

Annex to CGG Working Paper 21–

Assessment Of International Treaties Applicable, Or At Least Adaptable, To Geoengineering-Related Activities Through Indicators

Chiara Armeni (University College London) and Catherine Redgwell (University of Oxford)

Climate Geoengineering Governance Working Paper Series: 022.

Published online 09 March 2015



ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

Universal scope- applicable to all Geoengineering techniques and related activities
1992 CONVENTION ON BIOLOGICAL DIVERSITY (CBD)
Scope for Participation: Universal
Substantive scope: All activities having an impact on biodiversity conservation
Geographic Scope: Global (incl. High Seas)

Yes	No	Yes	Yes	No	Yes	Weak	Yes	High	High	Yes
<p>Entered into force: 29.12.1993</p> <p>Current n. of contracting Parties: 193</p>	<p>Framework convention-soft language</p>	<p>COP Decisions by Consensus (or, as a last resort, 2/3 majority)</p> <p>Amendments to the Convention/Protocols/Annexes by 2/3 majority of the Parties present and voting (Art 29)</p> <p>No reservation permitted (art 37)</p>	<p>Strong National Implementation¹: EIA; national plans, strategies and programmes; identification & monitoring; in situ/ex situ conservation through national measures and legislation (eg. Protected Areas), exchange of information.</p> <p>Adoption of national incentive measures. Financial Mechanism (GEF)</p>		<p>COP (meets every 2 years); Secretariat;</p> <p>SBSTTA (composed by Gov reps with relevant expertise, decides by majority)</p> <p>Secretariat</p>	<p>No specific rules on liability and state responsibility</p> <p>National Implementation - positive role of NGOs in stimulating compliance via CBD institutions²</p> <p>Dispute Settlement (Art.27) - cft. the Cartagena protocol provides for the negotiation of a non-compliance procedures</p>	<p>Subsidiary Body on Scientific Technological and Technical Advice (SBSTTA)</p> <p>Clearing House Mechanism, as publicly accessible information repository</p>	<p>193 Contracting Parties, representing developing and developed countries in the negotiations and regime evolution</p>	<p>Participation of non-state actors is allowed and large (mainly environmental and business)</p> <p>Observer status can be granted to States, NGOs, IGOs, International organisations. (Art 23.5) NGOs can participate to drafting groups at the discretion of the chair of the COP.</p>	<p>Adaptability to scientific developments - eg. Cartagena Protocol on Biosafety; COP decisions on climate-related geo-engineering</p> <p>Mechanisms for Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')</p>

¹ Implementation can be defined as the body of national measures (eg. laws, regulation, policies and standards, administrative and judicial measures) that operationalize the objectives and requirements of an international treaty in the national legal system of its contracting parties. See C Redgwell, Oxford Handbook ..., See also UNEP Governing Council Decision SS VII/4 'Compliance with and Enforcement of Multilateral Environmental Agreements ' Doc. UNEP (DEPI)/MEAs/WBG.1/3(February 2002) Annex II.

² See Brunne, Doelle, Rajamani, *Promoting Compliance in an Evolving Climate Regime*, (2012) at 173-174, which refers to role of ETC in bringing its concerns to the CBD Secretariat with respect the German OIF experiment, despite the 2009 COP decision on their moratorium.

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

1992 UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) <i>Scope for Participation: Universal</i> Substantive Scope: All activities related to stabilisation of GHG to prevent dangerous climate change (Art 2) – ie. theoretically all climate-related geoengineering techniques <i>Geographic Scope: Global</i>										
--	--	--	--	--	--	--	--	--	--	--

Yes	No	Yes	Yes	Yes	Yes	Weak	Yes	High	High	Yes
<p>Entered into Force: 21.3.1994</p> <p>Current n. of contracting Parties: 195</p>	<p>Framework convention; Soft language</p>	<p>COP decisions by consensus³</p> <p>Amendments to the Convention/Annexes by consensus (of at least resort, ¾ majority of the Parties present and voting (art 15-16). Amendments to the Protocol must be accepted to enter into force.</p> <p>Annexes/amendment to annexes will enter into force for all Parties 6 months after adoption (except express non-acceptance)</p> <p>No reservations permitted (art 24)</p>	<p>Strong National Implementation: GHG inventories, national programmes and policies, transfer of technology, consideration of BA scientific information & knowledge.</p> <p>Financial Assistance to developing c.</p> <p>Green Climate Fund</p>	<p>Based on principle of Common but Differentiated Responsibility</p>	<p>COP (meets annually);</p> <p>Subsidiary Body on Scientific and Technological Advice (SBSTA)</p> <p>Subsidiary Body on Implementation (SBI)</p> <p>Secretariat</p>	<p>No liability provisions</p> <p>Dispute Settlement</p> <p>National Implementation</p>	<p>SBSTA external linkages with IPCC</p>	<p>195 Contracting Parties, representing developing and developed countries in the negotiations and regime evolution</p>	<p>Participation of non-state actors is allowed and large (environmental, business, academia)</p> <p>Observer status can be granted to the UN, its specialised Agencies, non-Party States. 'Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by the Convention[...] may be admitted as observer, unless at least 1/3 of the Parties present object and subject to the rules of procedures</p>	<p>Adaptability to scientific developments - eg. Kyoto Protocol; interpretation, strengthening and evolution of the regime through COP decisions)</p> <p>Mechanisms for Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')</p>

³ This is not mentioned in the Convention, but follows general UN practice. See discussion of consensus at UNFCCC in Post-Cancun Paper by Field http://www.field.org.uk/files/field_limitationconsensus_web.pdf

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

									adopted by the COP' (Art 7.6)	
--	--	--	--	--	--	--	--	--	-------------------------------	--

1997 KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (KP)
Scope for Participation: Universal
Substantive Scope: All activities related to reaching GHG emission reduction targets (art 3) - i.e. theoretically all climate-related geoengineering techniques
Geographic Scope: Global

