Dealing with the Risks and Responsibilities of Landmines and their Clearance

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Abstract

Part I of this Essay addresses the issues of State responsibility for landmine removal. Part II discusses the various legal issues that landmine removal programs present. It does so by examining: (1) the international obligations that exist; (2) the domestic legal considerations; and (3) some of the issues facing governments who wish to remove landmines by the common measure of contracting out such work to third parties. The central question Part II considers is whether and how States can transfer the risks associated with landmine clearance to contractors.
DEALING WITH THE RISKS AND RESPONSIBILITIES OF LANDMINES AND THEIR CLEARANCE

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Although international humanitarian law and traditional military doctrine have set clear requirements for the 'responsible' use of anti-personnel mines, too often these rules have not been implemented. Research conducted on behalf of the International Committee of the Red Cross (ICRC) by military experts has shown that in 26 conflicts since the beginning of the Second World War, anti-personnel mines have only rarely been deployed in accordance with the existing legal and military requirements.¹

INTRODUCTION

The human, social, environmental, and psychological costs of anti-personnel landmines are well documented. So too are the financial costs. A landmine that costs three to four U.S. dollars to produce will cost somewhere between U.S.$200 and U.S.$2000 to clear.² The consequences were it to detonate before clearance are readily and tragically apparent.

As the above quotation indicates, much of the damage has already been done, to the extent that vast tracts of land are already peppered with landmines. Thus, while the moral imperative to ban or control their future installation remains critical, the removal of those landmines already laid has become urgent. On the writers’ rough estimate, de-mining activities are taking place in some three dozen countries ranging from Afghanistan to Yemen.

Financial and economic considerations themselves provide

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a powerful argument for governments possessing mined areas under their jurisdiction or control to implement comprehensive landmine clearance programs. For many governments, these financial imperatives are reinforced by international legal obligations under the 1997 Ottawa Treaty banning the use, development, stockpiling, or transfer of mines.³

Little attention has been paid to the legal framework within which landmine clearance programs exist, and in particular, to the impact of legal frameworks on the financial viability of landmine clearance programs. These programs carry with them their own costs, in particular, costs associated with the inherent risks of clearance. States that seek to contract out this landmine clearance work must first consider whether they can transfer the risks associated with the work, and/or whether they may be liable for the costs of any injury that occurs during landmine clearance. Similarly, States that seek to transfer responsibility for landmine clearance areas to contractors working on their behalf on other projects, such as public construction, must likewise consider their options for dealing with these risks.

For those States that are obligated under the Ottawa Treaty to finish their landmine clearance within ten years of the Treaty coming into force in each respective State (for many States, leaving a deadline of 2009), this is a central question, as it directly impacts the manner in which they can meet their international obligations through contractual or transactional processes.

Part I of this Essay addresses the issues of State responsibility for landmine removal. Part II discusses the various legal issues that landmine removal programs present. It does so by examining: (1) the international obligations that exist; (2) the domestic legal considerations; and (3) some of the issues facing governments who wish to remove landmines by the common measure of contracting out such work to third parties. The central question Part II considers is whether and how States can transfer the risks associated with landmine clearance to contractors. As will be seen, this issue is not straightforward in the context of signatories to precursors to the Ottawa Treaty.

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I. STATE RESPONSIBILITY FOR LANDMINE CLEARANCE

In this Section, we examine the nature of States' obligations under international and domestic law to clear emplaced landmines. We begin by explaining what these obligations are, their sources, and their content. Next, we discuss the mechanisms by which these obligations may be enforced, addressing specifically the question of the likelihood of governments being held liable for the damage inflicted by uncleared mines.

A. The International Regulation of Landmine Use and Clearance

As tools of war, the use of landmines is primarily regulated by the area of international law which governs armed conflict—international humanitarian law. This body of customary norms and treaty obligations has evolved over the last century to restrict or prohibit, inter alia, the use of certain weapons that are indiscriminate in nature or superfluously damaging in their effect, and to regulate the use of other weapons. A number of restrictions on the use and clearance of landmines have emerged from that body of law, creating State obligations on the international level.

