

Geneva, 14-21 September 1992

SECOND REVIEW CONFERENCE OF THE PARTIES TO THE CONVENTION ON
THE PROHIBITION OF MILITARY OR ANY OTHER HOSTILE USE OF
ENVIRONMENTAL MODIFICATION TECHNIQUES

Working paper submitted by Finland and the Netherlands

1. The purpose of the present paper is to argue that the Second Review Conference of the Environmental Modification Convention should agree to define the scope of the Convention as prohibiting military or any other hostile modification of the environment having widespread, long-lasting or severe effects, regardless of the specific technique employed, or its technological sophistication.

I. THE ORIGINAL INTENT OF THE CONVENTION

2. The use of environmental modification techniques for hostile purposes was first thought of as a potential threat in the early 1970s. From the very beginning the threat was defined as resulting from the hostile use of techniques requiring a high level of technological sophistication and resources. The techniques most often mentioned involved weather, or even more broadly, climate modification as well as geophysical modification activity such as inducing artificial earthquakes.

3. The use of environmental modification techniques did not play a significant role in military planning at the time. However, there was a fear that high-technology techniques might be developed in the future unless action were taken to foreclose the option. Even so, the potential threat was not regarded as overly serious. In 1972 - well before the commencement of negotiations on the ENMOD Convention - the United States unilaterally renounced the use of climate modification techniques for hostile purposes, even if their development were proved to be feasible in the future.

4. These high-technology assumptions underlie the ENMOD Convention. The original intent of the Convention was to foreclose a futuristic technological option in which there was little military interest at the time. Indeed, environmental modification techniques do not play a significant role in military planning at the present time either. Nor is it likely that - in an ever more environmentally conscious world - they would do so in the foreseeable future.

5. As a consequence, the ENMOD Convention is widely perceived as irrelevant to the real security concerns of States. This perception is reflected in low adherence to the Convention. At present, there are only 55 States Parties.

II. GULF WAR IMPLICATIONS

6. Iraqi actions during the Gulf War in 1991 sparked renewed interest in the ENMOD Convention. It is clear that the deliberate setting on fire of hundreds of Kuwaiti oil wells was a hostile act that produced "widespread, long-lasting or severe effects" in the meaning of Article I of the Convention and the relevant Understanding which defines the parameters of these three criteria.

7. It should be pointed out that, in the case of the ENMOD Convention (unlike that of Protocol I Additional to the Geneva Convention of 1949), these three criteria are alternative ("or"), not cumulative ("and"). The presence of any one of them alone is sufficient for the environmental technique to be outlawed under the Convention. In our view, the effects of the Gulf War oil fires met all three criteria, in varying degrees.

8. However, it is equally clear that a determination that the effects of the Gulf War oil fires met the criteria set by the ENMOD Convention is not enough to make the Convention ipso facto applicable to the Iraqi actions that caused them. This is basically for two reasons.

9. From the legal standpoint, Iraq cannot be found in breach of the ENMOD Convention since it is not a party to the Convention. Still, it can be argued that Iraq, as a signatory, was under an obligation to refrain from acts which defeat the object and purpose of the Convention. This is not enough to establish Iraqi liability under the ENMOD Convention, however.

10. Even if Iraq had been a party to the ENMOD Convention during the conflict, the question remains whether setting oil wells on fire is in fact an environmental modification technique proscribed by the ENMOD Convention. In other words, what exactly is covered by the definition of that term in Article II and the Understanding relating to Article II?

11. In our view, this is the crux of the matter, and this is where the Second Review Conference can and should make a contribution. Unless this basic issue is clarified, the ENMOD Convention will remain, for all practical intents and purposes, inapplicable.

12. A case can be made, and has been made by some scholars, that Iraqi actions qualify as resort to an environmental modification technique. These actions caused an upset of the ecological balance of the region and, arguably, also changes in weather patterns, both of which are listed in the relevant Understanding as illustrative of phenomena that could be caused by the use of environmental modification techniques as defined in Article II.

13. The opposite view rests largely on the reference, in Article II itself, to the deliberate manipulation of natural processes as the defining characteristic of what environmental modification techniques are. It is therefore contended that setting oil wells on fire, whatever the effects, is

not manipulation of natural processes in the meaning of Article II. This interpretation is also in line with the original intent of the Convention with its emphasis on the use of dedicated, albeit undefined, high-technology means of environmental modification.

