Article

International Law Obligations Arising in relation to Nationally Determined Contributions

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Abstract

This article analyzes the international law obligations that arise in relation to nationally determined contributions (NDCs). It argues that distinct and concurrent obligations arise from two separate sources. On the one hand, treaty obligations arise under the Paris Agreement, which imposes an obligation of conduct on parties: they must take adequate measures towards the realization of the mitigation targets contained in their NDCs. On the other hand, communications such as NDCs may constitute unilateral declarations that also create legal obligations. These unilateral declarations impose obligations of various types, which may extend beyond mitigation. For example, they may specify measures of implementation or demand the achievement of a particular result. The potential 'double-bindingness' of NDCs should be a central consideration in the interpretation of international law obligations regarding climate change.

Keywords: Climate change, Paris Agreement, Nationally determined contributions, Unilateral declarations of states capable of creating legal obligations

1. INTRODUCTION

In contrast to the Kyoto Protocol¹ and most other multilateral environmental agreements (MEAs), the Paris Agreement establishes very few substantive legal obligations. For the most part, the Paris Agreement relies on the 'ambitious efforts' that parties must 'undertake and communicate' as 'nationally determined contributions [(NDCs)] to the global response to climate change'.² Intended NDCs (INDCs) had been communicated by most parties to the United Nations Framework Convention on Climate Change (UNFCCC)³ in advance of the Paris summit.

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Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto (Japan), 11 Dec. 1997, in force 16 Feb. 2005, available at: http://unfccc.int/resource/docs/convkp/kpeng.pdf.

² Paris (France), 13 Dec. 2015, in force 4 Nov. 2016, available at: http://unfccc.int/paris_agreement/ items/9485.php.

³ New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: https://unfccc.int/ resource/docs/convkp/conveng.pdf. INDCs can be consulted on the registry of the UNFCCC

(I)NDCs must cover all main areas of international cooperation as defined in the Paris Agreement, including mitigation, adaptation, financial support, transfer of technology, capacity building, and transparency.⁴ This innovative approach was intended to overcome the opposition of some states to a treaty that had too many substantive provisions. It also successfully navigates the diplomatic complexities of securing negotiated national commitments in a context where there are as many conceptions of differentiation as there are parties to the UNFCCC.

However, international lawyers have divergent views on how (I)NDCs should be characterized. (I)NDCs do not fall squarely within any of the classical sources of international law outlined in the Statute of the International Court of Justice (ICJ) – namely, international conventions, international customs, and general principles of law.⁵ Different views have therefore been expressed regarding the obligations of states under the Paris Agreement in respect of NDCs. This question, however, has typically been dealt with only briefly, as a digression in studies on the legal nature of the Paris Agreement itself.⁶ In recent years this treaty and the continuing negotiations regarding its modalities of implementation have been the primary focus of the literature on international law and climate change. Nevertheless, given that the Paris Agreement itself imposes very few substantive legal obligations, the legal characterization of (I)NDCs is a question of paramount practical importance.

This article identifies and analyzes the international law obligations that arise in relation to (I)NDCs. It argues that such obligations may arise in two distinct ways. On the one hand, treaty obligations arise under the Paris Agreement, inasmuch as it creates an obligation to pursue the mitigation objectives that NDCs define. On the other hand, communications such as (I)NDCs may be among the unilateral declarations that international courts and tribunals have consistently recognized are themselves capable of creating legal obligations. While these two sources of obligation may coincide, they remain distinct. For example, obligations arising under (I)NDCs or similar declarations may apply to states or entities that are not parties to the Paris Agreement, such as Taiwan. (I)NDCs may also define obligations where the Paris Agreement does not – for example, with regard to international support; or they may define obligations of a different nature, such as obligations of result. The potential 'double-bindingness' of NDCs could have far-reaching implications more generally for the obligations of states under international law on climate change.

Secretariat, available at: http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions. aspx.

⁴ Art. 3 Paris Agreement.