The starting point must be that the use of landmines—including anti-personnel landmines—is legal per se. Some landmine campaigners have suggested that landmines are inherently contrary to the basic norms and principles of customary international humanitarian law, such as elementary considerations of humanity,4 the principles of discrimination,5 and proportionality.6 State practice, however, suggests quite the contrary: each year, between two and five million new mines are emplaced without the slightest suggestion of illegality.7 In fact, the emergence of a system of treaties regulating and prohibiting certain types and uses of landmines indicates that, as a matter of customary international law, the use of landmines is permitted.

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4. This is the basic norm that underpins international humanitarian law's restriction of the methods of armed conflict. See Corfu Channel case (U.K v. Albania), 1949 I.C.J. 4.
5. This is the requirement that military operations discriminate between civilian and military objectives.
7. Friend or Foe?, supra note 2.
State responsibility for the use and clearance of landmines is, therefore, primarily a question of treaty obligation to other States, arising from two treaties: (1) the Amended Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices ("Protocol II"), which is a protocol to the 1980 Convention on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects ("CCW Treaty"); and (2) the 1997 Ottawa Treaty.\(^8\)

The obligations these treaties create are those undertaken by States parties to other States parties. Neither of these treaties directly addresses the issue of victim compensation for lost property, income, life, or other personal damage. They provide no direct mechanism for the victims of landmines to hold governments liable for the injury they have suffered. However, as we shall see, they can in certain respects shape that potential liability and the way in which it may be dealt.

1. Protocol II to the CCW Treaty

Protocol II was amended in 1996 by a Review Conference to provide more restrictive regulation of the use of landmines, and, for the first time, to oblige parties (including non-State parties covered by the Second Additional Protocol to the 1949 Geneva Conventions) to clear landmines as soon as possible after the cessation of hostilities.\(^1\) Each party to a conflict is responsible for all mines deployed by it and must undertake to clear, remove, destroy, or maintain them under the terms of the Protocol. Over eighty countries have ratified the Protocol, including China and the United States (who have not, however, signed the Ottawa Treaty).

The Protocol also provides compliance procedures. The parties are required to take appropriate steps, including legisla-

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11. CCW Treaty, supra note 8, art. 10.
tive and other measures, to prevent and suppress violations on their territory. Rather than banning anti-personnel landmines, detailed technical standards are imposed requiring landmines to be self-deactivating after a certain time: no more than ten percent of activated mines must have failed to self-destruct within thirty days after emplacement, and no more than one in 1,000 activated mines may function as a mine after 120 days.12

Although Protocol II aims to encourage landmine clearance, Article 8 may, in fact, work against that stated intention. It provides:

1. In order to promote the purposes of this Protocol, each high Contracting Party:
   (a) undertakes not to transfer any mine the use of which is prohibited by this Protocol,
   (b) undertakes not to transfer any mine to any recipient other than a State or a State agency authorised to receive such transfers.

Article 2(15) defines “transfer” to include not only the physical movement of landmines, but also transfer of title and control. Read together, these two Articles could be interpreted to prohibit the transfer of “title and control” over mines from State Parties to non-State agencies authorized to receive such transfers. While no definition of “State agency,” “title,” or “control” is given, these prohibitions on transfer may severely restrict the ability (or justify any unwillingness) of States to contract out landmine clearance work. States Parties may not be able, for example, to transfer mines to the “control” of their landmine clearance contractors, unless they are State agencies; and if the mines are illegal mines under the Protocol—even if they are mines found but not emplaced by the State—they may not be able to be transferred at all. The effect of these prohibitions could be to discourage the use of landmine clearance contractors, even though they may (and often do) have greater expertise than the government itself. In addition, the definition of an anti-personnel mine in the Protocol was problematic in that it covered mines “primarily designed to be exploded by the presence . . . of a person,”13 thereby arguably excluding dual purpose munitions. These two aspects obviously limited the efficacy of the treaty un-

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12. See id. art. 3.
13. Id. art. 2(3) (emphasis added).
The Ottawa Treaty was signed on December 3, 1997, and entered into force on March 1, 1999. It provides a broad prohibition on the use, transfer, production, and stockpiling of anti-personnel mines, including anti-vehicle mines designed to function also as anti-personnel mines. The Treaty has been signed and ratified by over 120 States (at the time of writing, notable absentees include China and the United States).