Yes	Yes	Yes	Yes	Yes	Yes	Medium	Yes	High	High	Yes/No
Entered into Force: 16.2.2005		Meeting of the Parties (MOP) decisions by consensus ⁴	Strong National Implementation: Quantified Emission Limitation and Reduction Targets (QELRs) and Timetables for Annex I c.	(based on principle of Common but Differentiated Responsibility)	MOP; Secretariat; SBSTA; SBI; CDM Executive Board; Compliance Committee	No liability provisions Dispute Settlement & Non-Compliance Procedures (art 18 + Annex to Decision 24/CP.7) including a Facilitation Branch and an Enforcement Branch International support to national implementation	SBSTA; external linkages with IPCC	191 Parties (but some key players are not Parties – e.g. US, and Canada, which withdrew in 2012)	Participation of non-state actors is allowed and large (environmental, business, academia) Same rules for participation than established under the Convention (art 13.8 KP)	Unproven adaptability to scientific developments in practice (e.g. post 2017 scenario remains uncertain), but COP decisions for interpretation, strengthening and evolution Mechanisms for Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')

⁴ The rules of procedure of the COP and financial procedures applied under the Convention are applied *mutate mutandis* (except where otherwise decided by consensus) (art 13.5)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

1977 CONVENTION ON THE PROHIBITION OF MILITARY OR ANY OTHER HOSTILE USE OF ENVIRONMENTAL MODIFICATION TECHNIQUES, (ENMOD)
Scope for Participation: Universal
Substantive Scope: Limited to military or hostile activities (i.e. dual use of climate-related activities only)
Geographic Scope: Global

Yes	No	No	No	No	Yes/No	Weak	No	Low	Low	Yes/No
Entered into force: 5.10.1978	Only general requirements and principles	No specific indication of decision-making rules/participation to it. Amendments enter into force for a Party upon its acceptance after a majority of parties has accepted it (no indication of specific decision-making rules)	Weak national implementation: Obligation to “undertake any measures it consider necessary to prohibit and prevent any activity in violation” of the convention; consultation and cooperation incl. with international organizations)		COP (only met twice); Depositary; Consultative Committee of experts	No specific provisions on liability Any party can lodge a complaint to the UN Security Council if believes that another Party is acting in breach of the Convention		76 parties - parties have only met twice , but include developing and developed countries.	No rules on non-state actors participation	Provision for review, but weak (See also ‘Decision-Making Rules’)

Specific – Applicable to Geoengineering methods and related activities in the atmosphere and the outer space

1979 LONG-RANG TRANSBOUNDARY AIR POLLUTION CONVENTION (Regional Treaty)
Scope for Participation: Limited (UNECE Members only)
Substantive Scope: Air Polluting Activities (ie. only if any climate-related Geoengineering technique causes/threatens to cause air pollution)
Geographic Scope: Regional (UNECE region, including the EU as Regional and Economic Integration Organisation –REIO)

Yes	No	Yes	No	No	Yes	Medium	Yes	High	Medium	Yes
Entered into force: 16.5.1983	Soft nature of the obligations in the convention, but more detailed targets and specific obligations	Executive Body decides by consensus (or as a last resort, by ¾ majority of parties present and voting – unless otherwise provided) An amendment is adopted by consensus of the Parties, and enters into force for the parties that have accepted it	Strong National Implementation: General obligation to limit, reduce and prevent air pollution; Exchange of information; consultation ‘upon request’ (more specific	Except for the 1991 Protocol on Volatile Organic Compounds provides for 3 ways of meeting obligations based on individual Parties’ emissions and geographic/demographic circumstances	Executive Body UNECE Executive Secretariat Implementation Committee	No liability provisions (footnote to Art 8 (f) states” the present convention does not contain a rule on State liability as to damage) Dispute Settlement	European Monitoring and Evaluation Programme (EMEP) provides scientific support to the Executive	51 of the 54 United Nations Economic Commission for Europe (UNECE) members	Participation of non-states actors is allowed, but has varied over time Qualified Participation as Observer is permitted to any	Adaptability to scientific development (eg. framework strengthened by 8 subsequent protocols. ⁸ Of these, 3

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
	are established in the associated Protocols via a “critical loads approach”	on the 90 th day after instruments of acceptance have been deposited. Thereafter, it enters into force on the 90 th day after deposit of any other acceptance (art12 and RoP 29)	obligations in the individual protocols for specific substances) No financial mechanism			Non-compliance mechanism (since 1997)⁵	Body ⁶		body or agency, whether national or international, governmental or nongovernmental, which is qualified in matters covered by the Convention, unless at least 1/3 of the Parties present at the session object. ⁷ No rules regarding submissions which are channelled via the Parties,. NGOs usually not admitted into closed sessions, nor required in subsidiary bodies.	are of special interest for research on SRM techniques: 2 sulphur protocols, and the acidification protocol. Mechanisms for Amendments within the treaty provide engines for dynamism (See ‘Decision-Making Rules’)
1987 MONTREAL PROTOCOL TO THE 1985 VIENNE CONVENTION ON THE PROTECTION OF THE OZONE LAYER <i>Scope for Participation: Universal</i> Substantive Scope: Limited to Geoengineering techniques involving the use of substances regulated under the Montreal Protocol and depleting the Ozone Layer (e.g. SO2) <i>Geographic Scope: Global</i>										
Yes	Yes	Yes	Yes	Yes	Yes	Medium	Yes	Very High	High ?	Yes
Entered into Force:		Meeting of the Parties (MOP)	Strong National		MOP;	No specific	Assessment	Universal	Participation of	Adaptability

⁸ The 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone; 25 Parties. Entered into force on 17 May 2005. (Guidance documents to Protocol adopted by decision 1999/1, Revised guidance document on ammonia).; The 1994 Protocol on Further Reduction of Sulphur Emissions; 29 Parties. Entered into force 5 August 1998.; The 1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent; 25 Parties. Entered into force 2 September 1987.

