Canada, DFAIT, Mine Clearance: Perspectives and Challenges.

health conditions. Although the Ottawa Treaty provides latitude to a demining industry, the face of the new growth industry, separated between "rid" and "help," evolves and unfolds in the post-Ottawa Process.

CONCLUSION

DND and the defence industries did not contest the negotiations to achieve a global ban despite the stockpiles of anti-personnel mines, the entrenched military doctrine governing the Canadian Forces and the inevitable loss of manufacturing a low-technology weapon to generate revenue. By primarily examining the relationship between industry and defence in the pre-Ottawa Process and the post-Ottawa Process, four distinct reasons have been offered, substantiated and analyzed to support the argumentation. First, SNC Industrial Technologies was the sole company in Canada that was involved in the production of anti-personnel mines. Moreover, the weapon was used as a loss leader to attract customers. Although this practice has been discussed exclusively in relation to Canada, US corporations have used anti-personnel mines as a top-off to large arms deals. Second, Canadian defence manufacturers are not a large and powerful constituency. The political weight of the defence-industrial base and the military-industrial complex does not directly shape defence policy in Canada. Third, NGOs who formed part of the land mines coalition had privileged access to the DFAIT and the Minister of Foreign Affairs. Their views to move towards a global ban expeditiously became a foreign policy objective supported by the federal government. Finally and most importantly, the contribution to Canadian wealth, through a thriving new growth industry, consisting of demining abroad, advanced the pressure to negotiate a global ban through a fast-track approach. Initiated in October 1996, these four reasons provided the impetus for the Ottawa Process to secure a signed treaty in December 1997.

Traditionally, conversion refers to economic conversion;²⁵⁰ whereby, a transformation from the production of a military product to the production of a civilian product occurs. In the case of the Ottawa Process, the production and the use of anti-personnel mines has been converted to the training and the eradication of anti-personnel mines. Three aspects of conversion have been identified and coincide with the events which have occurred in the post-Ottawa Process.

The first of these facets is most typically employed in studies of "conversion" and is an economic conversion....The second facet has to do with the conversion of collective institutions from military purposes toward a non-military contribution to society....The third facet of conversion is the political side of the question. Since military security is a child of international politics, a profound conversion must include a transformation of international politics.²⁵¹

In the pre-Ottawa Process, SNC Industrial Technologies was responsible for manufacturing anti-personnel mines to accommodate the military strategy entrenched within DND doctrine. In the post-Ottawa Process, the relationship between industry and defence has been expanded and modified to include additional actors. Both SNC Industrial Technologies and DND are contributing to mine eradication through the training of personnel. By augmenting the relationship to include CIDA, DFAIT, NGOs and rehabilitation, the new growth industry of demining has materialized.

Key actors from the foreign policy-making process did not oppose or delay passing Bill C-22, An Act to implement the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction. In Canada, the prime minister

²⁵⁰ Michael D. Ward, Jordin S. Cohen and Michele M. Betsill, "The Three Faces of Conversion in the USA," Defence and Peace Economics 6, no.3 (1995): 221.

²⁵¹ Ward, Cohen and Betsill, 221-222.

carries the most influence in the foreign policy-making process. The Minister of Foreign Affairs and the other ministers that serve foreign policy interests exert influence. Although ministers who are not in Cabinet, the bureaucracy, parliament, the provinces, the political party system and the NGOs do not typically influence foreign policy-making, these entities supported the global ban. For example, Bill C-22, first introduced on 20 November 1997, was not amended and received royal assent on 27 November 1997. Consequently, the prime minister presented the secretary-general of the UN with the ratification instrument immediately following the signing of the treaty by the Minister of Foreign Affairs, in Ottawa in December 1997.

Although anti-personnel mines have been produced in the industrialized countries, the agricultural industries of Afghanistan, Angola, Cambodia, Laos, Bosnia, Croatia, Mozambique, Myanmar, Nicaragua, Somalia, Sri Lanka, Sudan and Chad have been subverted. The agricultural industries of Iraq, Georgia, Sudan, Armenia, Azerbaijan, Columbia, El Salvador, Ethiopia, Eritrea, Falklands/Malvinas and Guatemala have been moderately subverted. Anti-personnel mines have not ruined the agricultural industry of Cuba. Canada may have taken the lead in this initiative as part of its peace-building foreign policy objectives towards these mined countries; however, profit maximization from manufacturing anti-personnel mines was not Canada's motive to continue or to discontinue the production, manufacturing and stockpiling of the weapon.

