

ANNEX I

**RESULTS OF THE MONTREUX SYMPOSIUM
ON ANTI-PERSONNEL MINES**

The general objective of this Symposium, which was held in April 1993 in Montreux, was to collect the necessary facts and ideas to coordinate future action by bodies that are interested in improving the situation of mine victims and in taking preventive action. More specifically, the aims of the Symposium were to gain as accurate a picture as possible of the actual use of mines and the consequences thereof; to analyse the mechanisms and means currently available to limit this use and to alleviate the suffering of victims, as well as to identify any lacunae in this respect; to decide on the best remedial action; to establish a strategy for coordinating the work of different bodies involved in such action; and to write a report which could be used as a reference for future measures.

In order to ensure a multidisciplinary approach, the participants invited to attend comprised established experts in different fields related to the whole issue of the use of anti-personnel mines and their effects, and included military strategists, mines specialists and manufacturers, experts in international humanitarian law and disarmament, surgeons and orthopaedists, representatives of demining organizations, concerned non-governmental organizations, and the media.

Twenty-five expert reports were distributed to the participants prior to the Symposium, and were discussed at its first plenary session. These reports have not been included in the present document but are reproduced in the full report of the Symposium, which was sent to all governments in August 1993. The participants were then divided into six working groups, each of which conducted an in-depth examination of various political, legal, military and technical aspects of the landmine problem, with a view to weighing the advantages and disadvantages of various remedies, including their feasibility, and to come up with proposals for action, both preventive and remedial. The conclusions reached by the working groups, as they stood after discussion in the final plenary session of the Symposium, are summarized below.

I. Humanitarian, medical and socio-economic cost of landmines

Several expert reports underlined the magnitude of this cost, and backed up their statements with figures. The figures highlight that most of the victims are non-combatants, especially women, children and agricultural workers, that 800 people worldwide die from mines each month, and that the scale of the problem is best illustrated by the case of Afghanistan. At the current rate of mine clearance achievable by over 25 United Nations teams working there, it is estimated that it would take 4,300 years to clear that single country of landmines. Other reports drew attention to the fact that there is a serious lack of medical expertise and equipment to cope effectively with the number of casualties, often resulting in much unnecessary loss of life and limb. Moreover, the surgical care of mine

victims is particularly demanding and time-consuming when done properly, and places considerable strain on blood bank services where they exist. In most mine-affected countries today, inadequate or non-existent blood transfusion services add to the difficulty of providing medical care for the mine-injured. The infrastructure necessary for adequate rehabilitation needs attention. Organizing training programmes for local prosthetists so that continuity is assured after the withdrawal of foreign humanitarian agencies and medical teams is far from easy in most affected countries, owing in particular to lack of financial resources and the shortage of local personnel trained at least in the basics.

In many severely mine-affected countries, clearance costs represent the equivalent of many years' gross domestic product. Furthermore, massive and indiscriminate sowing of anti-personnel mines has rendered whole regions unfit for human habitation, cultivation or animal grazing, spelling economic disaster for the affected countries as most of the societies concerned are rural and agricultural. This in turn has led to substantial internal and cross-border population movements causing economic destabilization, compounded by social tensions, in neighbouring countries. There is, furthermore, little chance of the majority of refugees returning, and certainly not in the near future.

The Symposium proposed that the possibility of using military medical units and facilities for the treatment of mine injuries be explored, together with that of establishing an international compensation fund. Governments, manufacturers, buyers, sellers, and licensors of mines, and violators of humanitarian law, could figure among the contributors. Besides paying compensation to mine victims, the fund would finance rehabilitation and mine-clearance activities, research and development, educational programmes and training.

