

## ANNEX 5

### GUIDANCE FOR CONSIDERATION OF MARINE GEOENGINEERING ACTIVITIES

#### SECTION 1: INTRODUCTION

1 This guidance aims to assist Contracting Parties to the London Protocol and Convention in considering whether and, if so, in what form and context, marine geoengineering activities of potential concern should be addressed. This guidance provides a recommended (non-binding) procedure for the consideration of such activities prior to taking any additional action.

2 For the purposes of the London Protocol "Marine geoengineering" means a deliberate intervention in the marine environment to manipulate natural processes, including to counteract anthropogenic climate change and/or its impacts, and that has the potential to result in deleterious effects, especially where those effects may be widespread, long-lasting or severe.

3 In adopting this definition, the Contracting Parties noted that they did not intend it to apply to other established legitimate uses of the sea that have effects on the marine environment, such as the direct harvesting of marine organisms; conventional aquaculture or mariculture; the creation of artificial reefs; use of dispersants in oil spill response; the production of energy from wind, currents, waves, or tides; ocean thermal energy conversion; deep sea mining; or conventional marine observation and sampling methods (LC 35/15, Report of the thirty-fifth Consultative Meeting and the eighth Meeting of Contracting Parties, paragraph 4.12.2.).

4 In view of the complexity of marine geoengineering activities and the range of scientific, technical and other issues that are likely to need to be considered, it is recommended that the following steps are followed to consider marine geoengineering activities to determine to what extent the activity has the potential to cause marine pollution and what further action, if any, may be considered. This document includes advice on information that is likely to be needed and a process for assembling and reviewing such evidence.

#### SECTION 2: STEPS FOR CONSIDERATION

5 A marine geoengineering activity of potential concern can be raised and considered as follows:

.1 Proposing an issue for consideration:

.1 Any Contracting Party, observer state, intergovernmental organization, or accredited observer may raise an activity of concern either at a meeting of the Scientific Group of the London Protocol and the Scientific Group of the London Convention (hereafter referred to collectively as "The Scientific Groups") or of the joint Meeting of governing bodies or intersessionally; this should preferably be through the submission of a document to one or other meeting; and

.2 Information should be provided covering the points in the annex to this guidance; but it is recognized that submissions may be

incomplete and there would be opportunities for further iterations to improve the information base, including input from external sources.

- .2 Review and advice by the Scientific Groups, insofar as this is provided for under their respective terms of reference<sup>9</sup>:
  - .1 the Scientific Groups should review information on the scientific/technical considerations of the activity concerned, drawing on submissions and any other relevant and available information about the marine geoengineering activity;
  - .2 the Scientific Groups should as appropriate involve independent international experts, an independent international advisory group of experts, including those from other international bodies, or other relevant experts to contribute to the review; and
  - .3 the Scientific Groups should provide advice on the review of the activity, including the robustness of the scientific/technical evidence, and where appropriate, advise the governing bodies on the level of concern with respect to the activity and the need for further study and further action.
- .3 Consideration by the governing bodies:
  - .1 the governing bodies should review the advice of the Scientific Groups and, as appropriate, information on social and economic factors;
  - .2 the governing bodies may seek advice from international independent experts with regard to these activities;
  - .3 the governing bodies may take action as appropriate and with respect to their specific responsibilities, including consideration of the following:
    - .1 the extent to which the activity is of concern; and
    - .2 whether or not any further work might be undertaken, for example through the Scientific Groups or an intersessional group.

### **SECTION 3: FURTHER ACTIONS**

6 Following consideration of the activity as outlined in section 2, the governing bodies may come to the view that further action is needed to prevent, reduce and eliminate pollution, inter alia:

- .1 statements of concern, resolutions and development of guidance; and

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<sup>9</sup> Resolution LP.2(2) on the *Terms of reference for the Scientific Group under the London Protocol* and Resolution LC.59(29) on the *Terms of reference for the Scientific Group under the London Convention*.

- .2 Parties to the London Protocol will also have a regulatory option which, once the amendment adopted in 2013 enters into force, will provide for the listing of the activity for prohibition or permitting. This option is described below. It is generally expected that this option would be used after the above assessment is completed.

#### **SECTION 4: NEW PROVISIONS OF THE LONDON PROTOCOL FOR THE REGULATION OF MARINE GEOENGINEERING ACTIVITIES**

7 In 2013 the eighth Meeting of Contracting Parties to the London Protocol adopted resolution LP.4(8) amending the London Protocol, adding, inter alia, a new article 6*bis* which states that "Contracting Parties shall not allow the placement of matter into the sea from vessels, aircraft, platforms or other man-made structures at sea for marine geoengineering activities listed in annex 4, unless the listing provides that the activity or the sub-category of an activity may be authorized under a permit" (article 6*bis*.1).

8 The new article 6*bis* of the London Protocol (together with new annex 4 "Marine Geoengineering Activities", annex 5 "Assessment Framework for Matter that may be considered for Placement under annex 4" and consequential amendments) creates, once it is in force:

- .1 a legally binding regime for marine geo-engineering activities listed in annex 4 and a prohibition on these activities unless the listing provides that the activity or the subcategory of the activity is authorized under a permit; and
- .2 a legally binding framework that is adaptable to allow for possible future regulation of other marine geoengineering activities.

9 A marine geoengineering activity would need to be listed in new annex 4 in order for it to be regulated under article 6*bis*. For the time being the only listed activity is ocean fertilization, but it is envisaged that other marine geoengineering activities could be included through subsequent amendments to annex 4.

10 Article 22 of the London Protocol describes how annexes are amended and would apply to any amendments that might be proposed to the new annexes 4 and 5. It describes how amendments are proposed; what factors are to be considered in proposing amendments; and how amendments may be adopted and enter into force. This guidance<sup>10</sup> does not affect the right of any Party to submit an amendment that is in accordance with article 22.

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<sup>10</sup> An analogous procedure is in effect under the Basel Convention with respect to annexes VIII and IX (see Decision VIII/15).

ANNEX

**INFORMATION REQUESTED FOR CONSIDERING  
A NEW MARINE GEOENGINEERING ACTIVITY**

- 1 Scientific/technical considerations:
  - i. Description and purpose of the proposed activity;
  - ii. Characterization of the matter proposed for placement;
  - iii. Characterization of the activity;
  - iv. Characteristics of geographic area(s) and environmental conditions (e.g. deep sea or low nutrient areas), where the matter might be placed;
  - v. Potential effects on human health, ecosystems, other legitimate uses of the marine environment;
  - vi. Whether the activity has the potential to result in deleterious effects, and whether those effects may be widespread, long-lasting or severe;
  - vii. The availability and their efficacy of measures and their standards/criteria to protect the marine environment from the effects of the activity;
  - viii. Efficacy of the activity in achieving its purpose (e.g. in counteracting anthropogenic climate change or its impacts); and
  - ix. Current state of knowledge, including confidence levels key knowledge gaps and uncertainties, and any relevant references in scientific journals, official documents, actual practice history, envisioned future activity etc.
- 2 Social and economic factors may also be considered such as whether the activity, or actions taken by Contracting Parties could have important social and economic effects, including distributional effects, e.g. affecting certain countries or population groups.
- 3 Consideration should also be given to the consistency of the proposed action with the rights and obligations of States under international law, including the law of the sea.

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