The General Obligations undertaken by States Parties are set out in Article 1:

(1) Each State Party undertakes never under any circumstances:
   (a) To use anti-personnel mines;
   (b) To develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, anti-personnel mines;
   (c) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.

(2) Each State Party undertakes to destroy or ensure the destruction of all anti-personnel mines in accordance with the provisions of this Convention.

The treaty goes on to spell out the detail of these negative restrictions on use, production, transfer, and stockpiling. It also spells out in detail the positive obligations undertaken by the States Parties.

First, States Parties agree to destroy anti-personnel landmines in their jurisdiction or control within ten years from the entry into force of the Treaty for that country in the case of emplaced mines, and four years for stockpiled mines. The Treaty provides for a complex procedure by which extensions may be granted after the submission of a request to a Meeting of the States Parties, setting out explanations of the landmine clear-

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14. See Ottawa Treaty, supra note 3, art. 5(1).
15. See id. art. 4.
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ance efforts already undertaken and the circumstances that mandate an extension.\(^\text{16}\)

Second, States undertake to "make every effort" to identify mined areas and to mark such areas clearly, according to the standards prescribed by Protocol II to the CCW Treaty.\(^\text{17}\) Mined areas must be perimeter-marked, monitored, and protected by fencing or other means ensuring the effective exclusion of civilians.

Third, States Parties agree to retain control over mines. Unlike the CCW Treaty, however, the Ottawa Treaty includes a specific exception permitting the transfer of mines for the purpose of destruction.\(^\text{18}\) Of course, the other restrictions on transfer provided in the CCW Treaty still apply.

Fourth, the Ottawa Treaty further removes the term "primarily" from the definition of anti-personnel mines, thereby removing the ambiguity inherent in the Protocol's definition.\(^\text{19}\) As the International Committee of the Red Cross stated in 1998 "a clear definition of the weapon being prohibited is the foundation of a comprehensive ban treaty."\(^\text{20}\)

Fifth, the treaty calls upon its signatories to do their utmost to assist in the care, rehabilitation, and reintegration of mine victims. Article 6, paragraph 3 states:

> Each State Party in a position to do so shall provide assistance for the care and rehabilitation, and social and economic reintegration, of mine victims and for mine awareness programs. Such assistance may be provided, inter alia, through the United Nations system, international, regional or national organizations or institutions, the International Committee of the Red Cross, national Red Cross and Red Crescent societies and their International Federation, non-governmental organizations, or on a bilateral basis.\(^\text{21}\)

Sixth, the Treaty obliges each State Party to take all appropriate legal, administrative, and other measures, including the imposition of penal sanctions, to prevent and suppress any activity prohibited to a State Party under the Convention, which is

\(^{16}\) Id. art. 5(3)-(6).
\(^{17}\) Id. art. 5(2).
\(^{18}\) Id. art. 3(2).
\(^{19}\) See supra Part I.A.1.
\(^{20}\) Banning Anti-Personnel Mines, supra note 1, at 5.
\(^{21}\) Ottawa Treaty, supra note 3, art. 6, para. 3.
undertaken by persons or on territory under its jurisdiction or control.22

B. Domestic Law Considerations

While different issues and considerations will inevitably arise in the countries where landmines are situated, the issues under domestic law generally involve reasons for action by governments (in the sense of exposing them to liability in the event of landmine incidents) rather than obligations per se:

- A country’s constitution may guarantee certain rights and freedoms (such as the State’s obligation to protect the welfare of its citizens) which could conceivably be actionable in the face of a government’s failure to take (de-mining) activities;
- Domestic tort law may create liability, where, for example, the State as occupier of land may be liable for injuries occasioned thereon; or again, negligence in supervising any public works may give rise to liability to those injured by landmines during the performance of those works;
- Regardless of issues of negligence, the State’s employees may have rights against their government should they be harmed by landmines during the performance of their work; and
- Owners or occupiers of land may have rights against the State for landmine accidents arising on land sold or leased by the State.

States may, of course, consider the above risks limited to the extent they enjoy State immunity from suit or execution. Such protection, however, is generally not as all-embracing as may be assumed.