14. However, this argument has been countered by the view that causing massive oil fires is indeed manipulation of at least one natural process, that of photosynthesis. The resulting layer of soot in the atmosphere can interfere with the rays of the sun and thereby impact adversely on plant growth.

III. PROPOSED ACTION

15. The foregoing analysis of the implications of the Gulf War for the ENMOD Convention suggests two actions that the Second Review Conference should take, in our view.

16. The Second Review Conference should clarify what exactly is prohibited by the ENMOD Convention. Regardless of the merits of the arguments concerning the applicability of the ENMOD Convention to the Gulf War, the discussion has made one thing clear. A clearer definition of the scope of the ENMOD Convention is needed for the Convention to become relevant to international security.

17. The Second Review Conference should urge broader adherence to the ENMOD Convention. Neither Iraq nor some other regional States, such as Saudi Arabia, are parties, a situation which clearly handicapped discussion of the relevance of the ENMOD Convention to the Gulf War. However, a call for broader adherence will not achieve any more than a similar urging by the First Review Conference unless it is accompanied by action that addresses the fundamental cause of low adherence to the ENMOD Convention, its perceived irrelevance to the real security concerns of States.

18. The underlying assumption for any effort to achieve a clearer definition must be that States Parties wish to apply the ENMOD Convention if the need arises. It is not enough that the Convention exists. There must be a willingness to apply it to the real world.

19. The fact that Protocol I Additional to the Geneva Convention of 1949, particularly its Articles 35 and 55, is clearly applicable to the Gulf War case (moreover, Iraq is a party) is, in our view, no argument for inaction as far as the ENMOD Convention is concerned. Protocol I lacks any sort of verification and/or enforcement provisions; all action is up to individual States Parties. As far as we know, Iraq's infringement of Protocol I has not prompted any specific countermeasures on that basis by other States Parties, individually or collectively.

20. In our view, it is in the collective interest of the States Parties to the ENMOD Convention (most of which are also parties to Protocol I) that actions which clearly contravene international law are not let slip through the cracks. That is the danger if one instrument is viewed as inapplicable and the other as unenforceable.

21. The ENMOD Convention does offer, under Article V, a consultation and verification mechanism of complaint and investigation as well as recourse to the Security Council of the United Nations. In view of the developments of the last few years, the Security Council option should not be as easily dismissed as heretofore. However, in practice any effective resort to any part of that mechanism presupposes broader agreement about the scope of Article II.

22. While the Understanding relating to Article VIII of the Convention makes it possible to consider amendments at a review conference, seeking amendment of Article II would not, in our view, be practicable or feasible. For the same reason, we do not think it advisable to seek to amend the text of the Understanding relating to Article II.

23. Article II and the relevant Understanding can, however, be clarified by the Review Conference in the light of evolving circumstances.

24. The negotiating record of the ENMOD Convention already contains one uncontested interpretative statement of the scope of Article II. In 1976, the United States stated that in its view the Convention would prohibit the use of herbicides as the means of destruction, damage, or injury if the effects were widespread, long-lasting or severe. The United States went on to say that an upset of the ecological balance of a region through the use of such techniques would be, at a minimum, a widespread effect.

25. It is clear from that interpretation that the use of herbicides is considered an environmental modification technique in the meaning of Article II of the Convention. The use of herbicides manipulates deliberately the very same natural process - photosynthesis - as, for example, sun-blocking soot caused by igniting oil wells. The use of herbicides is also an example of a relatively low-technology means of environmental modification, comparable to setting oil wells on fire.

26. We are not aware of any challenge to the United States interpretation concerning herbicides in the 16 years since. It would thus be appropriate for the Second Review Conference to endorse that interpretation. In our view, this would be best accomplished by drafting a general formulation covering the use of herbicides and any other comparable environmental modification techniques. The general formulation could be illustrated by a list of specific techniques, although it must be kept in mind that negotiating such a list in the short time available might be difficult.

27. Consequently, in the context of its review of Article II of the Convention, the Second Review Conference should, in our view, adopt a general statement that would be incorporated into the Final Declaration of the Review Conference. The statement could run as follows (the first sentence reproduces the first sentence of the 1984 Final Declaration):

"Article II

The Conference reaffirms its support for this Article containing the definition of the term 'environmental modification techniques'. The Conference agrees that this definition, taken together with the understandings relating to Articles I and II, covers military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any State Party by another State Party regardless of the specific technique employed or of its technological sophistication or lack thereof."
