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**AN INTERNATIONAL REGISTER OF
SMALL ARMS AND LIGHT WEAPONS:
ISSUES AND MODEL**



OCTOBER 1998

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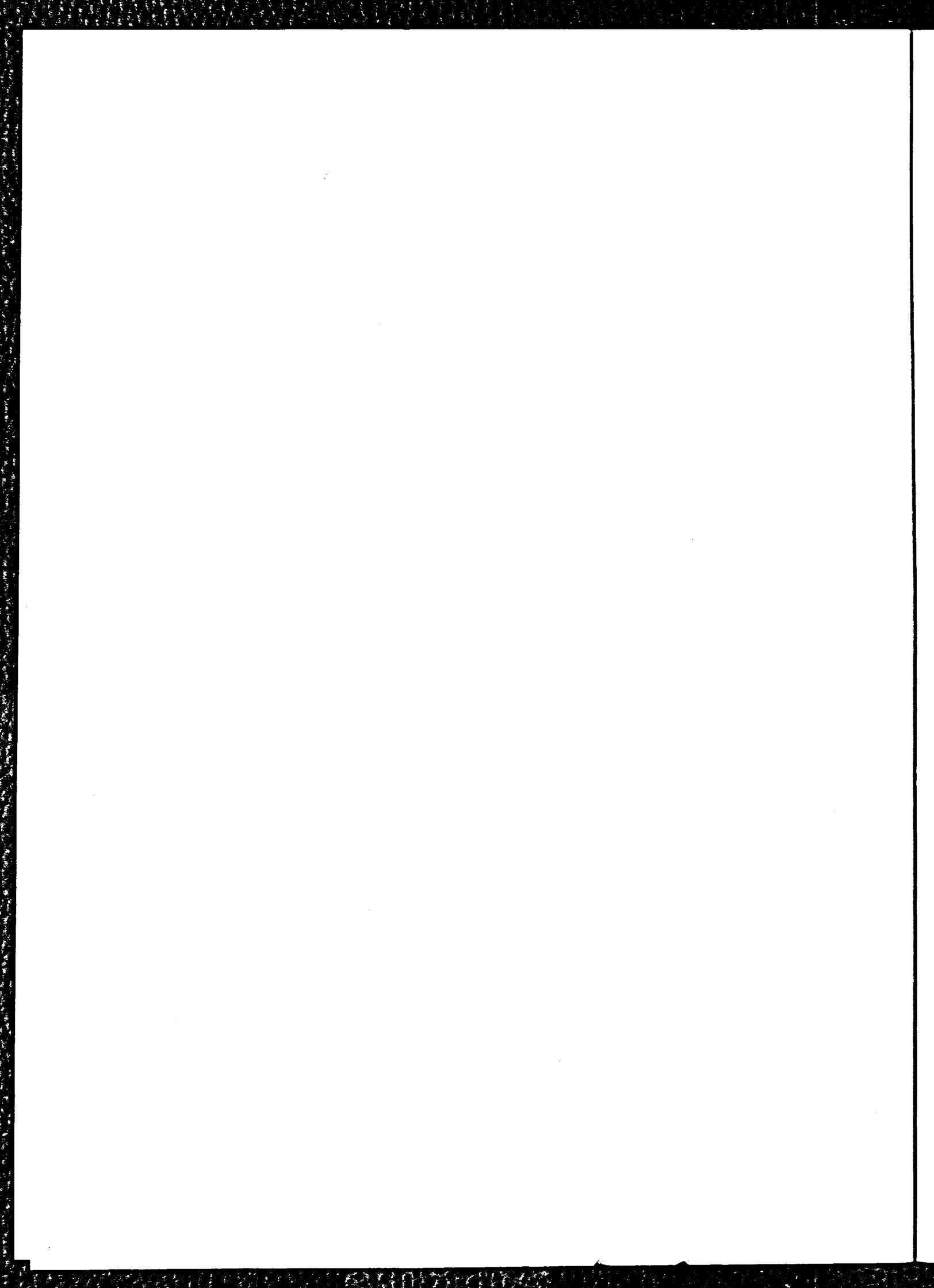


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PREFACE

Speaking at a seminar on small arms and light weapons on 25 September 1998¹, the Honourable Lloyd Axworthy, Canada's Minister of Foreign Affairs, outlined Canada's approach to dealing with the subject:

"First, the threat posed by small arms and light weapons affects all of us and demands international solutions. The small arms and light weapons market is transnational, going beyond the reach of individual countries. Patchwork solutions are doomed to fail unless we also take concerted global action.

"Second, illicit diversion from the legal trade in small arms and light weapons contributes to the problem and needs to be addressed. New military weapons are manufactured every day. Virtually all of them originate as legal and legitimate tools for defence and security. However, too many fall into the hands of criminals, terrorists and drug smugglers — resulting in unnecessary and unacceptable human suffering. Steps are being taken to address this illicit trafficking in small arms and light weapons. For example, the Organization of American States has concluded a Convention encouraging co-operation among its member countries in this area. More can be done, especially in the UN context.

"Finally, solutions must be practical. They must make a real difference not only in reducing the flow of weapons but also in changing attitudes. Transfers of many kinds of heavy conventional weapons are instantly seen as being destabilizing and potentially harmful. As a result, they are made subject to arms control export guidelines and transparency regimes. Small arms and light weapons, when transferred in large numbers and into the wrong hands, can have precisely the same deleterious effect. Yet because they are not considered along with other weapons systems, there is no regime to address the negative consequences of legal transfers."

One of the suggested means for increasing transparency with respect to the licit trade of small arms and light weapons is the adaptation of existing international data reporting registers on arms transfers, such as the United Nations Register of Conventional Arms, or the construction of specialized regional registers. It has been suggested that such a small arms and light weapons register would provide a confidence building tool as well as a basis for a better understanding of the scope, magnitude and patterns of international trade respecting these weapons.

Little detailed analysis of the requirements for such a small arms and light weapons register exists. To help fill this gap in background research, Canada's Verification Research Program undertook a project to explore the issues relating to a small arms and light weapons

¹ The seminar was sponsored by the British American Security Information Council and took place in New York on the margins of the Fifty-Third Session of the United Nations General Assembly.

register, including its likely content, possible definitions, timelines, data forms, and other operational questions, drawing upon the experience of other information exchange regimes, notably the UN Register, the Organization for Security and Cooperation in Europe's Vienna Document and the Conventional Armed Forces in Europe Treaty. By examining these issues and developing a generic model register, the aim was to develop a practical hands-on guide for policy-makers and practitioners in global and regional contexts. The report which follows is the result of this research project and has been prepared to assist government officials and researchers in their work in this field. It is being made available as part of the Department of Foreign Affairs and International Trade's on-going policy to share the results of independent research undertaken by the Department's Verification Research Program. The views expressed in this report are those of the author and do not necessarily reflect the views of the Department of Foreign Affairs and International Trade or of the Canadian Government.

Department of Foreign Affairs and International Trade
Ottawa, Ontario, Canada
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AN INTERNATIONAL REGISTER OF SMALL ARMS AND LIGHT WEAPONS: ISSUES AND MODEL

INTRODUCTION

There has been a growing awareness in the world of the problems created by the global surplus of small arms and light weapons.¹ Literature on the subject is replete with statistics outlining the abundance of weaponry and its availability to groups for use in advancing their particular cause, whether that be characterized as political terrorism, state repression, ethnic violence or criminal activity.²

In a discussion of the situation, Michael T. Klare has advanced the "diffusion" model to show the ever-expanding dispersion of armaments to groups at all levels of society and the use of such weapons for what he terms "global violence" versus the previously accepted conceptions of the Cold War "arms race".³ Various other writers have also pointed to huge stockpiles of weapons available for use, and in use currently, in all parts of the globe with attendant destabilizing effects on nation states and high casualty rates among civilian populations.⁴ As has all too often been the case, domestic violence has a tendency to spill over borders and spread throughout a region, drawing in neighbouring states and contributing to international instability.

A number of papers which have been written on the subject postulate various policy measures and programs to bring the situation under control. In a discussion of the light weapon situation, Dyer and Goldring note that transparency, oversight and control are the three essential ingredients for effective limitation of light weapons transfers.⁵ One of the approaches suggested to enhance transparency about the legal manufacture and trade of such weapons is the creation of an arms register for these types of weapons.⁶

Some writers have advocated the extension of the existing United Nations Register of Conventional Arms to include light weapons while others, noting the inability of nations thus far to agree to do so,⁷ suggest the creation of a separate register. Still others have noted that a regional register to address the specific problems of a group of like-minded nations in a particular portion of the globe may be more effective. Such a regional approach has been the basis for the small arms moratorium proposed by Mali as part of a West African regional arms control initiative.⁸

Until now, little has been written or discussed concerning the practical methodology of such a small arms and light weapons register. Most references to such a project make vague allusions to the United Nations Register of Conventional Arms, despite the fact that that initiative

has its own problems and has been recognized as being only partially effective. In constructing a light weapons register, cognizance must be taken of previous experience in a number of areas including the UN Register to allow policy makers to form a clear idea of future problems that will need to be faced.

AIM

The aim of this paper is to discuss relevant practical considerations for a potential small arms and light weapons register to help ensure that it is a worthwhile and viable measure, and to propose a model which may be followed in establishing such a register. The paper is in two parts.

The first part highlights some of the general points to be considered when designing a light weapons register. The discussion draws on work which has been done in assessing the present United Nations Register of Conventional Arms, and on experience extrapolated from the operation and results of other arms control regimes and agreements. In the discussion, various approaches to a light weapons register are suggested. It must be accepted that any register which is finally negotiated might be very different from the most desirable model for any number of reasons. The discussion aims to provide a clearer understanding of the possible effects of inclusion or exclusion of a particular feature.

The second part of the paper outlines a model for a light weapons register. It provides a possible format and explanatory notes for a register based on the points noted in the first part of the paper. The model is in outline only and it could logically be expected that modifications will be made to accommodate the conditions prevailing among interested parties at the time they wish to proceed with such a project.

This discussion of a small arms and light weapons register proceeds from the premise that such a register is desired by some international or regional organization or group of nations and that there is a will on the part of participants to make the necessary arrangements to put a light weapons register into effect. Whether or not this is a global or regional effort is not important to the methodology of the model outlined. The points that follow look at the establishment of a light weapons arms transfer register from the aspects of content, organization and operation.

PART ONE - DISCUSSION

GENERAL

The term "small arms and light weapons" (shortened to "light weapons" throughout this report) is used for convenience in this report to encompass the spectrum of small arms and those weapons of heavier calibre which are designed primarily for military purposes. It generally excludes firearms which are not exclusively designed for military usage. It excludes larger weapons which are covered under the United Nations Register of Conventional Arms (for example, tanks and aircraft). Some of the weapons included may need to be operated by more than one person and versions may sometimes be towed or vehicle-mounted (air, land and sea). Anti-personnel land mines are not covered in this paper in view of the Ottawa Agreement and subsequent Treaty signed in December 1997. If, however, that Treaty were to fail or be ignored, there could be scope to include such a munition in a light weapons register. Anti-vehicle land mines are included within the scope of the model outlined here.

A register is not an instrument intended to control arms, in and of itself. It is a tool to promote transparency which can build greater confidence among participants, perhaps as part of a larger arms control and disarmament regime. In order to design a register properly, one must bear in mind the basic reason for such a mechanism. The purpose of an arms register of any sort is, quite simply, to increase the transparency of the production, existence, and/or movement of military arms and munitions. The expectation is that this transparency will build confidence among the participants and provide valuable information for consultations and further actions to reduce tensions or prevent threatening situations. In other words, transparency is one tool used in an attempt to promote international and domestic peace and security.