II. Prohibition of the use of certain types of mines

1. Prohibition of the use of all anti-personnel mines

It was generally felt that this would be the best solution, not only from the humanitarian point of view but also because restrictions on the use of weapons are more difficult to control than their total prohibition. However, this solution was considered by a number of participants as unrealistic, for two main reasons. First, as some of the expert reports pointed out, the global annual production of anti-personnel mines has averaged five to ten million over the past quarter century, meaning that there are possibly more than 200 million mines already existing in the world today. Moreover, the world trade in landmines, involving around 30 countries, is both flourishing and complex, is cloaked in secrecy and involves various institutions and agents who interact to circumvent the regulations on the trade in such weapons. Secondly, governments would agree to such a prohibition only if their military establishments found it acceptable. The military experts present pointed out that it would be difficult to conceive of military operations being conducted without anti-personnel landmines, as there would be a definite loss in military capability and, were such a prohibition to be imposed, adapted anti-tank mines would probably be used. However, restric-

tions on the use and production of certain types of mines, such as those not fitted with self-destruct or self-neutralizing mechanisms, or non-detectable mines, would probably be approved. In this context, there was a need for a wider military view on the overall effectiveness of anti-personnel mines and whether or not they were essential in military terms.

2. Prohibition of the use of anti-personnel mines not fitted with self-destruct or self-neutralizing mechanisms

The expert reports pointed out that the technological capability to produce mines with a comparatively reliable self-destruct or self-neutralizing mechanism is certainly available. Examples of self-destruct mines cited were the Russian POM-2S, the PFM-1S (butterfly mine), the American GATOR (anti-personnel and anti-tank variants available). As for self-neutralizing mines or mechanisms, the Chinese Type 72-B, the Russian MVE-72 break-wire fuse and the VP-13 seismic fuse or control unit were mentioned.

With regard to **self-neutralizing mechanisms**, the strongest argument against them was that they still denied the use of land because it was not obvious whether they had indeed been neutralized. They therefore necessitated the same amount of time and cost for mine clearance. Added to this was the assertion that the explosive charge remains in the ground, and can over a period of time become more dangerous, or even be dug up and resold or reused. The one case clearly favouring **self-neutralizing mechanisms** was **anti-tank mines**, because of the immense damage created by the explosion of these mines.

Mines fitted with **self-destruct mechanisms** seemed the best solution, as after the mechanism has functioned the danger is completely eliminated. No explosive components remain. Moreover, the evidence of detonation (for example, craters, fragments and the explosions themselves) serve to alert inhabitants to the presence of mines, including those whose self-destruct mechanisms have failed. It was felt that prohibition of the use of anti-personnel mines not equipped with such a mechanism would present a definite improvement over the existing situation, principally by helping bring the problem down to a more manageable level.

However, certain questions remain to be resolved. First, existing mines thus equipped are sophisticated and at present expensive. It was nevertheless felt that with the introduction of such a prohibition, economies of scale would greatly reduce the price of such mines. Secondly, current failure rates average approximately 10%, a figure which would have to be considerably reduced; such an improvement is attainable given existing technological capability. Thirdly, such mechanisms could easily be fitted into anti-personnel landmines by industrialized countries, but there would remain the problem of simpler mines manufactured indigenously by nations or groups involved in low-intensity guerrilla warfare. It was, however, recognized that strict observance of the rule by the leading manufacturers would lead to a sharp decrease in the current widespread availability of anti-personnel landmines without self-destruct mechanisms. The full

report of the Montreux Symposium contains expert reports on technical aspects of self-destruct and self-neutralizing mechanisms, including those that are activated mechanically, electronically, by battery, or by acids or other chemicals, as well as a discussion on the advantages and disadvantages of each type. One final question remained outstanding, that is, the delay time before self-destruction. This was a predominantly military issue, and it was recognized that the opinion of military experts was needed to establish a realistic and acceptable delay time.

3. Prohibition of the use of mines which are not detectable

It was found that among the main reasons for the production of all-plastic, non-magnetically detectable mines were ease and cheapness of manufacture as compared with those with metallic components, and increased longevity because of the absence of corrosion-sensitive components. However, it was pointed out that the cost and inconvenience of fitting non-removable metallic detection rings or plates, ideally by casting them into the explosive fill to prevent removal, would be minimal, and that non-detectability of mines provided little if any military advantage.