⁵ Decision 1997/2 Concerning the Implementation, its Structure and Functions and Procedures for Review of Compliance

⁶ EMEP Steering Committee (supported by a Bureau) meets annually and reports to the Executive Body on its activities (Art 9 and 10).

⁷ Rules of procedure http://www.unece.org/fileadmin/DAM/env/lrtap/conv/Rules_of_Procedure.pdf

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
1.1.1989 Current n. of Contracting Parties: 197 ⁹ – Universal Participation		decides by consensus, (decisions on adjustments to the ozone depleting potentials in the Annexes can taken by 2/3 majority for developing C and majority of developed c. These adjustments will bind all parties to the protocol, including those who voted against them (art 2(9) as revised 1990) Objecting Parties can withdraw from the protocol with 1 year notice	Implementation: specific targets and timelines to reduce and eliminate the production and consumption of certain ozone depleting substances Montreal Protocol Multilateral Fund		Secretariat Implementation Committee - (political rather than judicial organ)	provision on liability Dispute Settlement Non-compliance Procedure (both facilitative and enforcement functions)	Panels pursuing to Art.6 ¹⁰ ; and other temporary subsidiary bodies (e.g. task forces)	Participation since September 2009	non-state actors is allowed, and have increased over time RoP. 6: The United Nations and its specialized agencies, the International Atomic Energy Agency and any State not party to the Protocol/Convention may be represented by observers. RoP 7: Any body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to the protection of the ozone layer [...], subject to the condition that their admission to the meeting is not objected to by at least 1/3 of the Parties	to scientific development S (eg. adjustment and amendment procedure) Mechanisms for Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')

⁹ However, the 1997 Montreal Protocol and the 1999 Beijing Amendment only have 194 and 188 contracting Parties, respectively

¹⁰ [Technology and Economic Assessment Panel \(TEAP\)](#), [Scientific Assessment Panel \(SAP\)](#), [Environmental Effects Assessment Panel \(EEAP\)](#)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES

Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
-------------	--------------------------	-----------------------	-------------------------------------	--------------------------------	---------------------------	---------------------------	------------------	--	---	-----------------

									<p>present at the meeting, may be granted observe stauts</p> <p>Subject to conditions, they can: participate without the right to vote in the proceedings of any meeting in matters of direct concern to the body or agency they represent;</p> <p>NGOs can only submit proposals via delegation, but are allowed to participate in the discussion of the proposal. They are allowed to participate to closed sessions of Subsidiary bodies, formal and informal. They are occasionally consulted, if needed.</p>	
--	--	--	--	--	--	--	--	--	--	--

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

OUTER SPACE REGIME
 (includes: the 1967 Outer Space Treaty; the 1972 Space Liability Convention; the 1975 Space Registration Convention; the 1979 Moon Treaty.¹¹)
Scope for Participation: Universal
Substantive Scope: All geoengineering activities undertaken in Outer Space (and the Moon) and/or having an impact on the rights and obligations of the States in the Outer Space and its environment (ie. Placement of space mirrors)
Geographic Scope: Global Outer Space¹²

Yes	No	No	No	No	No	Medium?	Yes	Medium	Medium	?
<p>Entered into Force: the 1967 Outer Space Treaty: 10.10.1967; the 1972 Space Liability Convention: 1.9.1972; the 1975 Space Registration Convention: 15.9.1976; the 1979 Moon Treaty: 11.7.1984</p> <p>Current n. of Contracting Parties: the 1967 Outer Space Treaty: 102; the 1972 Space Liability Convention: 89; the 1975 Space Registration Convention: 60; the 1979 Moon Treaty: 15</p>	Mainly international legal principles	In absence of special provisions the UN practice of decisions by consensus applies	Weak National Implementation: Main principles: eg. non-appropriation of outer space by any one country, arms control, the freedom of exploration, liability for damage caused by space objects, the prevention of harmful interference with space activities and the environment, the notification and registration of space activities, scientific investigation and the exploitation of natural resources in outer space.		<p>No permanent treaty-body and conference of the Parties. However, the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) is the primary international forum for the development of laws and principles governing outer space.</p> <p>COPUOS has 74 Negotiating Parties.</p> <p>The United Nations Office for Outer Space</p>	<p>Outer Space Treaty states that States are responsible for national space activities (art VI), and liable for damage caused by their space objects. (art VII).</p> <p>Convention on Liability for Space imposes absolute liability and an obligation to pay compensation for damage caused by its space object on the surface of the Earth or to aircraft in flight.'</p> <p>Dispute Settlement</p>	<p>Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS)</p> <p>It is also supported by a Legal Subcommittee</p>	<p>Parties to COPUOS meet annually</p> <p>the 1967 Outer Space Treaty – 191 Parties;</p> <p>1972 Space Liability Convention – 88 parties;</p> <p>the 1975 Space Registration Convention – 56 Parties;</p>	<p>A number of international organizations, including both intergovernmental and non-governmental organizations, have observer status with COPUOS and its Subcommittees¹³</p> <p>They represent different geographical regions.</p>	

¹¹ Non-binding principles also govern the conduct of states with respect to specific activities in this area, eg.: Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space ; Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broad-casting; Principles Relating to Remote Sensing of the Earth from Outer Space; Principles Relevant to the Use of Nuclear Power Sources in Outer Space; Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries.