Among participants a register may increase the confidence level with a view to reducing international tensions. This is the aim of the United Nations Register of Conventional Arms. Some lessons may also be drawn from other treaties and agreements. The Conventional Forces in Europe (CFE) Treaty and the Vienna Document of the Organization for Security and Co-operation in Europe (OSCE) encompass transparency as a basic tenet of their operation, although they approach the desired result in slightly different ways.⁹ The CFE Treaty is based upon agreed ceiling limitations for the holdings of certain weapons systems. This is probably not necessary (if, indeed, it is even practical) in the sphere of small arms and light weapons. The Vienna Document is more of a confidence-building agreement in which the participant states use a number of methods, including exchanges of information, to increase transparency among themselves about their motives and actions.

In addition to addressing international tensions, greater transparency about light weapons flows and production should assist the international community and individual governments in addressing destabilizing conflicts within countries. Effective policy action, whether at the international or domestic level, is premised on accurate information. To the extent that a register contributes such information, it will help policy makers.

A register should allow participants to show good will and forthrightness to their fellow participants, theoretically increasing the level of mutual trust, and provide a routine forum for explanation of arms dispositions. Therefore, a register should provide as much detail as possible to satisfy all participants. To obtain the maximum benefit, there should be opportunity for explanation of the provided data to avoid misunderstanding and to provide meaningful information to others.

The United Nations Register of Conventional Arms has provided that countries, if they so wish, may explain and amplify on the data submitted. To date, this has been voluntary (as is the whole Register, of course) and only a limited number of countries have made use of this provision. Nevertheless, a register for light weapons would benefit from a provision that encourages countries to provide explanatory notes about transfer details and justification. Countries will inevitably interpret definitions and other details differently. Amplification could allow proper explanation so that a state's position can be more fully understood by other participants.

A register provides an *official* forum for a participating country to contribute information. This has proven, in the case of the United Nations Register of Conventional Arms, to be very beneficial. As Chalmers and Greene argue, officially-provided information gives a legitimacy to the data submitted and allows a basis upon which intergovernmental dialogues can be established.¹⁰ It follows, then, that information which flows to the register must come from a competent authority within the participating country and there must be confidence that the data is accurate.

In this regard, even negative information such as a "nil" return is worthwhile. The admission by a country that it does not have the capability to seize illicit weapons, for instance, may indicate where international aid may be most beneficially spent. If a nation is unable to account for arms exported, it may be a sign that there is work to do in the area of export controls or licencing issues.

THE SCOPE OF A LIGHT WEAPONS REGISTER

Definition of Classes of Light Weapons

The definition of what classes of weapons are to be included in a register is likely to provoke considerable discussion among potential participants of any register regime. On the one hand, some may wish to include a wide range of weapons, regardless of calibre or size, on the premise that all weapons can be lethal. Others may take a more moderate position that only those of large calibre or capable of large scale injury and destruction should be included. The real problem, except for the extreme case of blanket inclusion, is that there is no simple line of demarcation that will satisfy all concerns as well as be reasonably efficacious to implement. By

focussing a register on military style weapons such problems may be reduced. It is this type of weapon which appears to cause the most casualties and the greatest domestic and international instability. As a result, they are likely to be of most concern.

The 1997 report of the UN Panel of Governmental Experts on Small Arms made an arbitrary delineation of weapons into a number of categories. These included some weapons which could be used by civilians for legitimate pursuits as well as by criminal or insurgent elements for more nefarious purposes.¹¹ One problem in making a light weapons register acceptable to the maximum number of countries, and the interested groups therein, will likely be reaching agreement on those weapons for which there may be legitimate uses in a country and those which are clearly beyond the type needed by citizens for security and recreation, assuming that there is a functioning and stable government in a nation.¹²

International attention is focussing upon increasing the transparency of those light weapons and munitions which are primarily designed for and used by military or security forces.¹³ These sorts of weapons are characterized by high rates of fire and/or larger calibres, as well as purpose-designed weapons such as SAMs, grenades and land mines. Smaller calibre, repetitive but not automatic, and short range weapons, while lethal in and of themselves, might be considered to be more a domestic criminal matter. This does not mean that they are not a threat to stability or life, but that domestic criminal laws and regulations can control their possession and use effectively in concert with the prevailing culture or security condition in the nation. Exactly what these regulations are within the nation is largely a domestic matter.

For the purposes of this report, the new Canadian regulations concerning civilian possession of firearms may be considered as a guideline for determining the lower threshold of weapons that might be included in the register, in the absence of any clear delineation internationally. Firearms are divided into a number of categories, including restricted and prohibited, based mainly on their capability to fire automatically and to be concealed easily. Strict controls are imposed on each category and owners must be licenced and meet stringent safety regulations. This categorization provides for the legitimate use of firearms where needed but removes military style automatic, heavier calibre weapons from general use.¹⁴

A light weapons register, therefore, should concentrate upon those light weapons which pose the greatest threat to international or domestic peace and security. These would include automatic sub-machine guns and assault rifles, and those similar weapons which could be modified easily to fire in such a manner. Further, as suggested by the UN Panel of Experts in their report, crew served machine guns of heavier calibre and purpose-designed portable weapons such as anti-tank and anti-aircraft missiles and rockets should also be covered.¹⁵

In the case of light weapons, because of the size of known inventories and the geographic dispersion of arms shipments, it is probably unrealistic to employ methodologies involving the recording of serial numbers of complete weapons or weapon parts.¹⁶ Explosives and ammunition, too, can be easily trans-shipped in unmarked containers and there is currently no reliable or

standardized method of marking the components of ammunition.¹⁷ Some scope may exist in using serialized methodology for accountability of weapons at the larger end of the scale of light weapons (mortars and surface-to-air missiles (SAMs), for instance), but the volume of even these weapons probably mitigates against doing so at present.

Given that the scope of the problem ranges into the millions of weapons, it is likely more feasible that a register dispense with trying to record the serial number of each and every assault rifle or grenade lot and batch number. Most analysts would view the urgency of removing quantities of light weapons from circulation to necessitate foregoing strict accountancy procedures. Instead, a register should concentrate on accounting for large quantities of light weapons rather than individual pieces of weaponry. In this, observers and critics of the register may have to accept that it is a more imprecise document than might otherwise be hoped for in a perfect world and that analysis of the data may be an inaccurate science. Having said that, however, nations will presumably strive for a level of acceptable accuracy because, first, their very presence in the group of participating nations will signify their concern about the problem and, second, because the data they provide will need to stand scrutiny on the world stage.¹⁸

Part Two of this paper breaks down the categories of weapons for suggested register documentation. The ammunition for the operation of these weapons is also included. No doubt the actual, final inclusion or exclusion of any particular weapon or weapon system will be a matter of debate among the potential participants. Care must be taken to allow enough flexibility to include new types of weapons as they come on the market, or to expand the register to weapons previously excluded, without the need to completely re-vamp the format of the register.¹⁹

In this regard, there are two different ways a register may be structured with regard to the categorization of weapons: the list approach or the general definition approach. The first approach consists of each type of weapon, its variants and models being listed in an attempt to cover all relevant types of arms. The difficulty with this approach is that the weapons business is a dynamic one and new models or, indeed, entire new weapons are constantly being introduced. Also, the same weapon may have different designations in different countries. As happened in the experience of the CFE Treaty — which relies primarily on a list approach — confusion or disagreement can be created when it is necessary to categorize new or modified equipment being introduced into service. In the case of the CFE Treaty, the process, while cumbersome, is manageable because of the large, relatively few and easily identifiable type of weapons systems which the Treaty covers. In the realm of light weapons, a definitive list of all types of existing weapons may prove to be impossible to create and, if successfully done, might be a daunting document to use or to maintain.

In the second approach — that of general definition — weapons are grouped into classes or categories each of which has similar characteristics. Guidelines are given for reporting. The reporting state then chooses the category in which a specific weapon or weapons system falls and reports it under this class. Using this system, the onus is on the reporting state to choose the category most appropriate. As a corollary, the register should provide for a reporting state to

amplify or explain their choice of category, if there is any possibility of misinterpretation of data. The model light weapons register in Part Two of this paper uses the general definition approach.

Ammunition / Munitions

Another thorny issue is the question of whether or not to include ammunition and munitions in a light weapons register. Some weapons systems and munitions are so important and clearly defined as to be eligible for their own categorization. These include packaged missiles and rockets, whether designed as integral projectile/launcher systems (such as the M-72 Light Anti-tank Weapon or the Stinger anti-aircraft missile) or as replenishment rounds for existing launcher systems.

Still other munitions can be considered to be in a different category of weapons entirely (such as anti-vehicle mines²⁰ and explosives designed for military use in engineering or assault roles). Depending upon size, they can be easily transported and used to block routes, deny areas to an enemy and act as defensive barriers. They could, of course, also be used for terrorist or criminal purposes but their primary design should be for military use. There should be little difficulty in reaching agreement on the inclusion of anti-vehicle land mines, in general terms. They have no utility in civilian commercial applications and are military-specific in their use.

Including other explosives may be somewhat more problematic in that there is a fair degree of commonality between military and civilian explosives; the difference often being more in the packaging than in the design. Nevertheless, some provision should be made in a light weapons register for explosives which are purposely designed or manufactured for military applications. These may include shaped charges, packaged demolition sachel charges, cratering devices and cutting charges. All these fulfill specific military missions and are probable candidates for national export controls in any event.

Hand grenades and similar rifle-projected missiles are also clearly a munition which have only military applications. They come in a variety of sizes and shapes, can be easily transported and are identified and handled very much like cartridge ammunition. (They may be transported with some components, such as primers or detonators, separated for safety reasons but normally they are manufactured and controlled with lot and batch numbers in the same manner as cartridge ammunition.) Grenades have been used in terrorist or criminal activity, in much the same way as have other light weapons, so their inclusion in a light weapons register is a logical requirement. Grenades are so pervasive in the inventories of most countries that there should be a special category for them.

One weapon which has not been employed widely recently but which remains in the inventory of many larger armies is the flamethrower. While not technically a single weapon but more of a weapon system, the flamethrower is capable of being easily transported and used by one or two people. Normally, a system of tanks and hoses is needed to deliver and ignite the fuel

which is then projected into an area occupied by enemy troops. This weapon is not covered under the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects. It should be included in the light weapons register.

On the subject of actual light weapon ammunition, suggestions have been made that there may be scope to have controls imposed on the actual rounds or bullets which are fired by light weapons. The argument is, in its simplest form, that ammunition is the necessary element without which light weapons lose their effectiveness. If one curbs the ammunition supply, therefore, the lifeblood for light weapons will be constricted and this will contribute to a diminution of light weapon use.²¹ Whether or not this hypothesis is true, the problem is that the production of and market for ammunition is huge and adds another, almost inestimable dimension to the problems associated with a light weapons register, especially the aspect of accurate data collection.

One major argument for including some data about ammunition in a light weapons register is the fact that so little is known about its manufacture and transfer among nations. A recent BASIC paper found that it "...proved quite difficult to find major sources and trade routes of ammunition supply...".²² Various estimates place the number of countries capable of producing ammunition for light weapons at between 70 and 100 plus.²³ Further, research indicates that ammunition, particularly smaller calibre rounds, can be manufactured in small facilities and that there is some capability in most countries of private entrepreneurs engaging in the production process on a small scale.²⁴ Control of component parts of ammunition (cartridge case, bullet, propellant or powder and primer) is possible but difficult because of the small size and wide availability of all but the primers. Clearly, this is an area in which greater transparency is required and which might be usefully addressed by a register. For the purposes of a register, clearly identifiable and completely manufactured ammunition may be all that can be realistically expected to be reported.