Detectability would be of great help in mine-clearance operations, and was also regarded as important in conjunction with the introduction of a prohibition of anti-personnel mines without self-destruct mechanisms, because of the failure rate of those mechanisms.

4. Prohibition of the use of mines with anti-handling devices

There were strong arguments in favour of banning the use of integral anti-handling devices, since they have no apparent military value and their main effect is to hamper clearance operations. The only possible military advantage they present is in terms of lowering of morale, and as a further deterrent to breaching a minefield.

5. Existing stocks

Information furnished in one expert report indicated that at least 78 producers in 44 countries have manufactured at least 307 anti-personnel landmine products in recent decades. Production of landmines currently averages between five and ten million annually, implying that there exist, worldwide, well over 100 million and possibly more than 200 million mines. Today, landmines are deployed in more than 50 countries.

Given this situation, a complete ban on the use, production and transfer of all anti-personnel mines, and the destruction of all existing stocks, was seen as the ultimate objective, probably to be achieved through a multilateral agreement. Until such an agreement can be reached, however, existing stocks ought to be modified and fitted where possible with self-destruct or self-neutralizing mechanisms, or destroyed. The technical means to do so are certainly available,

although many anti-personnel mines are too small to be fitted with self-destruct mechanisms. Two problems would still remain. The first would be that of effective verification of compliance by States. The second would relate to the financial implications of the destruction of existing stocks, but this could be weighed against the exorbitant cost of mine clearance, which in some areas approaches US\$ 1,000 per mine.

III. Proposals for amendment of the 1980 Convention and of its Protocol II

A study of the negotiating history of the 1980 Convention, undertaken in one expert report, shows that an attempt had been made to seek common ground between the military view that anti-personnel mines were an effective and operationally almost indispensable weapon, and the humanitarian view that these weapons were terrible in their effects as they not only caused unnecessary suffering but were indiscriminate by their very nature, inflicting heavy casualties among the civilian population and continuing to do so well after the conflict in question had ended. However, the final result was a modest treaty which in many respects was the product of various compromises. This has greatly undermined the protection from the effects of anti-personnel landmines that the Convention was initially intended to afford. The Symposium discussed at length some of the main shortcomings of the treaty and came up with proposals to overcome them.

1. Introduction of implementation mechanisms

One of the major weaknesses of the 1980 Convention is its lack of implementation mechanisms. The participants, while fully recognizing the limited effectiveness in practice of implementation measures provided for in international law, were nevertheless convinced of the necessity and utility of incorporating some such measures into the Convention. Again, even though some measures could be considered appropriate only for mines and booby-traps, it was generally felt that it would be more logical to introduce such provisions in the body of the Convention itself and not in just one of its protocols.

The implementation provisions found in 1977 Protocol I additional to the Geneva Conventions were regarded as providing a model. Three possibilities were considered: a simple reference to certain articles of 1977 Additional Protocol I; wholesale reproduction of the appropriate articles of this Protocol; or reproduction of the appropriate articles but with suitable changes in the wording so as to make them obviously applicable to the use of weapons. The third alternative was preferred and the following articles were identified as being the most relevant:

Article 82. Provision of legal advisers. It was recommended that legal advisers be incorporated at all levels down to brigade or equivalent level, and be incorporated into planning staffs.

Article 83. Training in humanitarian law. It was felt that the following four measures should be taken:

- a. Training in the use of weapons in accordance with humanitarian law in cadet academies, and in all command and staff training.
- b. Incorporation of legal provisions in all weapon systems manuals, in the languages of the user countries.
- c. Incorporation of warnings of legal limitations on weapons packaging.
- d. Incorporation of training in the international law of war in all military training of foreign nationals.

Article 84. Translation of the 1980 Convention into local languages and the adoption of necessary national laws and regulations.