¹² Under international law, there is no definition of 'outer space'. The Committee on United Nations Committee on the Peaceful Uses of Outer Space has been addressing this issue to conceptualise the definition and delimitation of Outer space, including in relation with the limits of air space. See <http://www.oosa.unvienna.org/oosa/SpaceLaw/national/def-delim/question.html>

¹³ See for instance Report of Report of the Committee on the Peaceful Uses of Outer Space General Assembly Official Records Sixty-seventh Session Supplement No. 20, para 12-15, indicating all observers organisation (international governmental and non-governmental, including with permanent status) attend the meeting. Available at: http://www.oosa.unvienna.org/pdf/gadocs/A_67_20E.pdf

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
					Affairs is the Secretariat for the Legal Subcommittee of COPUOS.			the 1979 Moon Treaty – 13 Parties		
Specific – Applicable to Geoengineering methods and related activities at sea										
1982 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (LOSC)										
<i>Scope for Participation: Universal</i>										
<i>Substantive Scope: All activities undertaken in, and having an impact up on, the ocean and the marine environment (eg. OIF, cloud seeding)</i>										
<i>Geographic Scope: Global oceans and seas (incl. High Seas)</i>										
Yes	No	Yes	No	No	No	Strong	Yes	High	Low	Yes
Entered into Force: 16.11.1994	Global treaty governing states' activities and jurisdiction in and in relation to different maritime zones, including environmental protection/MRS.	Meetings of the States Parties are convened by the UN Secretary General when necessary (art 319.(2)(e). Amendments can be submitted to the Secretary General pursuing procedure of art 312 – or a simplified procedure of art 313. A special procedure is required for amendments to provisions relating to exclusively to activities in the Area (<i>Article 31</i>)	Strong national Implementation: Laws and regulations to be adopted at national level pursuant the objectives/general obligations of the convention. No financial incentives		Meeting of States Parties to the Convention convened on an <i>ad hoc basis</i> . But the following are permanent institutions: Commission on the Limits of the Continental Shelf International Seabed Authority International Tribunal for the	National Enforcement of laws and regulation adopted pursuing UNCLOS Includes liability and responsibility provisions with respect to the conduct in the Area (Art 139), arising from enforcement measures (art 232, 235) and Marine Scientific Research in the marine environment (art 263) – these are without prejudice with the application of existing rules and development of further rules under		See n of contracting Parties (except the US)	Non-state actors participation allowed, but generally small RoP 18.4: NGOs “recognised by the ECOSOC whose fields of competence are relevant to the law of the sea and other NGOs invited by the Meeting of the States Parties, which have demonstrated their interest in matters under the consideration of the Meeting may also participate” ¹⁵	Evolution is permitted through amendment, incorporation of other generally accepted agreements and standards, and adoption of implementing agreements and soft law. Mechanisms for Amendments within the treaty provide

¹⁴ CP the Agreement relating to the implementation of Part XI of the Convention:143; CP to the Agreement for the implementation of the provisions of the Convention relating to the conservation and management of straddling fish stocks and highly migratory fish stocks:79, only one including the US (Updated at 04 October 2012)

¹⁵ SPLOS/2/Rev.3/Add.1. 12 June 1997 – however participation has been small.

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
	(eg. LC/LP;IMO standards)				Law of the Sea ITLOS Trust Fund	international law. (Article 304) Compulsory third-party settlement of dispute with a) International Tribunal of the Law of the Sea; b)ICJ; c) an arbitral tribunal or d) a special arbitration tribunal for cases on fisheries and protection of the marine environment – but limited to certain violations. For dispute exploitation/exploration international seabed and ocean floor: Seabed Dispute Chamber of ITLOS			Restricted participation for Subsidiary Bodies Some specific rules are established under the convention. ¹⁶ Observers cannot participate in closed sessions of subsidiary bodies.	engines for dynamism (See ‘Decision-Making Rules’)
1972 LONDON DUMPING CONVENTION										
<i>Scope for Participation: Universal</i>										
<i>Substantive Scope: Dumping activities at sea, including ocean iron fertilization (and any other marine geongineering?)</i>										
<i>Geographic Scope: Global</i>										
Yes	Yes	Yes	Yes	No	Yes	Medium	Yes	Medium	Medium	Yes
Entered into Force:30.8.1975	Specific objectives and obligations,	Unless otherwise provided, decisions shall be taken, elections determined and reports, resolutions and	Strong national Implementation: Permitted unless		Consultative/Special Meeting Contracting Parties (CP);	Article X In accordance with the principles of international law	Scientific Group on Dumping ²² Ad Hoc Legal	Contracting Parties: 87, balanced	Participation on International NGOs is allowed, and has been	Adaptability to scientific developments

¹⁶ Observers can be invited to participate by the UN Secretary General in accordance with article 319 – no specific provisions in the convention for their accreditation. Consultation and cooperation with international and non-governmental organizations on matters of competence of the International Seabed Authority (Article 169)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

<p>Contracting Parties: Contracting Parties: 87</p>	<p>but main measures to be implemented at national level.</p>	<p>recommendations adopted by a majority of the Contracting Parties present and voting¹⁷</p> <p>Amendments to the Convention/Annexes²⁸ can be adopted by 2/3 majority of those present at a Meeting. They entry into force for the Parties which have accepted it on the 60th day after two thirds of the Parties shall have deposited an instrument of acceptance of the amendment with the IMO secretariat.</p> <p>Thereafter the amendment shall enter into force for any other Party 30 days after that Party deposits its instrument of acceptance of the amendment.</p> <p>Amendments to the Annexes enter into force for each Contracting Party <i>immediately</i> on notification</p>	<p>prohibited approach - A permit must be obtained for dumping activities. Permitted unless prohibited approach, through listing in Annexes. Each Contracting Parties shall designate an appropriate authority or authorities to issue the permits required under the Convention.²⁰</p> <p>No incentive mechanism</p>		<p>International Maritime Organization (IMO) Secretariat</p> <p>The Compliance Group (subsidiary to the COP)</p>	<p>regarding State responsibility for damage to the environment of other States or to any other area of the environment, caused by dumping of wastes and other matter of all kinds, the Contracting Parties undertake to develop procedures for the assessment of liability and the settlement of disputes regarding dumping.²¹</p> <p>There are no compliance mechanisms under the London Convention. However, with the entry into force of the London Protocol on 26 March 2006,</p>	<p>Group of Experts</p> <p>Subsidiary Body on Scientific, Technical and Technological Advice</p> <p>Inter-governmental panel of experts on radioactive waste disposal at sea²³</p> <p>See also: Procedures for the application of scientific advice in respect of the London Dumping Convention</p>	<p>between developed and developing countries. Includes the US and China.</p>	<p>small (but influential) in practice²⁴</p> <p>Only international organizations with specialised technical expertise relating to the objectives of the convention/protocol can be granted observers status. International NGOs can be granted consultative status, with the privilege of e.g. making statements on agenda items and intervention in meetings, and participate in closed sessions</p>	<p>(eg amendment process and expeditious procedure for amendment of Annexes; CCS debate under the Convention leading to amendment to Protocol; discussion on OIF within the LC-LP framework (see Resolutions LC-LP 1. (2008) and LC-LP.2 (2010) and details on the Protocol section below).</p>
--	---	--	--	--	--	--	---	---	--	---