Even here there will be difficulties. Ease of transport, difficulty of detection, theft and other diversion of ammunition, lack of national controls and reticence of commercial suppliers to divulge what they see as confidential business information will be stumbling blocks to coming to grips with transparency in this area.²⁵ Notwithstanding, ammunition should not be ignored given the important place it may occupy in any proposed light weapon control mechanism.

Marking of cartridges and bullets, prohibition of certain classes of ammunition for civil use and improved domestic controls may hold some promise for the future where they are implemented.²⁶ The recent Organization of American States initiative contained in their 1997 Inter-American Convention Against the Illicit Manufacturing of, and Trafficking in Firearms, Ammunition, Explosives and Other Related Materials addresses ammunition as well as the weapons themselves. As is the case with the OAS agreement, a light weapons register is seen by some as a methodology to increase transparency in the area of ammunition transfers worldwide.²⁷ As noted by one writer, "...anything less than a 'holistic' approach..." to the problem of light weapons may be ineffective.²⁸

Destruction Data

A number of suggestions have been put forth to tackle the problem of over-abundance of light weapons in the world. One concept gaining ground in the literature is the idea of destruction. Countries often have surplus stocks as a result of modernization or because of changed international circumstances such as the end of the Cold War. Weapons will also be seized from illegal sources. Hostilities will cease and soldiers de-mobilized. UN Peacekeeping operations in the future may incorporate a system of disarmament, demobilization and reintegration for ex-combattants that involve confiscation of light weapons. Some peacebuilding efforts have included weapon buy-back schemes to lower the level of personal armament in a region previously affected by war and unrest. Given all these situations and others, it would seem beneficial to account in a register for light weapons taken out of circulation.²⁹

There are problems with trying to account for illicit weapons seized by national security forces. Some nations may be reluctant to divulge the extent of the illicit weapon problem within their borders. Others may be reluctant to admit how many seized weapons are being kept for the use of the national security forces or in domestic reserve stocks. There have been concerns expressed about the quality of weapons which are often returned in the process of buy-back schemes with allegations that patently old, useless weapons are being equated to more dangerous modern weaponry. (Worry about the quality of weapons being accounted for is of minimal concern for a register which deals in quantity and not quality of the units. Indeed, buy-back schemes can be tailored to factor in the quality issue by a sliding scale of reward payment, method of payment, etc.) The critical point is that some weapons are being removed from illicit circulation and emphasis should be put upon this factor. The register can be a useful vehicle for provision of this information.

Including seizure and subsequent disposal figures in a light weapons register might allow some gauge of the effectiveness of control measures instituted by national and multinational entities. Further, providing a capability for highlighting these statistics could allow nations to prove their good intentions. If it were to become the case, as has been suggested by some writers, that future economic aid and favoured trading status become dependent upon national action being taken to alleviate the light weapons situation, a consistent track record in a light weapons register may prove more valuable to the nation concerned than the supposed value of the weapons destroyed.³⁰ In a perfect world, inclusion of quantities of weapons seized would be useful to reflect correctly the balance of arms transfers. Even in an imperfect world, such an entry would be beneficial in a light weapons register to provide a visibility factor for both national and international authorities who are making the effort to stem the flow of arms or to destroy their existing stockpiles.

New Production and Current Holdings

A major criticism of the United Nations Register of Conventional Arms has been that it does not include provisions to record existing national holdings or subsequent production of weapons which add to national holdings.³¹ Provision of such information is entirely at the discretion of each country, even more so than participation in the Register in the first instance. This is a touchy subject among many nations who see information about national military reserve stocks of weapons and munitions or production capability as sensitive for national security reasons. In other cases, collecting the necessary data would be a monumental, perhaps impossible, task in some countries and regions of the world given the size and scope of existing stocks and loose controls currently employed for light weapons.³² Nevertheless, a light weapons register would likely be a more useful tool of transparency by including some indication of the capacity of reserve holdings and production capacity covering a particular time period.

Inclusion of information concerning the level of national production of new weapons and current holdings would help address differences among countries who have varying capabilities. Some argue that it is quite unfair (as is the case with the United Nations Register of Conventional Arms) to expect one country to declare imports while, at the same time, ignoring additions to national holdings from domestic production in another country. A false picture could be built up of the totality of light weapons arms inventories and transfers; transparency would not be served and mistrust could ensue.

Some countries which do have existing regulations on production and export have been reluctant to provide some such data to an international public register citing a concern about "proprietary" information and putting commercial producers at risk of unfair competition.³³ The counter argument is that nothing in a register of arms transfers, assuming that all transactions are carried on legally within the regulations of the state, should affect the normal course of international trade. It is accepted that there will be an arms trade and that some companies in some countries are still going to be active in this legitimate defence sector of business.

With regard to concerns about a loss of competitive business confidentiality, nothing in the proposed register should be construed as giving unfair economic advantage to business competitors if care is taken to record transactions after the fact. For example, the issuance of export permits reflected in the register will probably be noted after any business deal is finished and the product is ready for shipment. Therefore, there will likely be little or no prior unfair warning of impending business deals. While some observers would like to see prior notification of intent to transfer arms, this may be too idealistic an aim in the near term.³⁴

Because arms industries are part of the legitimate economic fabric of many countries, it is argued that they deserve the protection of normal commercial confidentiality to protect business transactions from undue competitor interference. The issue appears to be one of timing of the reporting of transactions as well as of identifying specific business transactions. A solution may be to have submissions to the register cover only gross figures on completed transactions or

production and, thus, accept that the register will be a reflection of past and general activity, not of future or contemporary specific business transactions. To counter undue time lags in the reporting process and to increase the dynamic nature of the register, it should be possible for participating states to submit data on an ongoing basis at any time.

In some instances, it may be that new production and holdings will be an essential element to be reported. For instance, if participants in the register were to be part of a declared regional moratorium on small arms production, such data would be critical to a register. Nevertheless, reporting of new production (and current holdings) might be a contentious issue among some countries in other circumstances and states may or may not choose to divulge such data in a register. From the perspective of transparency, a small arms and light weapons register would seem to benefit from having a provision for inclusion of information on national production and current holdings, whether or not participants are forthcoming with the data in the initial stages of the register's operation. There is always the possibility that the position of a particular country may change and that they may begin to report the data at a later date.

The Illicit Trade

No one is quite sure of the extent of the illegal arms trade in light weapons. Most observers estimate it to be considerable. Some commentators even place it as high as 50 per cent of the total of arms traffic.³⁵ All agree that it is a large and complex problem.

Illicit arms trafficking can include the theft of weapons, criminal or insurgent action, covert government arms transfers to foreign groups and distribution to domestic paramilitary groups by governments in power for various reasons of expediency.³⁶ These sorts of arms shipments and transfers can take place on both the black and "grey" market, the second generally encompassing the latter two state-sponsored types of arms transactions in which governments may be participants. Typically, in the black and grey markets, weapons begin their life legitimately and then are diverted or stolen, ending up as illicit.

It is unlikely that illicit arms trafficking can be satisfactorily addressed through a light weapons register. By its very illicit nature, such traffic is unlikely to be reported. It is possible that illicit actions may be revealed when one state divulges information which is not included on the data submission of the receiving state. Such discrepancies between exports and imports reported have actually occurred in the current United Nations Register of Conventional Arms but, for the most part, the cause has been a divergence of opinion about the definitions of transfer dates or definitions of types of weapons between providing and receiving state.³⁷ Another approach to addressing illicit trafficking might be to include law enforcement statistics about numbers of criminal charges, prosecutions, etc. It is arguable that such data might help provide an indication of the magnitude and nature of the illicit trafficking problem in a country. However, such data might already be publicly exchanged in other international arrangements concerning criminal law enforcement.

A better approach for the register might be to focus on the *arms* once seized rather than upon trying to capture information about the illicit *transactions*. Once arms are apprehended as a result of police or other work and taken into custody by a state, they assume a "legal" status. Such confiscated weapons can be subsequently stored or traded. As well, much current thinking appears to recommend wholesale destruction of light weapons as a desirable, if not a mandatory approach, to bring down levels of light weapon stocks.³⁸ In other cases, states may prefer to add them to their own inventory to bolster existing armament levels of the domestic security forces or to sell the seized weapons for scarce foreign currency.

Any register, then, should allow for the recording of stocks taken into custody and their subsequent disposition whether destroyed, sold or stored by the apprehending authority. In this way, reporting in a register the number of weapons seized may provide the best way of gauging the magnitude of the illicit problem. Such an entry could have the positive effect of allowing states to draw attention to their actions and could also permit some examination of the scope of illicit arms trafficking or evaluation of measures taken against this problem in the region covered by the register.

THE ORGANIZATION OF A REGISTER

A Consultative Mechanism

One might assume that the umbrella agreement under which any light arms register is instituted will include some mechanism for oversight of the operation of the register and consultation among the parties. Such a mechanism would allow for assessment of whether or not the aims of the agreement are being met. This is common in the case of arrangements such as the CFE Treaty and the Vienna Document (albeit that they are done in different forums with differing aims). Typically, this could take the form of a periodic review of the operation of the register, an annual report of its effectiveness and/or a forum to discuss modifications or technical issues which are beyond the purview of a secretariat to resolve.

Additionally, the consultative mechanism should allow for questions and clarifications from one participant to another to be discussed among states in a routine manner. Such a mechanism would add to the confidence building utility of the register by allowing participants to query and to explain their concerns as well as the rationale for their actions. To do this, it may be necessary to provide for meetings on an as-required basis in addition to any periodic review. It would be helpful if the resources of the register's secretariat and the register data itself were available to support this mechanism. This would suggest that there would be benefits if the data in a light weapons register was continually updated so as to be available for compilation and distribution when required.³⁹

A Compliance Mechanism

Some arms control treaties and other agreements encompass some form of compliance assessment. These may take the form of formal monitoring or verification procedures as is found in the CFE Treaty or they may be of a more informal nature. The opposite is typified by the United Nations Register of Conventional Arms in that there is little or no formal monitoring function. There is no recourse for participants to query data and no mechanism to inspect on-site in a participant's sovereign territory.

It is probable that a light weapons register would be voluntary in nature. It is also uncertain what would be the nature of the obligations — if any — incurred by the participants in such a register that would require a mechanism for compliance monitoring. Hence, whether a formal compliance mechanism is needed may depend on the specific context of the register. That being said, it would be very useful for the successful operation of the register, if some mechanism was established to encourage reports, including nil reports, to be submitted on time and in the proper format. It is conceivable that individual states might undertake such gentle "compliance reminders". However, it would seem more efficient to centralize this function, because a central secretariat would probably have more convenient access to all submissions by participating states.

Analysis of Data

Each member state can do its own analysis as to the effectiveness and content of the register, to the degree it so chooses, using the data which is shared among participants. From this, participating states can take action as they see fit in their own interests, including for example bilateral consultations or raising questions in a consultative forum.

Consideration might also be given to having a comprehensive analytical capability incorporated into the operation of the register. Again, a centralized function would likely be cost-beneficial and, in particular, could allow poorer or smaller nations to gain the same quality and quantity of analysis as more powerful participants. A centralized analytical function should be more objective in its results, avoiding the temptation to distort data for national purposes. Some states, however, would likely continue to conduct their own analysis for their own purposes. Deciding on the level of analysis that would be permitted such a central agency might be an issue for negotiation. From the point of view of operational effectiveness of the register allowing summary compilations, adjusting national submissions to ensure proper format, and other basic analytical undertakings should, at least, be undertaken by the central agency.