Canadian government policy with reference to security explicitly asserts:

Protecting our security must go beyond military preparedness.
New approaches, new instruments, new institutional roles and

political responsibilities in the maintenance of international security must be developed. Movement will continue away from security policies and structures based on containment toward new architectures designed to build stability and cooperation. Canada will be at the forefront of those helping to shape a broader framework that responds to the demands of a changing security environment.

Serious long term challenges are posed by environmental, demographic, health and development issues around the globe. Some of these challenges - such as global warming - could affect us directly. Others may provoke crises producing humanitarian tragedies, epidemics, mass migrations, and other problems from which, even if half a world away, Canada will not be immune. Still others may result in the adoption abroad of policies that ultimately degrade our economic security by undercutting labour, health, environmental or other international standards. All of this demands a broadening of the focus of security policy from its narrow orientation of managing state-to-state relationships, to one that recognizes the importance of the individual and society for our shared security.²⁵²

Canada's commitment to preventive diplomacy, to regional security organizations, to peace-building and to the UN, by enforcing peacekeeping measures and by providing expertise as an international service through training, will continue.

Despite the ban of anti-personnel mines, humanitarian demining will require both expenditures for the eradication of mines and expenditures by DND to protect troops abroad who are conducting preventive peacekeeping measures and training. Given the expansive definition of international security to involve shared human security at the international level, the relationship between defence and industry evolved to include NGOs, rehabilitation and CIDA to deliver global security. Although the humanitarian catastrophe of anti-personnel mines exists "half a world away," Canada will not be isolated from potential migrations and epidemics

²⁵² Canada, Foreign Affairs and International Trade, Canada in the World (Ottawa, Ontario: Canada Communication Group, 1995), 24-25.

resulting from activities abroad which undermine our standards relating to health, safety and environmental interests. Consequently, Canadian foreign policy with reference to investment in humanitarian demining must continue regardless of the unlimited profits from the burgeoning new growth industry which clearly expedited the negotiations for the global ban to an era which may be referred to as the post-Ottawa Process.

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APPENDIX I - List of Experts

List of Experts Interviewed

Colonel E.S. Fitch	Department of National Defence Director Military Engineering (Military Advisor to the Canadian Delegation in Oslo, September 1997)
Lieutenant Colonel N. Levert	Department of National Defence Director Military Engineering 4 (Deals with manufacturing and defence interface)

List of Experts Responding to Written Questionnaires

Industry
President: 1

Treaty Designers/Treaty Negotiators/Policy-Makers
NGOs and DFAIT: 5

Department of National Defence
Public Servant: 1

List of Expert Speaker Sessions Attended

Steve Goose	US Campaign to Ban Landmines
Robert Lawson	Department of Foreign Affairs and International Trade
Michael Pearson	SAMCI
Scott Wade	Canadian International Development Agency
Valerie Warmington	Mines Action Canada
Jody Williams	International Campaign to Ban Landmines

APPENDIX II - Canadian
Foreign Policy-Making
Process

Pre-Ottawa Process -- Canada

Life Cycle of Anti-Personnel Mines

DEFINITIONS
Manufacturers - Production of Anti-Personnel Mines
NGO - Vietnam Veterans of America Foundation (VVAf)
Rehabilitation - Physical and Medical
Department of National Defence - Uses Anti-Personnel Mines to Protect

Post-Ottawa Process -- Canada

Demining Process

DEFINITIONS

- Manufacturers - Recycling of Anti-Personnel Mines and Demining
- NGOs - Demining and Medical Facilities
- DFAIT - Political Involvement
- Rehabilitation - Physical and Medical
- CIDA - Demining
- Department of National Defence - Training the Deminers

IMAGE EVALUATION TEST TARGET (QA-3)

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