²² established by Resolution LDC.28(10)

¹⁷ Rule 29 rules of procedure

¹⁸ Procedure for preparation and consideration of amendments to the London Dumping Convention: See LDC.10(V) Procedures for the circulation of proposed amendments to the London Dumping Convention: See LDC.9(V)

²⁰ Art VI)

²¹ Art 11 – as amended in 1978-"Any dispute between two or more Contracting Parties concerning the interpretation or application of this Convention shall, if settlement by negotiation or by other means has not been possible, be submitted by agreement between the parties to the dispute to the International Court of Justice or upon the request of one of them to arbitration. Arbitration procedures, unless the parties to the dispute decide otherwise, shall be in accordance with the rules set out in the Appendix to this Convention.

²³ See terms of reference at http://www.imo.org/blast/blastDataHelper.asp?data_id=20889&filename=LC59%2829%29.pdf

²⁴ See for participation in IMO Rules governing the relationship with Non-governmental *International* Organisations; Rules of Procedure of IMO Governing bodies and committees,; guidelines on the Grant consultative status. See also http://www.imo.org/blast/blastDataHelper.asp?data_id=15954&filename=LDC30%2811%29.pdf

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
		of its acceptance to the IMO secretariat (<i>expeditious procedure</i>) and 100 days after approval by the meeting for all other Parties (<i>tacit consent procedure</i>), except for those which before the end of the 100 days make a declaration that they are not able to accept the amendment at that time.) ¹⁹				a set of Compliance Procedures and Mechanisms , pursuant to Article 11, were adopted in November 2007. It included the establishment of a subsidiary body - the Compliance Group - that meets in parallel to the Meeting of Contracting Parties and provides advice to the Parties on such matters.	LDC.7(IV)		meeting.	Mechanisms for Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')
1996 LONDON DUMPING PROTOCOL <i>Scope for Participation: Universal</i> <i>Substantive Scope: Dumping activities at sea, including ocean iron fertilization (and other marine geoengineering?)</i> <i>Geographic Scope: Global</i>										
Yes	Yes	Yes – strong	Yes	No	Yes	Medium	Yes	Low	Medium	Yes - strong
Entered into Force: 24.3.2006	But national implementation remains crucial	See above with respect to the Convention (Amendment to the Protocol Article 21) Amendment to Annexes (Article 22)	Strong National Implementation Prohibited Unless Permitted Approach: A <i>permit</i> must be obtained for dumping activities. Prohibited unless permitted approach through inverted list in Annexes. Each Contracting Parties shall designate an appropriate		Meeting of Contracting Parties/Special Meeting of Contracting Parties; IMO Secretariat	Strongly based on national implementation- Article 15: the Contracting Parties undertake to develop procedures regarding liability arising from the dumping or incineration at sea of wastes or other matter. (=LC) Article 16 Details on	See above	Contracting Parties: 42	See above with respect to the Convention	Adaptability to scientific development (e.g. LC/LP Parties have amended Protocol to allow CCS activities under their regime; they have addressed OIF and have

¹⁹ Art.VI)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
			<p>authority or authorities to issue the permits required under the Convention.²⁵</p> <p>No incentive mechanism</p>			<p>the dispute settlement (negotiation, mediation, conciliation/arbitral procedure under Annex 3 or recourse to art. 287 UNCLOS).</p> <p><i>See above on compliance procedures</i></p>				<p>been discussing the possibility of amendment to the Protocol to allow other marine Geoengineering activities to be considered in the future if they fall within the scope of the LP and have the potential to cause harm to the marine environment</p> <p>- Explicit "Future Proofing" -</p>
<p>1959 ANTARCTIC TREATY</p> <p><i>Scope for Participation: Universal (with limited decision-making)</i></p> <p>Substantive Scope: Activities undertaken within the geographic area of application, with special focus on scientific research, cooperation, inspection and preservation of Antarctic living resources (eg. potentially including scientific research on Geoengineering techniques both onshore and offshore)</p> <p>Geographic Scope: Regional – Antarctic Region ie. area south of 60 degrees South Latitude, including all ice shelves (excluding the High seas)²⁶</p>										
Yes	No	Yes - but limited	No	No	Yes	Weak	No (formally)	Low	Low	Yes
Entered into Force: 23.6.1961		Decision making is limited to the contracting parties that demonstrate their interest	Weak National Implementation: The treaty establishes		Antarctic Treaty Consultative Meetings	Dispute settlement (art XI)	But Scientific Committee on Antarctic	50 Parties to the Treaty (of	Observer status is granted to all non-Consultative	Mechanisms for Amendment

²⁵ Art VI)

²⁶ It must be noted that some states claim sovereign rights over parts of the Antarctic area (ie. Argentina, Australia, Chile, France, New Zealand, Norway and the UK). Art IV provides that nothing in the Treaty should be considered as a renunciation, diminution or prejudice of these rights.