It is probable that a light weapons register would attract the attention of the NGO and academic communities and that, as in the case of the UN Register of Conventional Arms, some organizations would take upon themselves an information or analysis function. While this activity would probably be a useful source of information for policy makers and the public, these groups

would likely remain outside the formal state-to-state structure of the register and fulfill a possibly noteworthy, but ancillary, watchdog role on its operations.

One area into which the United Nations Register of Conventional Arms has provided a deeper view was the field of import and export data. Bradford University researchers have noted that data could often be garnered from one country's submission about activity in another.⁴⁰ A data base using both import and export information allows some overview by other participating nations and the public. Therefore, the light weapons register should make provision for import and export data to be included in each country's submission in order to allow for the development of a data base permitting a basic level of analysis of international light weapons flows.

Secretariat

The day-to-day operation of a light weapons register may require some administrative support. To be effective, a register must be up-to-date and as accurate as possible, (recognizing that there may be some constraints on timeliness required to ensure business confidentiality, for example). This may call for a small central staff to accomplish the myriad of administrative actions which would contribute to timeliness and completeness.

It might be possible in some circumstances for a group of participating nations to simply exchange reports among themselves with no intermediary organization. In contexts where the number of participants is small and the aims of the umbrella agreement are limited, this may suffice. The responsibility for the necessary administration then falls upon the nations themselves to ensure that all reports are submitted on time and with complete accuracy. Difficulty would likely arise quickly if the number of participants grew, however.

To undertake the mechanical administration of a light weapons register, the establishment of a central Secretariat would probably be very useful. Such an organization would perform the functions of a central clearing point for information, undertake administrative arrangements for activities such as periodic meetings, construct any databases necessary for information retrieval and facilitate communications. The sheer volume of data to be collated and classified may dictate that some expertise be put into place to ensure that a data base is properly constructed, administrative problems are solved, communications function and that meaningful information can be extracted from the register. In other arms control regimes, this has been done in a variety of ways.

The CFE Treaty has come to rely, in great measure, upon the efforts of a part of an existing international organization: the NATO staff which runs the VERITY data base in Brussels. The staff also co-ordinates training for all participating CFE states to ensure that the data is correctly handled and that CFE-permitted inspections are done to a similar standard. The NATO staff provide a common discussion platform by conducting seminars for verification agencies to discuss operational problems and solutions. Similarly, the OSCE administers the Vienna

Document and the UN's Department for Disarmament Affairs in New York is responsible for the United Nations Register of Conventional Arms. Any regional or global light weapons register will likely require the employment of a similar central administrative secretariat.

There are three ways in which this staff can be constructed. The classic way is for an international organization to form a staff at its offices, equipped with appropriate communications and automated data processing (ADP) support. A second approach may be for a participating nation or nations to contribute "in kind" to the common good and provide the necessary facilities and personnel. A third way is to "contract out" the task to a third party who can do the necessary work.

The first method may be useful if the existing organization has the requisite infrastructure which can be used. For instance, the United Nations, the OSCE or the OAS might be able to incorporate a light weapons register staff onto their existing bureaucracy, using communications, ADP and personnel already in location as a basis for the new activity. Some cost will, of course, be involved but expenses may be kept low if some of the existing organization's expertise, existing infrastructure and spare capacity are used. On the other hand, today most organizations are aiming to downsize and create savings, not expand. There may be no spare capacity. Existing organizations also come with existing reputations and may not be popular in all quarters. If the light weapons register is developed as a multilateral initiative among countries outside the umbrella of an existing global or regional organization, or if the organization has no spare capacity, staff or facilities, this option may not be viable.

If one or a few nations, either within or outside the group of participating nations, were to offer their assistance in the form of staff and equipment to run the light weapons register, certain advantages and disadvantages accrue. The facilitator nation could be an honest broker, if it did not have interests in the region, but this becomes a moot point if the light weapons register becomes a global initiative. There is always the danger of a facilitator nation's motives being misunderstood or misconstrued, thus leaving the arrangement vulnerable to charges of maladministration or worse. Depending upon the size of the register, it may be a contribution which is too large for some nations who would otherwise be acceptable to the majority of participants. Policies in countries change, as do their national interests, and a country could find itself wishing in future to divest itself of a responsibility which it may come to find to be too onerous. If the register became too large, a facilitator country could find itself with a growing commitment far out of proportion to the one initially assumed.

A secretariat could be formed from nothing but this would entail organizational development and infrastructure creation from what may be disparate sources. One possible way is for the participating nations to "contract out" the operation of the light weapons register to a private corporation or to an existing non-government institution. Commercial corporations exist which could organize and manage such a register for participants. Indeed, the United Nations and international aid agencies have used a number of commercial firms to provide support for peacekeeping and economic development projects around the world. The major drawback is that

these corporate entities are energized by the profit motive and may see such a contract as a lucrative source of income, thus increasing the price for the job. As well, truly international companies are difficult to find and the awarding of a contract to a firm from one country (or group of countries) may not sit well with all participants.

There may be scope to approach one of the respected academically-based international institutes who already have an interest and some expertise in the subject of arms control to manage a light weapons register. Often these non-government institutes have existing computer capacity of their own or of a parent university, along with the expertise to run it. An interest certainly exists, as their extensive research data bases testify.⁴¹ Normally, high-calibre academic faculty are already involved in the projects and a fund of background knowledge exists on the subject of arms transfer registers as a transparency measure. Therefore, costs may be lower and the threshold knowledge of the staff may be higher by using facilities in some of the institutes. Depending upon the institute chosen, it may be possible to cut some costs and get a high quality product at the same time. Even though the institute may be located in a particular country, a degree of independence and political insulation may be provided by their status as academic and non-governmental organizations.

If this route were to be followed, there are some areas which would require careful consideration. The institute or university chosen must have a demonstrated capability and expertise, and not be chosen just to satisfy some arbitrary criterion such as "proper" geographic distribution or "acceptable" political affiliation. Safeguards must be built into the agreement or contract which would clearly spell out the parameters of work to be done and to prevent the information being used for other purposes which participating states may feel to be contrary to their aims. As in any contract, the role of employer/contractor must be clearly delineated and understood.

THE OPERATION OF A REGISTER

National Data Collection

How the collection of data within a participating state for submission to the register is to be undertaken is a matter for each state to determine. The route chosen may be as elaborate as the creation of a special domestic organization, which acts in concert with military and criminal security agencies, or as simple as tasking a specific official to do it. Some countries will be better able to undertake the data collection than others because of existing organizational and legal norms within their borders. While the exact methods of national data collection will vary from country to country, some general issues will remain constant.

There will likely be a need for co-ordination of general statistical information collection among a number of national agencies: military, business, civilian security and diplomatic. The

responsibility for this could rest with some agency within the government, called here the "national authority", which acts as the point of contact and the official voice for the participating nation. It is not the place of the register to interfere with the internal mechanisms of a member country. The participating state will risk international embarrassment if the data submitted is grossly incorrect and so it behooves the state to establish an accurate data gathering process within its boundaries. Naturally, the national authority will take cognizance of the requirement to submit gross statistics while protecting police intelligence, data specific to security operations, and business confidentiality.

Some countries may not have a methodology or capacity by which they can capture all the desirable information from within their national borders. In this regard, the comments of Bradford University researchers in the UK concerning the United Nations Register of Conventional Arms may be germane. They point out that one of the results of an arms register is that countries are encouraged to institute domestic controls and to take a more proactive stance in enforcement when the spotlight of public scrutiny is turned upon them. The institution and enforcement of national regulations concerning import and export controls, production licences and possession certificates is desirable, probably vital, to curb arms flows around the world or in a particular region.⁴² A light weapons register, by increasing transparency of the situation, can assist in this process.

Data Exchange

The present United Nations Register of Conventional Arms has no provision for any periodic meeting to exchange or discuss information. Participants in the UN Register of Conventional Arms simply submit hard copy data via diplomatic channels but little attempt is made to validate the data. The Vienna Document, the CFE Treaty and the OSCE Global Exchange of Military Information (GEMI) each have annual meetings to establish new base line data in hard copy format. The CFE Treaty began with declarations of equipment to establish baseline holdings and has tracked the disposition of weapons and weapons systems by means of periodic declarations substantiated by on-site monitoring. Most of these agreements have conducted annual gatherings of experts to collect and transpose data into electronic formats.

For a light weapons register, data might be exchanged at periodic physical meetings of all participants, through the submission of hard copy data by normal diplomatic channels, and/or via an electronic exchange of data using a mutually-agreed software format with electronic communication links to a central agency.

The use of such an electronic network would be cheaper than having nations send representatives to a central location to exchange information, or perhaps even the submission of hard copies via diplomatic channels. An electronic exchange could provide more timely entry of data, depending upon the frequency of changes allowed or required by agreement. To further keep costs down, the whole system could be operated on public communications systems with

data being handled at a central point. National data submissions would be changeable only with proper authorization. This could be managed electronically by using commercial encryption technology similar to that being used for computer banking today. A secretariat would then disseminate collected information to participating states. This dissemination might involve the use of the Internet, thus allowing information to be viewed in the public domain by researchers, other governments and the general public. Thus, transparency could be satisfied and the costs would be manageable.

An electronic transmission capability and dependable access to a central server may not always be available in each and every country. If the problem is merely one of availability of hardware for data processing, appropriate computer and modem equipment may have to be provided to allow a link to function. If the technological expertise is not available in a country, training may have to be instituted for the appropriate national authority. Alternately, provision of a computer link and operator may be made from the central secretariat or a donor country with a view to handing over the responsibility at the earliest possible opportunity. In the case of the establishment of the VERITY database for the CFE Treaty, for instance, all of the above approaches were taken by NATO nations to assist some of the emerging Eastern European republics.

Of course, provision can and must also be made for acceptance of data by hand, mail, message or facsimile to accommodate any participants who lack reliable electronic data transmission facilities. These methods can also be used as a double-check, routine correspondence avenue or alternate route for data when necessary. The primary methodology of data exchange and transmission, however, should be by electronic computer link for speed and economy. Experience of both the CFE Treaty and the Vienna Document has proven this to be a more efficient and timely way to exchange data. Using electronic data transfer will more easily allow frequent changes to the data and will enable the database to reflect more current information.

If the information flow is dynamic, data would be exchanged on a continual basis and any country's entry in the database could be updated by its latest submission. Some nations might find it more convenient only to file continual updates and keep their submissions current in that manner. A register, then, should cater for both a periodic recapitulation of data yet retain a dynamic quality which will make it a valuable and living document.

Level of Confidentiality

One question which arises is the desirable level of confidentiality for a light weapons register. Given that the purpose of the register is transparency, it appears that the lowest possible level of confidentiality would best suit the aim. However, this may not be a view shared by all participants.

Some of the information which could be requested for a register may be considered by some countries to be of a sensitive nature for national security reasons, to be politically embarrassing or to be classed as vital economic or police intelligence. In some cases, this may appear to be more a question of mindset rather than fact, but it still may deter some nations from participating. Regrettably for those nations, there are few secrets in the world today. While the extent of light weapons transfers, holdings and production may never be completely revealed, national capabilities in gross terms can be accurately gauged. To prove this point, one must only search the open literature and internet sources.⁴³ Therefore, reticence to reveal register information on the part of any one nation is likely to prove to be without solid basis.

In fact, vagueness of details may breed a more dangerous situation. One of the strengths of the United Nations Register of Conventional Arms is the fact that official information is available, thus dispelling unfounded and potentially dangerous estimates by outside agencies which may be inaccurate and which may lead to incorrect reactions by other nations or economic competitors.⁴⁴

Limited confidentiality in a register may be attractive to some nations in order to satisfy the criticism that information freely given would be a bonus for other nations who do not participate in the register. There is the possibility that information could be shared only among participating countries and kept confidential or secret from non-participants. This is certainly one method of operation which may work under certain circumstances, for instance when there are a small number of nations involved. It may be a way to introduce the operation of a register in an incremental manner to participants with a view to moving to full transparency at a later date.