The question of State immunity is a well-settled one within the bulk of domestic legal systems. For example, it has long been the position under the common law that the Crown is immune from suit in tort. However, that position has for a number of years been abrogated by statute in many common law countries.23 Similarly under civil law, the traditional immunity of the State has been diluted by statute and by the system of administra-

22. Id. art. 9.
tive tribunals, which allows for actions against agents and organs of the State.\textsuperscript{24} In contrast, under most socialist systems, there appears never to have been such a presumption in the first place.\textsuperscript{25}

Moreover, the States which are by far the worst affected by landmines may well, often as a result of the very armed conflict which is the source of the mines in question, have new or rejuvenated legal systems in which this question is not yet wholly settled. For example, informal discussions suggest that it is generally considered by experts, but certainly not settled as a matter of judicial pronouncement, that the Cambodian State is not immune from actions for the recovery of damages by its employees where there has been demonstrated gross, but not simple, negligence.\textsuperscript{26} Accordingly, examination of the government's potential immunity from suit is a first and fundamental step before any further consideration of how to deal with the risks of landmine clearance is attempted.

\textbf{C. Enforcing State Responsibility for Incidents and Clearance}

Treaty obligations are, as we have noted above, obligations undertaken by States to other States; not obligations States owe to their own nationals. Accordingly, redress for damage which occurs as a result of a State's failure to discharge its treaty obligations—that is, its failure to clear mines—must ordinarily be sought through inter-State mechanisms. There may, however, be an emerging possibility of moral—if not financial—redress obtained directly by mine victims on the international level.

As for domestic forms of redress, this will depend on the system within which a State situates itself,\textsuperscript{27} and the availability (and at times willingness) of independent and/or impartial domestic tribunals to hear such claims.

\textsuperscript{24} See Henri Mazeaud, Léon Mazeaud, Jean Mazeaud, & François Chabas, \textit{Treaté Théorique et Pratique de la Responsabilité Civile Délictuelle et Contractuelle} 3 (6th ed. 1978).

\textsuperscript{25} See, \textit{e.g.}, Donald D. Berry \textit{et al.}, \textit{Governmental Tort Liability in the Soviet Union, Bulgaria, Czechoslovakia, Hungary, Poland, Romania and Yugoslavia} (1970).

\textsuperscript{26} See 1967 Civil Code, arts. 816-18 (Cambodia); \textit{cf.} 1993 Cambodia Const. art. 39.

\textsuperscript{27} See \textit{supra} Part I.B.
1. Inter-State Redress

There are obviously potential grounds for criticism, if not claims, should States not meet their international obligations. But how can such criticisms be transformed into enforceable rights?

The Ottawa Treaty contains its own mechanisms for dispute resolution. Article 8(2) allows a State Party to submit a Request for Clarification to another State Party through the Secretary-General of the United Nations. After a number of procedural hurdles are overcome, this may result in a Special Meeting of States Parties to address the issue. Article 10, however, obliges Parties to consult and to cooperate to settle disputes arising from the application or interpretation of the Convention. Article 8(19) provides for any other procedure “in conformity with international law” to be used to resolve the dispute.

This suggests that disputes arising from the Ottawa Treaty, like those arising from the CCW Treaty, may become the subject of inter-State litigation. This might, for example, permit litigation before the International Court of Justice (“ICJ”), in which one State seeks to recover damages for the injury to its nationals caused by the other State’s failure to discharge its international obligations. The ICJ, in two of its most famous cases—the Corfu Channel case and the Nicaragua case—upheld such actions brought on the basis of damage caused by sea mines. In the event that the national of one State Party is injured by a landmine under the jurisdiction or control of another State Party, this kind of litigation is foreseeable.

