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THIRTY FIRST CONSULTATIVE
MEETING OF CONTRACTING PARTIES
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&
FOURTH MEETING OF CONTRACTING
PARTIES TO THE LONDON PROTOCOL
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Agenda item 5

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**CO₂ SEQUESTRATION IN SUB-SEABED GEOLOGICAL FORMATIONS:
CO₂ SEQUESTRATION IN TRANSBOUNDARY SUB-SEABED
GEOLOGICAL FORMATIONS**

**Proposal to amend Article 6 of the 1996 Protocol to the Convention on the Prevention of
Marine Pollution by Dumping of Wastes and Other Matter, 1972**

Submitted by Norway

SUMMARY

Executive summary: Norway proposes to amend Article 6 of the London Protocol.

Action to be taken: Paragraph 14

Related documents: LC 31/5; LC 30/16, paragraphs 5.12-5.25; LP/CO₂ 1/8; LC 29/17, paragraphs 4.4-4.9; LC 28/15, annex 6; LC/CM-CO₂ 1/5

1 Pursuant to Article 21 of the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (the London Protocol), Norway proposes amendments to Article 6 of the Protocol. The proposal is aimed at removing barriers for sequestration of CO₂ streams in sub-seabed geological formations as a measure to mitigate climate change and ocean acidification. The text of the proposed amendments is attached in annex hereto.

2 Norway is of the view that Article 6, which prohibits the export of wastes or other matter to other countries for dumping or incineration at sea, constitutes a barrier to the sound utilization of sub-seabed geological formations for the purpose of carbon capture and storage (CCS). Many countries do not have adequate storage sites within their own waters, whereas suitable formations may be located close-by within the waters of a neighbouring country. Furthermore, a smaller number of larger-scale storage sites might be preferable to a large number of small sites, importantly with a view to ensure proper site characterization, monitoring and remediation plans.

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3 Norway has well-characterized sub-seabed geological formations which are already used for the storage of CO₂ streams and for which monitoring programs and reporting requirements are already in place. Yet, while CO₂ capture facilities are under rapid development and storage sites in a number of neighbouring countries are scarce, most of our neighbouring countries would currently not be in a position to take up any offer to make use of geological formations such as the Utsira formation for storage purposes.

4 The proposal to amend Article 6 for these purposes is based on several years of deliberations within the framework of the London Protocol. To remove any doubt that the Parties recognized the role of this type of sequestration as part of a suite of measures to tackle the challenges of climate change and ocean acidification, amendments to Annex 1 to the Protocol were adopted at the 1st Meeting of Contracting Parties to the London Protocol in 2006 under resolution LP.1(1) (LC 28/15, annex 6). The amendments adopted reflected the deliberations of the CM Intersessional Legal and Related Issues Working Group on CO₂ Sequestration, meeting at IMO Headquarters from 10 to 12 April 2006. This meeting had also considered options for amendments to Article 6, but in conclusion, such amendments were not considered a priority for consideration by the Meeting of Contracting Parties at that stage (LC/CM-CO2 1/5).

5 Recalling that the LP Scientific Group had identified that the issue of sequestration in sub-seabed geological formations needed further consideration, the 2nd Meeting of Contracting Parties to the London Protocol established a Legal and Technical Working Group on Transboundary CO₂ Sequestration Issues (LC 29/17, paragraphs 4.4-4.9). At its meeting in Bonn, Germany, from 25 to 27 February 2008, the working group analysed the relation between transboundary movement of CO₂ streams for sequestration in sub-seabed geological formations and Article 6 of the Protocol.

6 The working group addressed, *inter alia*, whether an amendment to Article 6 would be required in the following cases:

- .1 the transfer of a CO₂ stream from one State to another for the purpose of dumping at sea but prior to its injection in the sub-seabed geological formation (case 1); and
- .2 the transboundary migration of CO₂ streams within the sub-seabed geological formation after dumping, including both deliberate migration (case 2.1) and unintended migration (case 2.2).

7 The working group also developed the text of a possible amendment to Article 6 of the London Protocol. The text was formulated to cover both transfer for dumping prior to injection and deliberate migration within the sub-seabed geological formation after disposal (cases 1 and 2.1). There was general agreement that an unintended migration of CO₂ streams within sub-seabed geological formations (case 2.2) would not constitute an export within the terms of Article 6 (LP/CO2 1/8).

8 The 3rd Meeting of Contracting Parties approved the report of the working group in general and agreed that transboundary movement of CO₂ streams was justified as a climate mitigation measure. Further, it was agreed that the Meeting should give the political signal that the London Protocol should not constitute a barrier to the transboundary movement of CO₂ streams for these purposes (LC 30/16, paragraphs 5.12-5.25).

9 Additionally, further work within an intersessional correspondence group, under the lead of Germany, was organized. Responding to a questionnaire developed by Germany, a total of eleven responses were received, outlining initial legal views. Norway notes with appreciation that most respondents were in principle in favour of permitting such transboundary movements, both when taking place prior to injection and if relevant, in cases of deliberate migration (LC 31/5).

10 The text of the proposed amendment as set out in annex hereto is based on the wording developed by the Legal and Technical Working Group on Transboundary CO₂ Sequestration Issues, however, also taking into account the work of the intersessional correspondence group on the same issue. In particular, Norway has noted the proposal to use the term “export” rather than wording such as “transboundary movements, including migration,..” when adding new text to Article 6. The use of the term “export” would match existing terminology in Article 6, and thus, possible confusion by the introduction of new terms into the Protocol could be avoided.

11 The Secretariat is requested to communicate the text of this proposed amendment to the Parties to the London Protocol no later than six months before the next Meeting of Contracting Parties, in accordance with Article 21.1, and to take such additional actions as may be required by the London Protocol and/or the applicable Rules of Procedure to enable adoption of this amendment by the Contracting Parties at this Meeting.

12 Norway reserves the right to call for the adoption of the proposed amendment as detailed at annex, or a similar text with any minor variations as agreed between Parties prior to adoption of the amendment, at the 4th Meeting of Contracting Parties.

13 Norway invites other Contracting Parties to the Protocol to co-sponsor the amendment proposal at annex. The Secretariat is requested to inform Parties that the proposal is open to co-sponsorship and to inform Contracting Parties in the event that the amendment proposal has been co-sponsored by two-thirds of the Contracting Parties to the London Protocol.

Action requested of the Meeting of Contracting Parties

14 The Meeting of Contracting Parties is invited to consider the amendment in this document with a view to its adoption.

ANNEX

PROPOSED AMENDMENT TO ARTICLE 6 OF THE LONDON PROTOCOL

Add “1” before: Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea.

Add a new paragraph 2 as follows:

“2 Notwithstanding paragraph 1, the export of carbon dioxide streams as referred to in Annex 1, paragraph 1.8, for disposal may occur, provided that:

- .1 the receiving State gives its prior informed consent;
- .2 disposal of carbon dioxide streams is in compliance with the requirements set by Annex 2; and
- .3 in the case of such export from a Contracting Party to a non-Contracting Party, a bilateral, multilateral or regional agreement or arrangement on the export of carbon dioxide streams has been entered into by the countries concerned. Such an agreement or arrangement shall not derogate from the protection and preservation of the marine environment as required by this Protocol and shall stipulate provisions that are equivalent to those contained in this Protocol on the protection and preservation of the marine environment. A Contracting Party entering into such an agreement or arrangement shall notify it to the Organization.”