If a level of confidentiality were introduced into the operation of a register, however, it would be difficult if not impossible to maintain. There is little assurance that confidentiality, of whatever level, would be completely effective. If only some material were to be given a level of confidentiality, there would be a need for guidelines to protect it. A system of checks would need to be instituted to ensure that only appropriate material is being released in a prescribed manner. The transmission of data and the physical handling of it under some level of confidentiality would increase costs.

It may be that a lack of confidentiality in the register would increase the hesitancy of some nations to participate. While efforts to convince such nations that their fears are unfounded should continue, they could be offered the opportunity for partial participation. None of the information provided by a participant should be dependent upon submissions being complete. While the ideal is that all nations will participate fully, even partial information in the initial stages of the register's maturity would be useful. (In fact, it must be accepted that some nations will not be able to provide all the information which they might wish because of the lack of an ability to collect the information.) Nations wary of disclosing all their available information should be encouraged to contribute what they feel comfortable with, or capable of, divulging in the hope of fostering further, full participation later. In other words, the register should be structured for maximum inclusion in every way rather than pointedly excluding participation in any way.

Cost

The question of the cost of establishing and running a light weapons register is one which is hard to answer with great precision. Costs will be dependent upon the scope of the register and whether it is global or regional. The more participants, the greater may be the economies of scale in handling data but still, in absolute terms, the volume of data to be handled will necessitate more facilities and hence more costs.

Costs will fall into two areas: costs incurred to establish and run the register, and costs to each participating country associated with the collation of raw national input data for the international register. The former costs can be estimated as part of the establishment process for whatever size of bureaucracy would be needed to set up and run the register.

National costs, however, will be dependent upon the licencing, export and domestic regulations relating to small arms already in existence in the particular nation. In a country such as Canada, the United Kingdom or Japan, existing control agencies and mechanisms may make it relatively simple to provide data. Incremental costs may be, relatively speaking, fairly minimal. On the other hand, in other countries, some data initially will not be available due to the lack of firearms ownership and usage controls, the introduction of which may be expensive or impractical to implement. In that case, the national cost of participation may be lower but the data provided (if at all) will be of lower quality and less complete, thus mitigating against the effectiveness of the register. These national costs may, for economic or cultural reasons, preclude complete participation by a particular country.

Operating costs of a register could be kept to the minimum by using existing data base formats, by maximizing electronic information exchange and by employing readily available commercial computer software. In this regard, the experience of other agreements can illustrate lessons for a future light weapons register.

In the case of the CFE Treaty, a computerized data base program was devised by NATO Headquarters' Verification Co-ordinating Committee staff for NATO member nations to track the inventory of former Warsaw Pact participants. This database consists of a dedicated central network server to which each of the NATO, and later Co-operation Partner, nations have access to track weapon inventories provided under the terms of the CFE Treaty. Some problems arose as a result of rapid changes to the software program (in response to lessons learned and a natural desire for improvement) and with the lack of electronic links from some of the less advanced states parties. As well, the initial Treaty wording did not allow the exchange of information to be done electronically and this became the cause of further negotiation among participants.⁴⁵ The OSCE set up a dedicated computer communications network to handle inspection notifications and data exchanges. It also became a useful tool for Vienna Document-related communications on a number of subjects. Based on this experience, it is advisable that any future light weapons

register should be simple, allow easy access by electronic, hard copy or facsimile data and use a commercially based, readily available software program as the basis for its calculations.

Whether or not there is a compliance assessment mechanism, and what type it will be, will also have a bearing upon the costs to be borne, either by a centralized agency or by nations in direct proportion to their participation. Other items which will affect costs are the exact functions of a central agency and the frequency of meetings decided upon by participants. In the case of the United Nations Register of Conventional Arms, an existing centralized agency acts as a repository and accountant for the information supplied by nations. On the other hand, for CFE Treaty data, because of the nature of the umbrella instrument, NATO has developed an implementation and co-ordinating staff which now is the recognized clearinghouse for information dealing with that Treaty. (Interestingly, this role for NATO is not mentioned in the CFE Treaty proper. Rather, it has evolved in an *ad hoc* fashion to fill an obvious requirement.) In the latter case, the drafters of the Treaty began work in an adversarial environment and clearly foresaw a monitoring and verification function while, in the case of the United Nations Register of Conventional Arms, the mechanism for compiling and checking information supplied is very much looser. In fact, there is no on-site monitoring provision in the latter arrangement and a centralized staff — much smaller than that used in NATO Headquarters — provides mainly a simple clearinghouse and publication facility.

In terms of actual costs, a look at the United Nations Register of Conventional Arms may be illuminating. Costs (in US dollars) were estimated in the planning stages to be:

- hardware, software and system development and training \$50,000 (non-recurring)
- development, establishment and training of the system \$75,000 (non-recurring)
- three posts for personnel to manage the system \$228,000/year

For this, the architects of the plan expected to be able to collect and collate the data from 185 countries, publish it and distribute it in hard copy on wide distribution. In actual fact, annual costs have been well below \$250,000 and it has taken less than two person-years of time to amass and disseminate the data. Of course, these figures only relate to central costs. Each participating country's national data compilation activities are much harder to gauge..

The size of the register, as noted, may vary these numbers considerably. In fact, the above figures rely on some special programming of software designed specifically for the task. The use of readily-modified commercial software or the use of existing data bases and server space should allow costs to be cut further in this area. There is also the possibility of adaption of existing software used by OSCE, NATO or the UN, as well as taking advantage of their respective organizational experience to help reduce costs, especially in the critical start-up phase.⁴⁶ As well, if the primary mode of distribution is electronic transmission of data, the resultant minimization of hard paper copy for the data should also lead to other cost savings.

The cost factor will be a variable which can only be determined with accuracy once the framework of the establishing umbrella agreement, the number of participants and the demand for the data are more readily definable. However, it seems reasonable to conclude that, based on other experience, the costs of starting and operating a simple light weapons register should not be exorbitantly high.

CONCLUSION

From the above discussion, then, one can put together a picture of desirable characteristics of a light weapons arms register.

It must fit the aims of the establishing agreement. That is, it must provide the transparency which (presumably) is desired by the participants and it must be in sufficient detail to provide meaningful insight into the situation pertaining to the region in which it is to be applied. In this regard, it must rely upon and reflect official data from the recognized national authority in each participating state.

Each participating nation should have the opportunity to provide amplifying comment on their submission and the resulting data base should reflect these notations to allow a full understanding of the participant's position. There should also be a mechanism to allow both technical, administrative clarification as well as a more formal consultative mechanism to raise observations or ask questions without creating diplomatic incidents. Some periodic review or report may be desirable as a methodology to gauge the effectiveness of the agreement or to focus domestic or international efforts to stem light weapon proliferation.

In the mechanical operation of a light weapons register, the main aim should be to cover as many classifications of military-style light weapons as possible but exclude the lower end of the weapon spectrum to recognize legitimate national and cultural needs for private arms possession within national criminal law boundaries. Because of the size of the light weapons trade and its geographical dispersion, the best that can be accomplished is probably an accounting by type and quantity rather than by serialized single-unit manifest lists.

Ammunition and munitions should be catered for in order that complete data on the light weapons situation can be accurately reflected. To give visibility to the dimension of the illicit trade in light weapons and to allow nations to show their efforts in curbing this manifestation of the problem, information should be included in the register concerning illicit weapons apprehended by national or international authorities. Likewise, to reflect accurately the size of light weapon data, information of national holdings and production should be tracked. Reporting of movement of light weapons by both exporting and importing nations will allow a degree of cross-checking of data by researchers.

A register would do well to be timely and dynamic, given the large and active trading which is characteristic of global light weapons transfers. Thus, it should be able to keep abreast of and publicize the latest movements or risk the possibility of being hopelessly out of date in any reporting period. However, it should not be so up-to-date as to compromise legitimate commercially sensitive information and, thus, work to the detriment of member states.

The mechanics of a register should cater for less technologically advanced nations by being simple in design and capable of accepting other than the preferred electronic data format inputs. In addition, a register should be able to function even if only a portion of the desired data can be provided by a national authority. Simplicity should also contribute to reasonable cost, always a consideration as a result of both international and domestic budgetary controls.

Data which is handled in an unclassified manner is easier and cheaper to work with than confidential information and the possibility of unauthorized release is high with so many agencies handling confidential information. Keeping data unclassified in the public domain could add to the transparency factor, the ultimate object of a light weapons register, and demonstrate a tangible commitment to the effectiveness of the register.

Lastly, to ensure that the myriad of details are properly completed, the administration is smooth and all members have a common opportunity to participate fully, a central staff or secretariat should be formed to provide proper support for the register's operation.

The model light weapons register in Part Two of this paper is based upon the above set of requirements. The register is in outline only because participants may wish to modify, delete or add to the suggested model. For instance, categories of weapons could be changed or more closely defined; some data may be felt not to be appropriate and may be deleted. The aim is to create a basic model register which can still function with any modification necessitated after negotiation by the participating nations.

The question remains: will such a register be useful and effective in increasing transparency, thus building confidence and security among nations as well as reducing the carnage within nations caused by the availability of large quantities of light weapons? A similar question has been asked about the United Nations Register of Conventional Arms by a number of researchers. No doubt, in many areas, the United Nations Register of Conventional Arms has fallen far short of the goals hoped for by its more idealistic founders. Conversely, it does function after a fashion and provides some elements of information which have been unavailable previously. In some cases, the spotlight of public scrutiny has been shone on areas of trade which were hitherto considered to be solely in the domain of national governmental decision-makers.

This fact, applied to the light weapons situation, may be more than some governments and weapon industrialists may wish. It was the opinion of some participants in the UN Panel of Governmental Experts on Small Arms that transparency was not an achievable goal due to the many and varied dealings in light weapons holdings by governments and commercial interests.⁴⁷

There is no doubt that any proposed light weapons register will run into difficult and possibly protracted diplomatic negotiation as proprietary interests come into focus and their influences are played out via international posturing. Indeed, some very legitimate cultural and domestic opposition may make a light weapons register a difficult goal to achieve in some areas of the globe.

At the very least, governments and international organizations which wish to institute such a register must be clear in their aim and take account of opposition, some of which will be difficult to ignore. Drawing upon experience with existing information exchanges in the arms control field will be helpful. It may be that only a portion of the ideal small arms and light weapons register may be attainable. This is, of course, a matter for politicians to decide and diplomats to negotiate.

No light arms register will provide a complete picture of manufacture, trade and traffick in these weapons. The extent of the black and grey arms markets will not be covered. Criminal activity will not be included and covert and quasi-official arms transfers will be ignored except in very limited ways. However, by bringing some attention to these activities controls may be encouraged where few or none exist at present. This pre-supposes, of course, that there is political will and general acceptance of such controls and that the national criminal and security forces can act to enforce the law. In many countries, this may be problematic.

There are also indications that a light weapons register is not high on the agenda of some nations and international organizations. A recent press report noted the reluctance of some NATO countries to deal with the issue during that organization's operations in the former Yugoslavia.⁴⁸ This might be typical of the ambivalence which may have to be overcome if a light weapons arms register is to succeed.

Making provision for the inclusion of partial data, and the opportunity to explain omissions, may encourage some weak or reticent governments to participate. Other participants and researchers using the data base of information will quickly assess for themselves whether any particular nation is whole-heartedly supporting the light weapons register.