Articles 85 - 87. Criminal sanctions. It was recommended in particular that Article 85, paras. 1, 2, 3a-d, 4d, and 5 (suitably amended), be incorporated, recognizing that these provisions have not generally been enforced in the past.

In regard to enforceability, it was proposed that grave breaches as defined in these articles could in practice be identified or notified by the following measures:

- a. Action by the appropriate authorities within the nation accused of the grave breach.
- b. Notification to the Secretary-General of the United Nations.
- c. Enquiries by an *ad-hoc* fact-finding group, the International Fact-Finding Commission, or other fact-finding mechanisms.

Finally, the possibility of inserting a provision on the compulsory jurisdiction of an adjudication body was considered, but serious doubts were expressed in this respect. It was pointed out that no compulsory jurisdiction provisions appear in other international humanitarian law instruments; the International Court of Justice has jurisdiction only over inter-State disputes and does not cover individual accountability; and the establishment of an arbitration tribunal and its regulations call for a considerable degree of cooperation between the parties involved. Participants felt that it was unlikely that States would accept the insertion of compulsory adjudication measures in the Convention.

2. Extending the applicability of the Convention to cover non-international armed conflicts

It was unanimously recognized by the participants that most of the human suffering caused by anti-personnel landmines occurred in the context of non-international armed conflicts. However, as it stands the 1980 Convention formally applies only to international armed conflicts. There was therefore general agreement on the advisability of extending the application of the Convention to non-international armed conflicts through an amendment to the provision of the Convention itself which specifies its scope of application. However, several difficulties inherent in such an extension of the applicability of the Convention

were identified. One major difficulty would be objections by States invoking national sovereignty, especially States which generally resist any international involvement in internal armed conflicts. Attempts could nevertheless be made to persuade States that it would be in their interest to extend the applicability of the instrument by arguing that it could be their own countries being devastated and their own population the victim. Another less satisfactory alternative would be an optional protocol on applicability to non-international armed conflicts. It was felt, however, that this would be disregarded by irregular insurgent forces. The extreme difficulty to entering into contact with such forces drastically reduced the chances of persuading them to comply with the law.

3. Shortcomings of the rules in Protocol II even if implemented

Article 3 of 1980 Protocol II, imposing general restrictions, is based on the generally accepted distinction between military and civilian objectives, but such a distinction is difficult to maintain once a military target has moved away from the mined area, leaving behind the anti-personnel mines which then automatically became indiscriminate.

Moreover, the duty to protect civilians from the effects of these weapons is couched in very weak terms, as paragraph 4 of this article makes reference to all “feasible” precautions. The term “feasible” allows for great flexibility in interpretation, but on the other hand it was felt that removing this term altogether would place the military in a position they were highly unlikely to accept. Furthermore, the provision is weak because feasible measures would include the installation of fences or signposts, but experience has shown that these tend to be removed by members of the local population, either out of ignorance or for the profit they can derive from such items. It was felt that Article 3 might be the right place to introduce the prohibition on the use of anti-personnel mines without self-destruct mechanisms.

Article 4 on restrictions on mines other than those that are remotely delivered has the same shortcomings as Article 3.

Article 5 deals with restrictions on remotely delivered mines. There are difficulties in recording accurately the locations of mines delivered by fixed-wing aircraft, artillery and rockets. Therefore the recording requirements in Article 5.1a in the absence of a neutralizing mechanism are not applicable when using these methods. Problems remain with the implementation of Article 5.1b, because self-destruct and self-neutralization devices are currently insufficiently reliable to guarantee the safety of a mined area; further, no maximum time limit is set for the active life of these mines. The wording of paragraph 1b also creates confusion between self-destruct and self-neutralizing mechanisms. In paragraph 2 there is no definition of “effective advance warning”.