Most landmine victims are, of course, not guest workers or tourists injured by mines in a foreign country, but local civilians injured by mines in their own neighborhood. As a result, it is unlikely that another State will agree, or even have standing, to take up their claim on the international plane. The possibility of

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28. For example, what if a State does not meet its obligations to clear mines within the ten-year deadline under the Ottawa Treaty or to mark properly areas in which mines are known or suspected to exist?
29. Ottawa Treaty, supra note 3, art. 8(19).
31. On the question of the right of one State to reparation for damage caused to its nationals by another State’s breach of treaty obligations, see Factory at Chorzow (F.R.G. v. Pol.), 1928 P.C.I.J. (ser. A) No. 17.
such a claim is higher if the affected person were a large company, rather than an individual. For example, it is conceivable that the State of incorporation of a company, or a State whose nationals had a significant equity investment in a company undertaking, for example, public works in a mine-affected country, might bring a claim on behalf of its nationals to recover damages from the mine-affected State if that company's property had been significantly damaged by uncleared mines in the course of those works. That would, of course, be an issue only if the company itself had been unable to recover the costs of such damage from the State, a question to which we turn below.

The reality is, then, that individual victims are unlikely to be able to bring claims against States for their failure to clear mines in accordance with the CCW Treaty or the Ottawa Treaty, except where both their home State and the foreign State in which the accident occurs are parties to one of those two conventions. It is more likely that such an inter-State claim would occur in the context of recovery in respect of damage a company suffers in the performance of work in the foreign State.

2. Direct Redress

a. International Bases

More remotely, there is the possibility of “international” direct redress for injuries suffered by the detonation of uncleared mines. In this regard one might consider, for example, the activities of international human rights mechanisms. At least in theory, nationals of signatories to the First Optional Protocol to the International Covenant on Civil and Political Rights (“ICCPR”), could bring claims to the U.N. Human Rights Committee for breach, by their State of nationality, of rights owed to them under the ICCPR. Arguing by analogy with the work of the U.N. Special Rapporteur on Toxic Wastes, claimants could assert that uncleared mines are an infringement on their rights under the ICCPR, notably the right to life provided


by Article 4. Importantly, claimants may not have to be the estates of individuals whose lives have been taken by landmines, or even landmine survivors, but could, following the Human Rights Committee's jurisprudence, even be those who simply live in mine affected areas.\(^{34}\)

Even if successful, these claims would not be binding on the States against which they were brought,\(^ {35} \) and are likely to lead at most to a moral rather than a financial sanction. However, the growing body of international jurisprudence suggesting that victims of gross violations of human rights have a right to reparation\(^ {36} \) could lead, for example, to the Human Rights Committee calling for the reparation by a State of victims of a systematic failure to clear landmines.

b. Domestic Bases

As stated above, domestic law obligations for the removal of landmines are likely to be rare. Rather, the potential for liability may serve as an incentive for such programs. A myriad of issues arise in this context, involving an examination of a particular State's law relating to, among other things, constitutional guarantees, State responsibility for its citizens generally, tort law including that of occupier's liability and negligence, contract law, and laws relating to the public sector.\(^ {37} \)

For the sake of this Essay, the writers assume that a State has, for whatever reasons, undertaken to remove landmines within its territory. What issues may that State face and what can it do to deal with those issues?

II. DEALING WITH THE RISKS OF LANDMINES AND LANDMINE CLEARANCE

In this Section, we examine the avenues open to governments in mine-affected areas to discharge their international obligations. Regardless of whether they are likely to be enforced by other States, their own nationals, or not at all, signatories to Pro-

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35. See Optional Protocol, supra note 32, art. 5(4).
37. See supra Part I.B.
tocol II to the CCW Treaty and/or the Ottawa Treaty clearly have significant and sometimes onerous landmine clearance obligations. For many of these States, the obligation to destroy all anti-personnel landmines under their jurisdiction or control will prove difficult to discharge (whether speaking of the ten year deadline under the Ottawa Treaty or the similar obligation under Protocol II to remove 99.6% of mines from mined areas). For many States obviously will (and already do) contract out this work, taking advantage of the experience and efficiency of experts in the area.

Where governments have ratified Protocol II, they would be well advised to adopt mine clearance legislation to retain some form of legal control of the mines covered by the Protocol. Even more critically, governments will generally have to consider how they are going to deal with the risks involved in such mine clearance work. In particular, governments need to consider whether they may be held liable under their own municipal law for injuries or damage suffered in the performance of work contracted for by these governments, especially where both cleared and uncleared mines remain technically under their "control," even though they are marked for destruction by another party.