The success of a light weapons register will be directly dependent upon what it is meant to do. Like the United Nations Register on Conventional Arms, any register will likely start off tentatively and grow only when nurtured by national action and international agreement to take concrete action to curb the arms flows to the area of interest. Initial hopes should probably be kept conservative to avoid disappointment

PART TWO - A MODEL REGISTER

GENERAL

This section gives a suggested outline for the operation of a light weapons register.

It is assumed that there will be an international agreement among states (perhaps under the auspices of the United Nations, a regional organization, or a bilateral or multilateral grouping of like-minded states) under which the register is formulated. This group of states parties will meet to establish the parameters of the arms register and to draw up the umbrella establishing agreement.

CENTRAL ORGANIZATION

The agreement will establish a **Consultative Commission** made up of participating states which will review periodically the operation of the agreement, discuss future changes to the agreement and to give broad, general policy direction for the implementation of the agreement to a full-time Secretariat. The Consultative Commission will act like a Board of Directors or Executive Council for the register. The Consultative Commission will meet to review any periodic reports which may be called for by the agreement and to report back to national governments. Lastly, it will also be available to meet on an as-required, as-requested basis to seek clarification or explanation of the actions of participating nations before formal diplomatic action is taken. If an international organization were the sponsor of such an agreement and subsequent register, an existing body in that organization might be capable of assuming this role.

The **Secretariat** will be responsible for receiving submissions from participating states, collating them, disseminating them to participating states, maintaining appropriate databases and communications networks, and publicizing the information contained in the register. All administrative tasks such as timely reminders of deadlines, minor technical clarification and the creation and operation of a data base will be the responsibility of this staff. Again, this function might be undertaken by staff within an existing international organization, if appropriate.

NATIONAL ORGANIZATION

Each participant state will designate a governmental agency or official to be responsible for the submission of data to the Secretariat and to act as a contact point. This responsible agency will be referred to as the **National Authority**. It could be a division of the Ministry of Foreign Affairs. All contacts with the Secretariat for routine administration and submissions will

be through the National Authority. The National Authority will be responsible for all internal collection and collation of data from the participating nation.

INFORMATION FLOW

Information will flow from each National Authority to the Secretariat. The staff will update the data base using information supplied by each National Authority. Minor administrative clarifications and corrections will be handled between the National Authority and the Secretariat. If a policy interpretation or ruling is required, any National Authority may ask for a meeting of the Consultative Commission to be convened to discuss the issue, to query another nation or seek clarification of data supplied by other nations. Bilateral consultations between participating states should be encouraged as a first step, of course.

The information flow will be timely. While there will be a requirement for a minimum annual submission from participating countries, nations will be encouraged to submit partial information and changes to data as they occur. This, in turn, will be updated and available electronically to all participating nations and the general public immediately.

It is understood that all nations may not have in place the necessary internal national mechanisms to provide data for all the requested categories. Countries may provide partial information. Provision has been made for participating nations to amplify their submitted data, or lack of it, and for these comments to be included in the light weapons register.

THE REGISTER DATA BASE

A light weapons register data base will be created by the Secretariat using the information submitted on Form A by each participant nation. The data base will be updated by the submission of a new Form A, or a Form C, from the National Authority.

The light weapons register data base will be held on a central server. This will be accessible by the public via the Internet. Public access will be read-only. Write-only permission will be retained solely by the Secretariat. National Authorities will not have access to the central server and all changes will be made to the data base by the Secretariat. National Authorities will submit changes to the Secretariat and, after confirmation that they are technically error-free, the staff will update the data base for each country.

The data base will be configured in such a manner that information can be extracted in a number of comparative formats. For instance, information should be obtainable by country, by weapon category, by type of transaction or by any other variable. A standard search engine will be incorporated into the data base to provide the selection variables for research purposes. These should have simple, pull-down menus to facilitate accessibility by the general public.

The data base will have provision for the applicable comments submitted by participant nations via Form B in order to reflect accurately the position of each contributor as they themselves would wish to have it seen by the world. Information in the data base will be cross-referenced, where applicable, to amplifying comments submitted by the National Authority.

The data base will be unclassified. Each specified period (annually or more frequently, depending upon the umbrella agreement's provisions), the register data will be collated as of the specified date. Hard copy data will be provided at the discretion of the Central Agency. The normal method of access to the public will be by the World Wide Web (ie. the Internet). Data to the latest date possible will be available for display and, in this way, the data base will be timely and reflective of the true state of declared transfers by participants.

ANALYSIS

The Secretariat will act primarily as accountants and bookkeepers for the register. They will, as part of their regular duties, compile the data and produce consolidated reports periodically or as required. The Consultative Commission may request a more extensive analysis of the data from the Secretariat. The Secretariat will provide the information to the best of their ability or will act as the contracting agent in the hiring of an outside entity to fulfill the request. It is expected that individual nations, researchers, academics and the media will make use of the raw data to draw their own conclusions about the flow of light weapons and the validity of data provided by National Authorities.

BASELINE DATA

Upon the entry into force of the agreement, the participating states agree to complete Form A in as much detail as possible. At their own discretion, they may submit amplification of the raw data with Form B. This will be submitted at the same time as Form A, and be cross-referenced to it, in order to allow participant nations to explain further the transactions outlined in Form A.

UPDATES OF INFORMATION

When information changes or becomes available when it was not previously, the participating states may submit Form C outlining the changes which pertain to their particular situation. This alleviates the need to re-submit the entire Form A (and B, if applicable). Form C will provide a quick and efficient way to modify data on an as-required basis to accurately reflect the current status of transfers at any given time.

If the establishing agreement of the register calls for it, nations will re-submit periodic (presumably annually) data on Form A (and B, if applicable). Nations may simply confirm existing data on the data base and update with Form C on a continual basis. If this is more convenient, Form B can be used to indicate that data already in the data base is correct and that no further update is required.

DATA TRANSMISSION FORMS

Data transmission forms will be kept succinct. The criteria is ease of transmission and understanding. All forms may be sent to the Secretariat electronically by computer link, by message, by facsimile, by mail or by hand. The Secretariat will incorporate the information into the light weapons register data base in such a manner that the comments will be readily available for perusal. Each of the forms is discussed in greater detail below.

Form A

General

This form will be the national submission to the light weapons register. This is the primary form for the recording of arms transfers. The Secretariat will use it to collate and present data to the Central Agency and to the public. It is submitted to the Secretariat by the respective National Authority. Collection and collation of the raw data within national boundaries is the responsibility of the National Authority.

Form A will provide baseline data for the initiation of the register. It may also be used to re-declare or submit information periodically if the umbrella agreement calls for this to be done annually, or at some other time. It provides a place to reflect this period and a blank to indicate the period up to which the update is effective.

Form A is designed to be simple and to provide data regarding each country at a glance. It deals in quantities of various types of light weapons, shows the disposition of each category and is meant to be easily amended and read.

Weapon Types

Types of weapons are listed in rows down the left vertical side of the form. The basic designations of light weapons and military small arms are drawn from the 1997 UN Panel of Experts report with some expansion of each of these categorizations. Explanatory notes for each category follow.

Sub-machine guns Military style automatic small calibre hand-held weapons.

Assault rifles Military style, automatic firing, hand-held weapons (or civilian pattern weapons which can be modified to fire automatically) normally used by infantry.

Light Machine Guns Automatic infantry squad support weapons with a high cyclic rate of fire operated by one or two persons.

Heavy Machine Guns and Cannons Automatic weapons normally over 12.7mm calibre which can be ground-mounted or vehicle borne (land, sea and air) and which may fire a variety of types of ammunition for specific purposes.

Grenade Launchers, Hand-held May be part of another weapon system or an individual weapon system and normally found in infantry units.

Grenade Launchers, Mounted May be part of the armament of a vehicle (land, sea or air).

Anti-tank Guns/ Recoilless Rifles A weapon which is specifically designed for anti-tank or other "hard" targets and which fires a projectile, either singly or automatically, at medium to high velocity. It may be man-portable, vehicle (land, sea or air) mounted or towed.

Anti-tank Missile/Rocket Launchers A reloadable system designed to fire a missile/rocket. These may be designed for use against more than armoured vehicle targets.

Anti-tank Missiles/Rockets Includes both: ammunition resupply missiles and rockets for launchers; and, any integral launcher/missile or rocket system designed to be used once and disposed of rather than reloaded.

Anti-aircraft Missile Launchers A reloadable system designed to fire a missile or rocket. While the system may be used for general fire support purposes, the main purpose of its design must be anti-aircraft defence.

Anti-aircraft Missiles Includes both: ammunition resupply missiles and rockets for launchers; and, any integral launcher/missile or rocket system designed to be used once and disposed of rather than reloaded.

Mortars All mortars of less than 100 mm in calibre which are designed to fire a projectile for any purpose including dispersion of smoke, illumination and fire support. The mortars may be man-carried, towed or vehicle mounted.

Ammunition The various types of ammunition are broken into generic categories corresponding with the above weapon types. Further delineation may be included in the amplifying comments which are encouraged in Forms B and C.

Hand Grenades All types of high explosive fragmentation or directed chemical energy grenades designed for anti-personnel, anti-tank and anti-bunker operations. Does not include smoke grenades or riot control agents such as tear gas or stun grenades.

Mines, Anti-tank Mines designed to attack vehicles and other large targets by high explosive. This includes all types of command detonated, remote control and direct action mines. Does not include anti-personnel mines.

Flamethrowers These include all types of flame projecting weapons not vehicle mounted. Projector systems normally include hoses, ignition and propellant components combined and carried by one or two persons.

Military explosives Explosives purpose-designed for military attack purposes, demolition and engineering work. Does not include civilian commercially used explosives.

Data Entries

Data concerning quantities and destination/source countries may be entered against each category of weapons in rows under each applicable column heading. An explanation of the columnar headings appears below.

Holdings Official national holdings are recorded in this column. These include holdings of all military and civilian security forces, including national reserve stocks. When national stocks are increased as a result of Production or Import or decreased as a result of being destroyed as a result of modernization, sold as surplus or otherwise disposed of, this fact should be noted on a subsequent Form A. Form B may be used to amplify this data.

Production This column includes all new production carried out within the national territory of the participating state. Normally, where licencing controls are in effect, the quantity number will be easily obtainable. This quantity is designed to reflect the authorized and known production of light weapons within the country during the period. Production may be estimated but, where production licencing controls are not in effect, the number must be clearly identified as an estimate. Subsequent Form A submissions should include an equal number of units shown in Production as being taken into Holdings or included in Export categories. Form B may be used to amplify this data.

Imports This column is sub-divided into two: one to reflect the quantity of each category of light weapon and the other to indicate the source of the shipment(s). The source should be the

initial exporting nation, regardless of whether shipments pass through intermediate countries. Import controls, where in force, should provide most of the raw data for the National Authority to assemble this data.

Exports This column is sub-divided into two: one reflects the quantity of each category of light weapon and the other to indicate the ultimate destination of the shipment(s). The destination should be the final destination, regardless of whether shipments pass through intermediate countries. Export licence controls, where in force, should provide the essence of this data for the National Authority.

Illicit Weapons This column is provided to allow countries, and other multinational organizations such as the United Nations, to account for illicit weapons taken out of circulation. The first column shows the number of weapons seized by security forces, civil and military, as a result of raids, intercepted shipments or programs such as buy-back programs. The second column allows a nation to highlight the number of light weapons which have been disposed of after being seized.