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

<p>Current n. of Contracting Parties: 50 Parties to the Treaty (of which 28 are consultative parties)</p>		<p>in Antarctica by conducting substantial research activities there (“Consultative Parties”), such as the establishment of a scientific station or the despatch of a scientific expedition (art IX). Non-consultative Parties participate to the discussion but do not take part to the decision-making process.</p> <p>Measures, Decisions and Resolutions, are adopted by the Antarctic Treaty Consultative Parties (ATCM) by consensus. They give effect to the principles of the Antarctic Treaty and the Environment Protocol and provide regulations and guidelines for the management of the Antarctic Treaty area and the work of the ATCM.</p> <p>Decisions, which address internal organizational matters of the ATCM, and Resolutions, which are hortatory texts, are not legally binding on Contracting Parties. Measures can be legally binding only after approval by all contracting</p>	<p>key principles (eg. use of Antarctica for peaceful purposes only; freedom of scientific research; facilitation of international scientific cooperation; questions relating to the exercise of jurisdiction in Antarctica and preservation of living resources) and a system of inspection and general requirements</p>		<p>composed of: consultative Parties, Non-Consultative Parties, Observers and invited Experts</p> <p>(annual meetings since 1994)²⁷</p> <p>Secretariat based in Buenos Aires (est. 2004)</p>	No liability	<p>Research (SCAR) <i>NGO with observer status with ATCM has been impotant to provide objective technical and scientific advice)</i></p> <p>Under direction of the ATCM the Secretariat has developed the Electronic Information Exchange System (EIES) as a central repository for this information</p>	<p>which 28 are consultative parties) but good geographic balance</p>	<p>Parties and to international governmental and non-governmental organizations. (eg The commission for the Conservation of Antarctic Marine Living Resources, the Scientific Committee on Antarctic Research and the Council of Managers of National Antarctic Programs, IOC (Intergovernmental Oceanographic Commission IOC)</p> <p>Observer status and consultation is regulated under the RoP (see in particular Rules 2 and 31)²⁸</p>	<p>s within the treaty provide engines for dynamism (See ‘Decision-Making Rules’)</p> <p>See also Adoption of Madrid Protocol (below)</p>
--	--	--	---	--	---	--------------	--	---	---	--

²⁷ The meeting consists of representatives of: the Consultative Parties; non-Consultative Parties; Observers - currently the Scientific Committee on Antarctic Research (SCAR), the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Council of Managers of National Antarctic Programs (COMNAP) ; invited Experts, such as the Antarctic and Southern Ocean Coalition (ASOC) and the International Association of Antarctica Tour Operators (IAATO).

²⁸ Rules of Procedure available at http://www.ats.aq/documents/keydocs/vol_2/vol2_Volume_2_Complete_Document_e.pdf

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
		parties.								
1991 ENVIRONMENTAL PROTOCOL TO THE 1959 ANTARCTIC TREATY <i>Scope for Participation: Universal (with limited decision-making)</i> Substantive Scope: Activities undertaken within the geographic area of application, with an impact on Antarctic environment and its ecosystems (eg. potentially including scientific research on Geoengineering techniques both onshore and offshore) Geographic Scope: Regional – Antarctic Region ie. area south of 60 degrees South Latitude, including all ice shelves (excluding the High seas) ²⁹										
Yes	Yes	Yes	Yes	No	Yes	Medium	Yes	Low	Low	Yes
Entered into Force: 14.6.1998 Current n. of Contracting Parties: 37 Parties (of which 26 are consultative parties) ³⁰	It contains 5 annexes with specific provisions	See above for 1959 Antarctic Treaty	Strong National Implementation: EIA under Annex I for any activity related to scientific research (art 8) Specific environmental obligations included in the Annexes. ³¹ Requirements for national measures to ensure compliance, reporting, notification and inspections. No financial incentive mechanism		ATCM; Committee on Environmental Protection (art 11) Secretariat.	The parties undertake to elaborate rules and procedures relating to liability for damage arising from activities taking place in the Antarctic treaty area and covered by the protocol (art 16). Annex VI on “Liability Arising from Environmental Emergencies” deals with “environmental emergencies related to scientific research programmes, tourism and all other governmental and non-	<i>Committee on Environmental Protection (art 11) to provide advice and recommendation to the Parties on the implementation of the protocol</i> ³³	37 Parties (of which 26 are consultative parties) ³⁴	Participation of non-state actors is limited and qualified. See above for 1959 Antarctic Treaty	Mechanisms for Amendments within the treaty provide engines for dynamism (See ‘Decision-Making Rules’)

²⁹ It must be noted that some states claim sovereign rights over parts of the Antarctic area (ie. Argentina, Australia, Chile, France, New Zealand, Norway and the UK). Art IV provides that nothing in the Treaty should be considered as a renunciation, diminution or prejudice of these rights.

³⁰ http://www.ats.aq/devAS/site_search.aspx?cx=000635445009649447825%3Akhnrudg12og&cof=FORID%3A11&ie=UTF-8&q=status+of+ratification+environment+protocol+&sa.x=0&sa.y=0

³¹ The Protocol Prohibits any activity connected to mineral resources other than scientific research (art 7) and requires parties to establish a contingency response plans for environmental emergencies

³³ <http://www.ats.aq/e/cep.htm>

³⁴ http://www.ats.aq/devAS/site_search.aspx?cx=000635445009649447825%3Akhnrudg12og&cof=FORID%3A11&ie=UTF-8&q=status+of+ratification+environment+protocol+&sa.x=0&sa.y=0