Article 7 contains a major flaw in that there is no definition of a “pre-planned” minefield, which is the only type that requires recording. With regard to all other minefields, parties are only required to “endeavour” to record them, which is a rather weak provision. In practice, it was found that further difficulties arose. For instance, some regular armies have followed strict procedures with respect to

mine-laying and there are clear rules for marking and recording minefields. However, history has shown that such records are properly drawn up and kept by very few armies. They are also quite frequently lost.

Even where such records are available, successful minefield clearance can rarely be guaranteed for a number of reasons. Mines tend to move, sometimes long distances, over a period of time owing to the effects of weather and soil erosion, and on occasion by the action of animals. This is especially true in the case of scatterable mines. Furthermore, even the most conscientiously maintained minefield record can be subject to human error by soldiers who may be tired or under stress. In non-international armed conflicts, to which the 1980 Convention does not apply, no records will have been kept, no maps made and no warning signs set up, whether through incompetence, lack of discipline or a wish to inflict as many indiscriminate fatalities and injuries as possible on the enemy population.

Article 8. It was felt that there was a need to extend the measures of protection included in this article to organizations other than the United Nations, such as CSCE missions and private demining agencies. In fact, the United Nations itself has acknowledged the necessity of coordinating demining activities, and for that purpose the Department of Peace-keeping Operations, which includes a Mine Clearance Centre, has established a data base to which it welcomed any contributions. Expert reports from other demining organizations pointed out that more often than not mine clearance is an extremely hazardous exercise principally because records are not properly kept, and there are often no maps or signposts. In Afghanistan, for instance, mine-clearance activities have resulted in over 30 deaths and over 45 amputations, and no less than 29 operatives have been blinded.

All these factors render mine clearance expensive, taking into account the high cost of experts' fees, personnel insurance premiums, and such support expenses as medical and casualty evacuation costs. Article 8 should therefore be extended in order to afford protection to third-party missions and logically also to humanitarian organizations working in regions affected by mines.

Article 9, which deals with international cooperation, does not impose an obligation to remove mines, as the words used therein are "*shall endeavour to reach agreement*". Moreover, this agreement relates only to "*the provision*" of such information and assistance as "*necessary to*" remove or render ineffective mines and minefields, and thus in no way imposes a specific obligation to do so. This was recognized as a major shortcoming of the law. Again, this article does not deal with other issues of crucial importance to a mine-devastated country after the cessation of active hostilities, such as repatriation and land reclamation.

IV. Possible arms control measures relating to the trade in mines and their stockpiling

Participants examined various arms control measures such as prohibition of or restrictions on exports, destruction of existing stocks that are incompatible with possible new manufacturing standards, prohibition of the manufacture of certain types of mines in an arms control treaty, and verification measures.

The advantages and drawbacks of measures that could be taken in the shorter term and those that might better be considered as long-term measures were considered separately. Accordingly, the following possible short-term measures were discussed.

1. *Unilateral measures*

a. The significance of the export moratorium on anti-personnel mines that some States have instituted was recognized, although many manufacturers would seek exemptions for certain types, such as self-neutralizing and self-destruct mines and high-tech “smart” mines.

b. It was felt that other States should be encouraged to adopt similar measures. This encouragement should come both from the public and from governments.

The participants discussed the value of a moratorium on exports as setting a standard for State behaviour, focusing world attention on the use of anti-personnel mines and constituting a critical first step towards achieving more far-reaching limitations.

Possible drawbacks mentioned included the questionable impact of such a moratorium on alleviating suffering, the repercussions for domestic producers, the difficulties of verification, and the fact that a moratorium does not eliminate the problem of clandestine export.

c. The possibility was raised of a multilateral voluntary regime along the lines of the Australia Group, which controls exports of dual-use biological and chemical items, and the Missile Technology Control Regime.

The advantage of such a regime would be to regionalize and/or internationalize controls on the export of anti-personnel mines. This type of non-proliferation regime might, however, create North-South friction. Another drawback is that it does not usually comprise a control system and the focus of exports might shift to non-participating States.