In a case where the number of weapons seized is more than the number of weapons shown disposed of, the difference will automatically be added to column (a), "Holdings", for that nation, or for that nation in which the activity is reported in the case of an international organization submitting the report, on the basis that the formerly illicit weapons are now under positive national control and, therefore, taken into inventory.

The seized weapons should be included in export information declaration (Columns (d) and (f)) if they are disposed of by export. Destruction information (eg.; method, location, or timings if such information is volunteered) could be covered by submission of Form B.

Form B

This form allows a reporting nation to amplify data given in Form A. It must, therefore, be read in conjunction with the data in Form A. Reporting nations may refer by serial and column to the quantity or information given and provide explanations or clarification to assist the Secretariat or other interested parties in the public domain. Entries may indicate: specific types of weapons or ammunition, give time frames of production or transactions, designate intermediate transit destinations of exports/imports, or detail sources of illicit weapons and method of destruction, among other items. The information in this form may be useful in allowing a nation to present an accurate picture of its light weapons trade or its efforts to control transfers. More, rather than less, information is encouraged but the form and content is left to the discretion of the submitting nation.

Form C

This form, an abbreviated combination of Forms A and B, is designed to be a simple and continual way to update the initial, or previous, national data. It can be initiated by the National Authority on an as-required, as-available basis. It can also be used to make changes for the annual update if such a submission is required by the agreement. The form can be sent by electronic message, facsimile, mail or hand. It will originate from the National Authority and be authorized by it.

The form uses the serial number of each category of weapon and the alphabetized column heading to change data only in those areas where necessary. Thus, it will be a useful and quick option for the submitting nation and an easily handled input for the Secretariat. The form will be serialized and dated for record purposes.

SAMPLE FORM A:
LIGHT WEAPONS REGISTER
PERIODIC SUBMISSION

COUNTRY: _____

DATE SUBMITTED _____

PERIOD: _____ (calendar year or period designated by agreement)

UPDATED TO: _____ (date)

WEAPON TYPE		HOLDINGS	PRODUCTION	IMPORTS		EXPORTS		ILLICIT WEAPONS	
		QTY	QTY	QTY	FROM	QTY	TO	SEIZED	DISPOSAL
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1.	Sub-machine guns								
2.	Assault Rifles								
3.	Light Machine Guns								
4.	Heavy Machine Guns and Cannons								
5.	Grenade Launchers, hand-held								

WEAPON TYPE		HOLDINGS	PRODUCTION	IMPORTS		EXPORTS		ILLICIT WEAPONS	
		QTY	QTY	QTY	FROM	QTY	TO	SEIZED	DISPOSAL
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
6.	Grenade Launchers, mounted								
7.	Anti-tank Guns/ Recoilles Rifles								
8.	Anti-tank Missile/Rocket Launchers								
9.	Anti-tank Missiles / Rockets								
10.	Anti-aircraft Missile Launchers								
11.	Anti-aircraft Missiles								
12.	Mortars (less than 100 mm)								
13.	Ammunition, sub-machine gun								
14.	Ammunition, assault rifle								
15.	Ammunition, light machine gun								

WEAPON TYPE		HOLDINGS	PRODUCTION	IMPORTS		EXPORTS		ILLCIT WEAPONS	
		QTY	QTY	QTY	FROM	QTY	TO	SEIZED	DISPOSAL
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
16.	Ammunition, heavy machine gun and cannon								
17.	Ammunition, anti-aircraft gun								
18.	Ammunition, anti-tank gun								
19.	Ammunition, grenade launcher								
20.	Ammunition, mortar								
21.	Hand Grenades								
22.	Mines, anti-tank								
23.	Flamethrower (man-pack)								
24.	Military Explosives								

SAMPLE FORM B:
LIGHT WEAPONS REGISTER
AMPLIFYING COMMENTS

COUNTRY:

REFERENCE: Form A to Light Weapons Register Submitted _____ (date)

1. **ITEM:**

Serial _____ Column _____

Comment:

2. **ITEM:**

Serial _____ Column _____

Comment:

3. **ITEM:**

Serial _____ Column _____

Comment:

(Continue as necessary)

SAMPLE FORM C:
LIGHT WEAPONS REGISTER
DATA UPDATE NOTIFICATION MESSAGE

TO: (Secretariat)

FROM: (Any other countries or organizations of choice, if applicable)

UPDATE RECORD CODE: (Standardized alphanumeric; eg, CA/02 [second update from Canada])

NOTE: (Date/time group in ZULU time that message is dispatched, date only if not electronically sent)

TEXT:

Delete current data and replace with new information as indicated below:

Serial	Column	Data
(#)	(letter)	(quantity, country)

(Continue as necessary)

Comments (amplification if desired concerning the information above)

Serial _____ Column _____ Comment:

Serial _____ Column _____ Comment:

BIBLIOGRAPHY

- British American Security Information Council (BASIC). *Combatting Illicit Light Weapons Trafficking: Developments and Opportunities*. Project on Light Weapons Report 98.1, January, 1998
- British American Security Information Council (BASIC). *Deadly Rounds: Ammunition and Armed Conflict*. Project on Light Weapons Report 98.4, May, 1998
- British American Security Information Council (BASIC). *Eastern Europe's Arsenal on the Loose: Managing Light Weapons Flows to Conflict Zones*. BASIC Papers Number 26, May 1998
- British American Security Information Council (BASIC). *The G-8 Summit: A Leading Role in Small Arms Control?* BASIC paper, May, 1998
- Canada. Department of Foreign Affairs and International Trade. *Export of Military Goods From Canada, Annual Report, 1996*, November 1997 (on internet web site <http://www.dfait-maeci.gc.ca/~eicb/menu.htm>)
- Canada, Department of Foreign Affairs and International Trade. *The Role of Ammunition Controls in Addressing Excessive and Destabilizing Accumulation of Small Arms*. Ottawa, April, 1998
- Canada, Department of Foreign Affairs and International Trade. *The United Nations Conventional Arms Register: Canadian Practice in Preparing Its Annual Data Submission*. Ottawa, November, 1995
- Canada, Department of Foreign Affairs and International Trade. *Light Weapons and Micro-Disarmament*. Ottawa, January 1997
- Canada, Department of Foreign Affairs and International Trade. *The United Nations Conventional Arms Register: An Annotated Bibliography*. Ottawa, October, 1995
- Chalmer, Malcolm and Owen Greene and Mitsuro Donowaki. *Developing Arms Transparency: The Future of the UN Register*. Bradford Arms Register Study No. 7. Department of Peace Studies, Bradford University, UK and Japan Institute for International Affairs, UK, 1997
- Chalmers, Malcolm and Owen Greene. *Five Years and Counting: The UN Register in its Fifth Year*. Bradford Arms Register Studies Working Paper 4, Department of Peace Studies, Bradford University, UK, December, 1997

Donowaki, Mitsuro. *Developing Associated Transparency Measures for Light Weapons and Small Arms and A Regional Arms Register in West Africa*. in the United Nations publication Disarmament Vol XX, Numbers 2 and 3, 1997

European Union. *EU Code of Conduct on the Arms Trade*. 25 May, 1998

Fraser, Douglas. *Progress in International Efforts to Constrain Light Weapons: A Canadian Perspective*. Workshop Report, Canadian Council for International Peace and Security, Ottawa, 25 January, 1997

Greene, Owen. *Tackling Light Weapons Proliferation: Issues and Priorities for the EU*. Saferworld, London

Goldring, Dr. Natalie J. *Overcoming Domestic Obstacles to Light Weapons Control*. BASIC Project on Light Weapons paper given to the Sandia National Laboratories Annual Arms Control Conference, Albuquerque, New Mexico, 18-20 April, 1997

Latham, Andrew. *Taking the Lead? Light Weapons and International Security*. International Journal, Spring, 1997

Lock, Peter. *Armed Conflicts and Small Arms Proliferation: Refocusing the Research Agenda*. in Policy Sciences, Number 30, 1997

Lumpe, Lora. "Preliminary Policy Options for Monitoring/Restricting Exports of Light Arms", (paper prepared for the Arms Sales Monitoring Project of the Federation of American Scientists for presentation at the UNIDIR Meeting on Small Arms and Internal Conflict, 7-8 November, 1994, Geneva, Switzerland

Nedimoglu, Necil. "NATO and Partner Countries Co-operate in Implementing CFE Treaty" in *NATO Review*, Vol. 42, No. 3, June, 1994

Organization of American States. *Inter-American Convention Against The Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Other Related Materials*. AG/Res.1 (XXIV-E/97), 13 November, 1997

Regher, Ernie. *Militarizing Despair: The Politics of Small Arms*. In New Routes 4/97.

Renner, Michael. *Small Arms, Big Impact: The Next Challenge of Disarmament*. Worldwatch Paper 137, Worldwatch Institute, Washington, October, 1997.

Roos, John G. "Meet the Peacekeeper: Revolutionar Weapon System Could Breathe New Life Into M-16s", *Armed Forces Journal International*, August, 1998

Singh, Jasjit (ed). *Light Weapons and International Security*. Indian Pugwash Society and BASIC, New Delhi, 1995

Smaldone, Joseph P. *Mali's Proposed Small Arms Moratorium: A West African Regional Arms Control Initiative*. Paper presented at Policy Workshop on Controlling the Global Trade in Light Weapons: Policy Options for National Governments and International Community, American Academy of Arts and Sciences, Cambridge, Massachusetts, 11-12 December, 1997

Smith, Chris and Alex Vines. *Light Weapons Proliferation in South Africa*. London Defence Studies Number 42, University of London, November, 1997

Tigner, Brooks. "NATO Is Reluctant To Adopt Small Arms Transfer Policy", *Defense News (International Edition)*, Vol. 13, No. 34, August 24-30, 1998

Thompson, John C. *Misfire: The Black Market and Gun Control*. Mackenzie Institute Occasional Paper, Toronto, May, 1995

United Nations. *Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects*.

United Nations General Assembly. *Report of the Panel of Governmental Experts on Small Arms*. Document A/52/298 dated 27 August, 1997

United Nations General Assembly. *Report on the Register of Conventional Arms*. Document A/47/342 dated 19 August, 1992

United Nations General Assembly. *Transparency in Armaments*. Resolution 46/36L dated 9 December, 1991

Wassenaar Arrangement on Export Control for Conventional Arms and Dual-Use Goods and Technologies. July, 1996