A. The Ability to Transfer Risks

For each of these questions, the first set of considerations are those of general municipal and constitutional law: Can the government itself be held liable for damage suffered on its land

38. See Mine Clearance Policy Unit, Dept. of Humanitarian Assistance, International Standards for Humanitarian Mine Clearance Operations § 5.10 (1997). It remains to be seen how States may prove that 99.6% of mines in areas without mine maps have been removed.

or in its employ, and can it transfer any potential liability to a contractor? The issue here is not whether the State can be held responsible for mines laid by other parties; once the mines are within the State’s jurisdiction or control, they are its responsibility. Rather, the question considered here is the ability of governments to transfer risk. Each government must, of course, consider its own position under its own legal and constitutional framework (including, as discussed above, the issue of State immunity). The following must accordingly be considered as broad guidelines.

First, as a matter of pure municipal law, can the government effectively transfer risk by, for example, requiring contractors on its land to take responsibility for injuries received by the contractor’s workers from landmines emplaced in that land, or even more importantly, by transferring to the contractor future and present liability for injuries suffered by third parties from landmines which the contractor has failed to clear? As a matter of pure common law, the Crown can contract to confer risk. Similarly, principles of civil law generally allow the State to contract out public works, and in doing so to contract for the transfer of such tortious liability. Civil systems also raise the further question of how to classify the subject of the contract, that is, whether it is a contract for public works and therefore subject to administrative remedies, or whether it should be otherwise classified. While legal systems founded on socialist bases may make some provision for contract between governmental agencies, they may also restrict the extent to which the government can contract with non-governmental parties and the government’s ability to transfer risk to those parties.

Second, governments must consider the related question of

40. See supra Part I.
43. See, e.g., Jurisclasseur Administratif, Fasc. 520, no. 3 (Fr.).
whether such contractual transfer of risk is consonant with their constitutions, which may impose strict obligations on a given government for the protection of the well being of its citizens. (In other words, it would be surprising if there was a government able to avoid constitutional obligations towards its citizens simply by transferring liability to other parties such as de-mining contractors).\textsuperscript{46}

Third, governments must consider whether the contract, or the transfer of risk sought, would require the modification of other laws. In particular, this may be the case where the government seeks to transfer future liability arising from emplaced landmines to the contractor responsible for mine clearance. Again, this may raise the question of the appropriate classification of the contract in question, and whether it is likely to be governed by laws or regulations relating to specific types of work. We now turn briefly to this question.

B. Landmine Clearance Contracts and Contracts in Which Landmine Clearance is Ancillary

The second set of considerations for governments relates to the nature of the work that is the subject of the contract. In areas where landmines are known or are likely to be present, the State can of course seek to clear them itself (and arguably may in some respects have to do so in the context of Protocol II). In this Section, however, we concentrate on circumstances when the State contracts out such work.

1. Landmine Clearance Contracts

Where the contract is for landmine clearance work (in areas where mines are known or are likely to be present), contractors can be expected to accept the risk of injury to their own employees during the operation and insure against it privately. However, experience in these matters shows that these contractors will accept future liability for injury to third parties from mines they have failed to clear only where that failure can be demonstrated to be the result of gross negligence. Most landmine clearance contractors will contract for any such negligence to be measured against their own standard operating procedures,

\textsuperscript{46} Although presumably in such a case the State could seek the right to be indemnified by the contractor in the event of actions brought against that State.
which are likely to be in line with U.N. mine clearance standards. These standards require 99.6% of emplaced mines to be cleared before an area is declared cleared.

2. Construction Contracts in Respect of Which Landmine Clearance May be Required

Alternatively, if the work is not for landmine clearance but, for example, for public works in areas that may be mined (often the case where the risk of landmine infestation is considered to be more limited), landmine clearance risks (and the possible transfer of the same) will become an object of negotiation. The contractor is likely to accept such clearance risks only at an increased contract price, reflecting the need to sub-contract (and perhaps insure in respect of) the mine clearance.

3. Mine Detection and Marking

The same principles will apply not only to landmine clearance work per se, but to the contracting out of mine detection and marking. To discharge their international obligations and to protect themselves from domestic suits, governments must not only de-mine mined areas, but in the meantime, clearly mark and fence those mined areas. For many governments, this will require intensive maintenance of marked areas to ensure that the marking and fencing remains effective and in place. For developing countries where identification of mined areas may be extremely difficult and where, on a practical level, fencing materials may be in high demand by locals, this will be an even more important and difficult obligation to fulfill.