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
						governmental activities in the Antarctic Treaty area for which advance notice is required under Article VII(5) of the Antarctic Treaty". (not yet into force) ³² Dispute Settlement (arts 18-19-20 + Schedule)				
1992 OSPAR CONVENTION. <i>Scope for Participation: North East Atlantic States</i> Substantive Scope: Activities that might cause pollution of the maritime area (e.g. potentially OIF, cloud seeding) ³⁵ Geographic Scope: Regional – North-East Atlantic region										
Yes	No	Yes	Yes	No	Yes	Medium	Yes	High	High	Yes - Strong
Entered into Force:25.3.1998 Current n. of Contracting Parties:16	General Obligations to prevent and eliminate pollution (art 2)	Decisions and recommendations by unanimous vote (if not possible ¾ majority) of contracting parties. A decision becomes binding for the parties that have voted it 200 days after its notification to the Executive Secretary, except for those notifying their inability to do so. For any other Party, it become binding upon notification of its ability to accept it/200 days after	Strong National Implementation: Parties to adopt programmes and measures for the prevention and elimination of pollution from land-based sources, including BAT and BEP ³⁶ Authorisation requires for dumping of waste and other matter		OSPAR Commission (Contracting Parties reps, meets usually annually); Secretariat; 5 main committees ³⁷ , some of which are in turn supported by working groups; Advisory Groups Coordination	Commission assesses compliance with the convention and, when appropriate decides upon and call for steps to bring about full compliance with the convention, and decisions adopted thereunder, and promote implementation of recommendations,	See committees providing advice to the OSPAR commission. [See 'Treaty-based institutions'] They produce reports	16 contracting parties	Participation is allowed, encouraged and facilitated- 35 NGOs and 18 IGOs have observer status with the OSPAR Commission Observers can be admitted following unanimous vote of the Parties.	Adaptability to scientific developments (eg 2007 Amendments to allow CO2 storage in geological formations- entered into force in 2011) Mechanisms for

³² Annex VI will enter into force after its approval by the Consultative Parties that participated in the Stockholm ATCM.

³⁵ However, 'current state of knowledge suggests that ocean fertilisation may not be a relevant mitigation option in the OSPAR area, as there is no evidence that iron is a limiting factor to phytoplankton growth in the area' Para 3.4. OSPAR Commission Report 2009 http://qsr2010.ospar.org/media/assessments/p00464_climate_change_mitigation_adaptation_final.pdf

³⁶ Best available technologies and best environmental practices.

³⁷ [Hazardous substances and Eutrophication Committee; Offshore Industry Committee; Radioactive substances committee; Biodiversity Committee; and Environmental Impact of Human Activities committee]; See; [committees](#)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
		<p>adoption. Recommendations are not binding.</p> <p>Amendments to the Convention are adopted by unanimous vote of contracting Parties. Amendments enter into force for those contracting parties which have ratified, accepted or approved it on the 30th day after receipt of ratification, acceptance and approval by AT LEAST 7 CONTRACTING PARTIES. After that, for other parties they come into force 30 days after their own ratification, acceptance or approval.</p> <p>Annexes and their amendment: same that the convention, expect for annex from Art 7 to be adopted by ¾ majority.</p>	<p>allowed under Annex II</p> <p>No financial incentive mechanism</p>		<p>Group; Heads of Delegation; Group of Jurists/Linguists; Committee of chairman and vice-chairman</p>	<p>including measures to assist contracting party to carry out its obligations. (art 23)</p> <p>No provision on liability</p> <p>Dispute Settlement via arbitration, if no otherwise agreed (art 32)</p>			<p>They can be a) any State which is not a contracting party or b) international governmental or any NGO the activities of which are related to the Convention. They can participate in meeting without right to vote and present to the Commission any information or reports relevant to the objectives of the Convention (art 11)³⁸</p>	<p>Amendments within the treaty provide engines for dynamism (See 'Decision-Making Rules')</p>
Treaties of Indirect Application										
1991 UNECE ESPOO CONVENTION ON TRANBOUNDARY ENVIRONMENTAL IMPACT ASSESSMENT (regional treaty) <i>Scope for Participation: Limited (UNECE Members only)</i> <i>Substantive Scope: EIA for listed activities likely to cause significant adverse transboundary impact (some geoengineering field experiments or activities might have such impact)</i> <i>Geographic Scope: Regional (UNECE region, including the EU as Regional and Economic Integration Organisation –REIO)</i>										
Yes	Yes	Yes	Yes	Yes	Yes	Medium	Low	Medium	Low	Yes/No
<p>Entered into Force:10.9.1997</p> <p>Current n. of Contracting Parties: 45 (as of April 2012)</p>	<p>Details on the circumstances and the context of EIA for projects likely</p>	<p>Amendments to the convention by consensus, or as a last resort by ¾ majority vote.</p> <p>Amendment enters into force</p>	<p>Strong national Implementation: Parties to establish procedures for, and conduct, conduct EIA for activities listed in</p>	<p>Distinction between all Parties, Party of origin, Affected parties and Concerned parties</p>	<p>Meeting of the parties to the Convention (MOP) (meets annually);</p>	<p>No liability provision; Dispute Settlement (Art 15)</p> <p>Implementation</p>	<p>No formal linkages with scientific bodies</p>	<p>Contracting Parties : 45 (as of April 2012) (out of 56 Members</p>	<p>Participation of non-state actors is provided for, but still limited in practice</p>	<p>Several amendments not yet into force (eg. Amendment allowing</p>

³⁸ See Rules of procedure 23 and 24 and ANNEX 2]

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
(out of 56 Members of UNECE)	to have a transboundary effect Annexes indicate covered activities, content of EIA and criteria for including other activities.	on the 90 th day after receipt of ratification, approval or acceptance by at least ¾ Parties.	annex I that are likely to cause significant adverse transboundary impact. Early notification and consultation obligations based on EIA No financial incentive mechanism		UNECE Executive Secretary exercises secretariat functions; Working groups on EIA and SEA; Implementation Committee Bureau	committee reviews compliance with the convention triggered by submissions from concerned party, another party or members of the Public/NGOs; or on its own initiative. ³⁹		of UNECE)	Public participation in the EIA process at national level is key in the convention. ⁴⁰ The public, incl. NGOs, can participate in meetings, without right to vote. ⁴¹ As of 2011, only 5 accredited NGOs. NGOs could participate in MOP meetings and in working groups, but not present in Bureau Meetings. Some participation in Implementation Committee, but many agenda items are closed doors. They can provide information to the Committee via submissions.	accession upon approval of UN Parties not parties to UNECE) + Kyiv protocol
2003 KYIV PROTOCOL TO THE ESPOO CONVENTION ON STRATEGIC ENVIRONMENTAL ASSESSMENT IN A TRANSBOUNDARY CONTEXT (Regional Treaty)										