ENDNOTES

1. Canada, among other nations, has taken the lead in efforts to address the proliferation of light weapons in the world. This was emphasized by a recent statement by the Honourable Lloyd Axworthy, Minister of Foreign Affairs, to a conference on Small Arms, Orillia, Ontario, Canada, 19 August, 1998.
2. For a general review of the problem, various articles are indicative of the situation. See: Chris Smith *et al*, "The Scourge of Light Weapons" in *Light Weapons Proliferation in Southern Africa*, ed. Chris Smith and Alex Vines, London Defence Studies Number 42, London, 1997; Ernie Regher, "Militarizing Despair" in *New Routes*, 4/97; and Michael Renner, "Small Arms, Big Impact; The Next Challenge of Disarmament", *Worldwatch Paper* 137, pp. 31-40. One of the most authoritative reports outlining the broad parameters of the problem can be found in the United Nations Report of the Panel of Governmental Experts on Small Arms, UNGA A/52/298 dated 27 August, 1997.
3. Michael T. Klare, "Light Weapons Diffusion and Global Violence in the Post-Cold War Era" in *Light Weapons and International Security*, ed. Jasjit Singh, Delhi, December 1995
4. Andrew Latham, "Taking the Lead? Light Weapons and International Security" in *International Journal*, Spring, 1997, p. 330; Renner, *op. cit.*, pp.13-15; Jasjit Singh, "Introduction" in *Light Weapons and International Security*, p. X; BASIC Project on Light Weapons Report 98.1, p.5.
5. Susannah L. Dyer & Natalie J. Goldring. "Analysing Policy Proposals to Limit Light Weapons Transfers" in *Light Weapons and International Security*, p.127
6. Latham, *op. cit.*, pp. 330-332 and Dyer & Goldring, *op.cit.*, p.128. See also Jasjit Sing in his "Introduction" to *Light Weapons and International Security*, p. XI in which he is very clear about the need for a greater transparency in the manufacture and transfer of light weapons.
7. Mitsuro Donowaki. "The Expansion of the Scope of the Register: Background and Future Prospects", Chapter 5 of *Developing Arms Transparency: The Future of the UN Register*, ed. Malcolm Chalmers, Mitsuro Donowaki, Owen Greene, University of Bradford, UK, 1997
8. Goldring, *op. cit.*, p.128 and Joseph Smaldone, "Mali's Proposed Small Arms Moratorium: A West African Regional Arms Control Initiative", (paper presented at the Policy Workshop on Controlling the Global Trade in Light Weapons, Cambridge, Massachusetts, December, 1997)
9. The UN Conventional Arms Register uses an accounting methodology to track arms transfers among participating states and, thus, directly concerns itself with transparency in the traffic of designated weapons and weapons systems. As a result, the level of confidence is

expected to increase among participants. In the operation of the Vienna Document, the reverse is true. The agreement is an attempt to increase general confidence and security-building measures among participating states via a series of transparency measures which include inspections, visits, demonstrations and exchanges of military information. There is no weapons register, *per se*, but information is provided on a range of military subjects to increase mutual trust. The CFE Treaty began as an almost adversarial agreement between the NATO Alliance and the former Warsaw Pact. It targeted specific weapons which were thought to be most critical and dangerous to peace and uses a rigorous inspection regime together with a detailed data exchange as central features to achieve transparency. This Treaty has become less adversarial and more collegial in the years following the collapse of the Soviet Union.

10. Malcolm Chalmers and Owen Greene, *Five Years and Counting: The UN Register in its Fifth Year*, Bradford Working paper #4, Bradford University, UK, December 1997, p.17

11. *Report of the Panel of Governmental Experts on Small Arms*, UN Document A/52/298, 27 August, 1997, pp. 11-12

12. For a discussion of the downward spiral of violence wherein the supply of light weapons creates an inability of the national security forces to function effectively thus feeding the need for more weapons in the hands of citizens to ensure their own safety, see an analysis of the problems in Southern Africa. Jacklyn Cock. "A Sociological Account of Light Weapons Proliferation in Southern Africa" in *Light Weapons and International Security*, ed. Singh, pp.89-98

13. The Canadian position on this matter was clearly stated by Foreign Minister Lloyd Axworthy in a speech at Orillia, Ontario, 19 August, 1998: civilian pattern weapons are a domestic criminal problem and international small arms control measures need to be applied primarily to military-style light weapons.

14. Canada. *An Act Respecting Firearms and other Weapons*. Statutes of Canada 1995, Bill C-68, December, 1995.

15. UN Panel of Governmental Experts on Small Arms Report., p.12

16. The size of the arms trade in light weapons is huge and might defy attempts to control the minutiae of it by means of serial numbers on smaller weapons. With quantities reaching into the millions of items, not to mention ammunition which is often calculated in tonnages, the best which can be hoped for is likely some measure of quantity rather than individual itemized lists. For a sense of the size of the arms trade (which no one can pinpoint for certain because of the black and grey markets) see: Mitsuro Donawaki, "Transparency Measures for Light Weapons and Small Arms" in *Light Weapons and International Security*; Regher, *Militarizing Despair*; and, BASIC Paper Number 26, "Eastern Europe's Arsenal on the Loose: Managing Light Weapons Flows to Conflict Zones", May 1998

17. Canada, *The Role of Ammunition Controls in Addressing Excessive and Destabilizing Accumulation of Small Arms*, April, 1998, p. 23.

18. A number of agencies world-wide gather statistics backed by data which uses serial numbers of individual weapons for criminal investigation purposes. In this regard, the capturing and recording of serial numbers is extremely desirable for tracking the source and routing of illicit weapons. In Canada, the Royal Canadian Mounted Police (RCMP) co-operates with other Canadian police forces, Interpol and law enforcement agencies of other countries to collect and share information which can be used in police intelligence activities. The proposed "Interpol Weapons and Explosive Tracking System" and respective national registries or tracing systems are examples of this type of data base. In addition, the RCMP and the Canadian Department of Justice have developed computer programs for the Canadian Firearms Registry which assist in the automation of registration, identification and tracing of weapons. These, and similar ones from other sources, might be investigated as to whether or not their software might be useful in the context of a light weapons register. Such efforts, of course, must recognize that the focus of the a light weapons register — transparency about large scale flows of light weapons — is different from systems intended for criminal law enforcement, which often concentrate on tracking individual weapons. Source: Comments on first draft of this paper by Superintendent J.A.J. Buisson, RCMP, the Registrar of the Canadian Firearms Registry, in a letter dated 22 September, 1998.

19. John G. Roos. "Meet the Peacekeeper: Revolutionary Weapon System Could Breathe New Life into M-16s." *Armed Forces Journal International*. August 1998, p. 44. A typical example of a new weapon is the Objective Individual Combat Weapon being developed in the US. This is a new type of grenade launcher which can be used on an M-16 rifle or on its own, fired manually, remotely or by unattended sensors and launch 20mm high-explosive, airburst rounds to a range of 1,000 metres. In addition, a variety of rounds of lethal and non-lethal capability will be available. As well as the M-16 rifle, mounts are being designed for vehicle and aircraft mount configurations.

20. As indicated in the text, anti-personnel land mines are not covered as munitions to be included in this model register. Anti-vehicle mines are commonly referred to as "anti-tank mines" although they are normally not discriminatory with regard to their targets.

21. This may not be completely true and may not hold as much promise as originally thought in light of the two ammunition studies conducted recently. See: Canadian paper on *The Role of Ammunition Controls in Addressing Excessive and Destabilizing Accumulation of Small Arms*, April, 1998; and, the BASIC Project on Light Weapons Report 98.4, *Deadly Rounds*, May, 1998.

22. BASIC Report 98.4, *Deadly Rounds*, p.17

23. Canada, *The Role of Ammunition Controls*, Annex A, pp. 26-29

24. *Ibid.*, p.22

25. *Ibid.*, pp. 17-19

26. *Ibid.* pp. 19-21

27. BASIC Report 98.4, *Deadly Rounds*, p.25
28. Canada, *Role of Ammunition Controls*, p.25
29. Natalie J. Goldring, "Developing Transparency and Associated Control Measures for Light Weapons", Chapter 17 of *Light Weapons and International Stability*, ed. Singh, p.226 It is difficult to see how any clear picture of extent of the problem can be obtained without some gauge. As well, Goldring points out that the loss of stored weapons kept in insecurely guarded facilities (witness Albania in 1997) might have been avoided if there had been a destruction program in place in the region.
30. This trend has begun already, albeit tentatively and at the discretion of supply-side countries. The Wassenaar Arrangement and the recent European Union Code of Conduct on the Arms Trade, along with a number of writings of experts on the subject, all call for nations to take into account the humanitarian record and whether national weapon controls exist. The withdrawal of foreign aid and embargoes may have a salutary effect in some circumstances.
31. Chalmers and Greene, "Expanding the Register to Include Holdings and National Procurement: Issues and Options", Chapter 8 in *Developing Arms Transparency*, p. 86
32. Bronwyn Brady in "Collecting and Organizing Data on the Manufacture of, and Trade in, Light Weapons", Chapter 7 in *Light Weapons and International Security*, pp.140-151. Even in advanced countries with a high degree of public acceptance for domestic gun control legislation such as the United Kingdom, researchers found information on the production of light weapons difficult to obtain.
33. For a discussion of the potential domestic US position on this subject, see Natalie J. Goldring, *Overcoming Domestic Obstacles to Light Weapons Control*. BASIC Project on Light Weapons paper given to Sandia National Laboratories Annual Arms Control Conference. April , 1997
34. Ravinder Pal Singh, "UN Arms Register: Some Interpretations of Barriers to Transparency and Accountability", Chapter 6 of *Developing Arms Transparency*. Prior public notification of arms transfers would allow public pressure to be brought to bear to change national export or import policy. This will be difficult to implement because of the fear of business intelligence leaks and national security concerns, real or perceived. Although these remarks are aimed at the UN Register of Conventional Arms, the principle would apply to light weapons also.
35. Mitsuro Donowaki, " Addressing Light Weapons and Small Arms Proliferation", Chapter 16 in *Developing Arms Transparency*, p. 208 .
36. Klare in *Light Weapons and International Security*, .pp.14-16
37. Malcom Chambers and Owen Greene. *Five Years and Counting*. pp. 9-11

38. Destruction proposals have been postulated in a number of forums. See, for instance, Douglas Fraser, *Progress in International Efforts to Constrain Light Weapons: A Canadian Perspective*, p.10; and Singh, "Controlling the Spread", Chapter 8 in *Light Weapons and International Security*, p.157
39. Herber Wulf. "The Register as an Instrument for Promoting Restraint and Preventing Conflict", Chapter 12 in *Developing Arms Transparency*, pp. 154-155. Though referring to the UN Register of Conventional Arms, the comments are germane to any arms register. Wulf gives a number of thoughts on the subject of a consultative mechanism's potential tasks and some suggestions as to how this may be accomplished. There is little doubt that such an emotionally-charged issue as light weapons will need some methodology for consultation among its participants on a regular basis.
40. Chambers and Greene, *Five Years and Counting*, pp. 9-11
41. Highly computerized data bases and communications already exist in such organizations as the Stockholm International Peace Research Institute (SIPRI), British American Security Information Council (BASIC), Monterey Institute for International Studies, Bradford University and a number of other university and non-governmental organizations, as well as the privately-funded International Institute of Strategic Studies, to name only a few.
42. Goldring, "Developing Transparency and Associated Control Measures for Light Weapons", Chapter 17 in *Developing Arms Transparency*, pp. 225-228
43. The open literature includes: *The Military Balance* produced by the International Institute of Strategic Studies; Jane's Information Group of intelligence publications; the *CIA World Factbook*; Stockholm International Peace Research Institute (SIPRI); and a number of internet sites, some of which are affiliated with the foregoing and a number of other academic institutes such as Bradford University and the Monterey Institute of International Affairs, to name only a few. All the information is in the public domain and some of it is remarkably accurate. The sophisticated facilities available to government intelligence agencies must only increase the amount of precise information obtainable.
44. Chalmers and Greene, *Five Years and Counting*, p.17
45. The CFE Treaty requires hard copy exchange of data. This is normally done in December of each year. After this, working groups form at NATO Headquarters in Brussels and convert the data to electronic format for dissemination on the VERITY computer network. Repeated requests from a number of nations to accept the data initially in electronic format were thwarted because of wrangling over the wording of the treaty.
46. Something of this sort has already happened in that the Verification Implementation Co-ordination Staff at NATO Headquarters, originally charged simply with managing the NATO allies portion of the CFE Treaty first expanded to become the central data and co-ordinating agency for all member nations and then further extended itself to assist in the implementation of

arms control aspects of the Dayton Accords in the former Yugoslavia.

47. Private communication with the author by a close observer of the UN Panel of Governmental Experts on Small Arms, August, 1998.

48. Brooks Tigner. "NATO Is Reluctant To Adopt Small Arms Transfer Policy", *Defense News (International Edition)*, Vol. 13, No. 34, Aug 24-30, 1998, p.18

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