The options available to governments in contracting for the transfer of landmine clearance risks are: (1) State assumption of the risk and the performance of mine clearing operations by itself; (2) transfer of risk with recognition that this must come at a price (as a matter of negotiation and/or the need to insure against accidents and/or liability); or (3) avoidance of discussion of the issue and subsequent recourse to domestic and international laws if an accident occurs. In the writers' view, the only feasible options are (1) and (2), and the most arguably efficient is option (3). Obviously this comes at a price. Issues a State must consider therefore include:

47. See Mine Clearance Policy Unit, supra note 38.
- Under what (if any) international treaties the State is bound in respect of the removal of landmines and what the consequences thereof are;
- What domestic law applies and whether it is constitutional (obviously difficult to amend) or municipal law;
- If clearance work can be contracted out, whether the State can validly transfer control and risk to third parties; and
- If the State can transfer control and risk, whether any agreement should include: (1) a right of indemnity should the State itself be sued by any victim; (2) a direct right of recourse to any insurance (should, for example, the contractor flee after any incident); (3) a right to review the contractor's safety procedures; and (4) a distinction between employees of the contractor and third parties (practice suggests that contractors will be less willing to assume liability for the injuries to the latter, except in the event of gross negligence).

On the economic front, one option a State may want to consider, albeit in presumably the most limited of circumstances, is to transfer the risk to the contractor, requiring him to seek recovery of the costs of damage from the party responsible for the emplacement of the mines in the first place, and then he can seek to recover from the government. Assuming such party can be identified, this remains, however, a limited option since the party responsible for emplacing the mines may have either ceased to exist (for example, disbanded rebel forces), may have become the government, or may simply have insufficient assets to make them a suitable target for actions to recover damages. Similarly, few contractors are going to accept this option in the absence of an independent and effective system of resolution of any claims (not necessarily easy to find in the context of certain national courts).

Nevertheless, precedent exists for mining parties to be held responsible for the costs of landmine clearance by the other party. For example, in the Gulf War Iraq laid over seven million mines in Kuwaiti territory, which Kuwait was obliged to clear after the cessation of hostilities, at a cost of around U.S.$700 million. Iraq was obliged to accept liability for those costs.\footnote{See Major Vaughn A. Ary, \textit{Concluding Hostilities: Humanitarian Provisions in Cease-Fire Agreements}, 148 MIL. L. REV. 186, 262 (1995).} Governments might use this as a precedent for contractual arrange-
ments which foresee the risk of landmine clearance being passed to the contractor (so that injured employees sue the contractor) but provide the contractor the right to recover damages from the government only after having undertaken certain steps towards recovery from the party responsible for emplacing the mines. 49 This arrangement could reduce the costs of transferring landmine clearance risks, and therefore the costs of landmine clearance in general, while ensuring that landmine victims are covered in the event of mine accidents. (Of course, contractors will almost always prefer direct recourse against the government, which then has to seek redress from the party responsible for emplacing the landmines.)

CONCLUSION

For numerous governments around the world, landmine clearance remains a crucial obstacle to development. These governments need to consider how best to handle the landmine issue from two perspectives: (1) to ensure that their international obligations are fulfilled (and any potential inter-State litigation or individual actions are avoided); and (2) to remove the possibility of actions under municipal law. Governments need to consider their own constitutional positions with respect to their liability for damage suffered as a result of mines in their jurisdiction or control and how they might transfer the risk associated with landmine clearance. These considerations will affect not only the contract price of landmine clearance programs and development projects in landmine-affected areas, but also the availability of international aid and project finance and, consequently, the lives and livelihoods of their nationals.

49. Another option, which in the writers' opinion would again be very difficult to implement, would be to require contractors to seek to recover costs from mine manufacturers. On this issue see Hoover, supra note 10; HUMAN RIGHTS WATCH, EXPOSING THE SOURCE: U.S. COMPANIES AND THE PRODUCTION OF ANTIPESONNEL MINES (1997).