³⁹ http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/2011_Structure_and_functions__operating_rules_etc/Implementation_Committee_procedures_rules.e.pdf

- see also

http://www.unece.org/env/eia/implementation/implementation_committee.html

⁴⁰ See Guidance http://www.unece.org/env/eia/pubs/publicpart_guidance.html

⁴¹ "The Public" under the convention is defined as "one or more natural or legal persons. (art 1 (x))

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES										
Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing

Scope for Participation: Limited (UNECE Members only)
Substantive Scope: SEA for listed plans and programmes likely to cause significant adverse transboundary impact (- plans or programmes to undertake geoengineering research or potentially deployment might have such impact)
Geographic Scope: Regional (UNECE region, including the EU as Regional and Economic Integration Organisation –REIO)

Yes	Yes	Yes	Yes	Yes	Yes	Medium	No	Low	Low	?
<p>Entered into Force: 11.7.2010</p> <p>Current n. of Contracting Parties:25 (out of 56 UNECE Members)</p>	<p>Details on procedure and necessary information for SEA</p> <p>Annexes provides guidance on covered activities, criteria for determining likely significant effects and other information</p>	See above re to the Espoo Convention	<p>Strong National Implementation: Specific requirements for screening, scoping and preparation of environmental report for plans and programmes subject to SEA. Public participation provisions in the SEA of plans and programmes. Requirements for consultation with environmental and health authorities as well as transboundary consultations. Monitoring of significant environmental effect of plans and programmes is also required.</p> <p>No financial incentive mechanism</p>	Distinction between Parties, parties of origin and affected party	<p>Meeting of the parties to the Convention serving as a meeting of the parties to the Protocol ((MOP/MOP);</p> <p>UNECE Executive Secretary exercises secretariat functions;</p> <p>Working group on EIA and SEA;</p> <p>Implementation Committee;</p> <p>Bureau</p>	<p>No liability provision; Dispute Settlement (Art 20)</p> <p>Implementation committee in reviewing compliance with the Protocol (see above re Espoo Convention)</p>	No formal linkages with scientific bodies	Contracting Parties : 25 (out of 56 Member of UNECE)	Participation of non-state actors is provided for, but still limited in practice See above re Espoo convention. Provisions on public participation in the SEA procedure.	

1998 UNECE AARHUS CONVENTION										
<i>Scope for Participation:</i> Regional (However, owing to a 2011 MOP decision to facilitate ratification by non-ECE parties, the Aarhus Convention could be considered no longer purely regional. ⁴²)										
<i>Substantive Scope:</i> Public Participation, Access to Information and Access to Justice on Environmental Matters (might have indirect effects on geoengineering research projects and large-scale deployment)										
<i>Geographic Scope:</i> Regional (but potential for expansion – see scope of participation above)										
Yes	No	Yes	No	No	Yes	Medium	No	High	High	Yes

⁴² See MOP Decision IV/5 on accession to the Convention by non-United Nations Economic Commission for Europe member States, as adopted 1 July 2011 (ECE/MP.PP/2011/CRP.3)

ASSESSMENT OF INTERNATIONAL TREATIES APPLICABLE, OR AT LEAST ADAPTABLE, TO GEOENGINEERING-RELATED ACTIVITIES

Legal Force	Precision of Obligations	Decision-Making Rules	Regulatory Instruments & Incentives	Distribution of Responsibility	Treaty-Based Institutions	Liability and Enforcement	Scientific Input	Degree of State Participation & Representivity	Degree of non-State Actors Participation & Representivity	Future Proofing
-------------	--------------------------	-----------------------	-------------------------------------	--------------------------------	---------------------------	---------------------------	------------------	--	---	-----------------

<p>Entered into Force:30.10.2001</p> <p>Current n. of Contracting Parties: Parties : 46 (out of 56 Member of UNECE)</p>	<p>General obligations and principles</p> <p>[But information on covered activities and information required are included]</p>	<p>Amendment to the Convention: Decision by consensus, or if not possible, by ¾ majority vote of Parties present and voting (Art 14). Entry into force, 90 days after ratification, adoption or acceptance of AT LEAST ¾ of these Parties, unless otherwise stated</p>	<p>Strong National Implementation: Parties to ensure access to information, public participation in the decision-making and access to justice on environmental matters. Reporting provisions.</p> <p>No financial incentive mechanism</p>		<p>Meeting of the parties;</p> <p>UNECE Secretariat;</p> <p>Working Group of the Parties;</p> <p>Compliance Committee;</p> <p>Task Forces</p>	<p>Compliance Mechanism: Art 15 “non-confrontational, non-judicial and consultative nature for reviewing compliance”</p> <p>Compliance Procedure triggered by Submission from a Party about its own [none thus far] or another party compliance [1 submission thus far]; referrals by the Secretariat [none thus far]; or communication by the public, NGOs or others [78 since 2001]⁴³.</p> <p>No liability provision</p> <p>Dispute Settlement provision</p>	<p>No formal linkages with scientific bodies</p>	<p>Parties : 46 (out of 56 Member of UNECE)</p>	<p>Facilitated Participation</p>	<p>Adaptability to scientific developments (Eg. Amendment on genetically modified organisms⁴⁴)</p>
---	--	---	---	--	--	---	---	---	---	---

⁴³ See also Decision 1/7, Compliance Committee and Procedures for Review of Compliance, (2001)

⁴⁴ See <http://www.unece.org/fileadmin/DAM/env/documents/2005/pp/ece/ece.mp.pp.2005.2.add.2.e.pdf>