All three of the above-described unilateral measures would call for the stepping-up of national control, and the role of customs authorities in this respect was particularly emphasized. The possibility of using independent organizations for such control was also explored.

2. *Multilateral confidence-building measures*

The importance of ensuring openness and transparency was stressed frequently. To this end the following measures were discussed:

a. The exchange of information on production, stocks and exports of anti-personnel mines should be facilitated by the compilation of a register or data base, as has been agreed in recent arms control treaties. Public organizations would have access and be able to contribute to this information. Some participants felt that the need for financial transparency in anti-personnel mine exports was important.

- b. As a follow-up to this information exchange, confirmation visits could be envisaged.

In this regard, the difficulties in reaching agreement on any international mechanism for follow-up control were recognized.

3. *Longer-term arms-control measures*

The participants discussed the possibility in the long term of a multilateral agreement to ban the development, manufacture, transfer and use of anti-personnel mines and the destruction of all existing stocks. The arms control measures indicated below could also apply to an overall ban on certain types of mines and the destruction of stocks that do not comply with new requirements.

The Review Conference of the 1980 Convention was borne in mind throughout the discussion. Some suggested that the review conference mechanism be used for consideration of an overall ban. The overlap between international humanitarian law and disarmament treaties was recognized with regard to the question as to which international forum would negotiate a convention for a comprehensive ban on anti-personnel mines.

It was proposed that non-governmental organizations be allowed to participate in the Review Conference and it was also stressed by some that mine producers should be included in the consultative process.

With respect to an overall ban, it was felt that several issues would have to be examined. The list below should not be considered exhaustive:

- a. Technical definition of what exactly constitutes an anti-personnel mine (or the types of mine to be prohibited), production facility, dual-use components, and mine delivery systems. In this connection the blurring of the distinction between anti-personnel and anti-tank mines needs special attention.
- b. A routine verification regime that would include declarations and inspections.
- c. A special challenge inspection regime.
- d. Destruction of stockpiles within an extremely limited period, and on-site verification of that destruction.
- e. Provisions for sanctions in case of non-compliance.
- f. Strict national legislation and enforcement to support the terms of the multilateral agreement.
- g. Allowance for certain permitted purposes, such as research for the improvement of demining equipment and for protection of troops.

It was stressed that as wide an adherence as possible to such an agreement was vital.

The problem of how to deal with continued use, production and trade by non-party States was recognized as potentially serious. Clandestine commerce would still have to be controlled as well. Evidence of illegal arms trading lies in the associated financial dealings, and is often discovered by customs officials. Mines

should bear certificates of origin, and the issuing of false end-user certificates should be a criminal offence. The view was expressed that if it is possible to ban chemical weapons, it should be possible to close loopholes when banning certain types of mines. However, it was considered that attention should focus in the first instance on the supply of mines, since the number of producers of mines, and even of explosives, is fairly limited.

In this context, another issue that the Symposium addressed was that of **collection of information on the trade in anti-personnel mines**. With a view to having States introduce the subject of mines in the Conference on Disarmament, it was felt that public access to information contained in the United Nations Register of Conventional Arms would be helpful, but it was pointed out that this information, submitted by governments, was available to governments only. However, it was possible that governments might eventually agree to make this information available to the public. Non-governmental organizations were a valuable source of information, but governments were unlikely to supply data for a voluntary register. It was also stressed that non-governmental organizations could not obtain information on a country-by-country basis, as the task would be overwhelming, but that some of them could serve as a clearing-house for information from all sources.

V. Information to the public

The Symposium also recognized the crucial importance of **alerting public opinion** in order to increase awareness among the military and governments. This would be an invaluable contribution towards a much-needed change in the law. The need for increased involvement of National Red Cross and Red Crescent Societies and their Federation, as well as United Nations agencies such as UNHCR and UNICEF, was stressed. There was also a constant need to keep the press informed about statistics on injuries caused by mines.