⁵ New York, NY (US), 26 June 1945, in force 24 Oct. 1945, Art. 38.1, available at: http://www.icj-cij. org/en/statute.

⁶ In turn, this has already led some courts to exclude any consideration of the legal authority of (I)NDCs: see In the Matter of Decisions Made under the Climate Change Response Act 2002 and Public Decisions Made in relation to the UNFCCC, CIV 2015-485-919 [2017] NZHC 733 (High Court of New Zealand, Wellington Registry), para. 38, available at: http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2017/20171102_2017-NZHC-733_decision-1.pdf ('Nor is a country's NDC binding at international law').

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As a prelude to this argument, Section 2 briefly retraces the origins of (I)NDCs. Section 3 analyzes obligations arising from the Paris Agreement in relation to NDCs, and Section 4 turns to the legal force of (I)NDCs and related declarations as unilateral declarations. Section 5 highlights some implications of the double-bindingness of NDCs by comparing the subject, object, nature, and beneficiaries of the respective obligations arising from these two sources. Section 6 concludes.

2. THE ORIGINS OF (INTENDED) NATIONALLY DETERMINED CONTRIBUTIONS

Differentiation has been a central principle from the outset of international negotiations on climate change, but while the parties to the UNFCCC agreed on a 'principle of common but differentiated responsibilities',⁷ they disagreed on both the grounds for and the extent of differentiation.⁸ Absent a consensus on the modalities of differentiation, the adoption of an international agreement defining each state's national commitment on climate change mitigation proved to be particularly challenging.

To overcome this diplomatic quagmire, the Copenhagen Accord of 2009 called on each party to communicate the commitment that it considered to be appropriate⁹ – an approach that the Conference of the Parties (COP) to the UNFCCC formally endorsed in 2010 through the Cancún Agreements.¹⁰ By the end of 2011, all developed parties had promised quantified economy-wide emissions reduction targets and close to 50 developing states had pledged to implement nationally appropriate mitigation actions.¹¹ Taken together, the so-called 'Cancún Pledges' were at that time the most ambitious commitment that states had made to reduce greenhouse gas (GHG) emissions and to mitigate climate change. The Cancún Pledges were not entirely successful and failed to hold GHGs in a pathway consistent with the goal of holding global average temperature within two degrees Celsius.¹² However, the formula proved to be more successful than the late attempt to extend the Kyoto Protocol for a second commitment period.¹³ The Cancún Pledges showcased the relevance of a bottom-up determination of national commitments on climate change mitigation.

⁷ Art. 3.1 UNFCCC.

⁸ See, e.g., US Senate Res. 98, 105th Cong, Byrd-Hagel Resolution, 143 Cong Rec § 8138-39 (25 July 1997).

⁹ UNFCCC Secretariat, Decision 2/CP.15, 'Copenhagen Accord' (18–19 Dec. 2009), UN Doc. FCCC/CP/ 2009/11Add.1, paras 4–5.

¹⁰ UNFCCC Secretariat, Decision 1/CP.16, 'The Cancún Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-Term Cooperative Action [(AWG-LCA)] under the Convention' (10–11 Dec. 2010), UN Doc. FCCC/CP/2010/7/Add.1, paras 36–37, 49–50.

¹¹ See UNFCCC Secretariat, AWG-LCA, 'Compilation of Information on Nationally Appropriate Mitigation Actions to be Implemented by Parties not included in Annex I to the Convention' (18 Mar. 2011), UN Doc. FCCC/AWGLCA/2011/INF.1; and UNFCCC Subsidiary Body for Scientific and Technological Advice/Subsidiary Body for Implementation (SBSTA/SBI), 'Compilation of Economy-Wide Emission Reduction Targets to be Implemented by Parties included in Annex I to the Convention (Revised Note by the Secretariat)' (7 June 2011), UN Doc. FCCC/SB/2011/INF.1/Rev.1.

¹² See Decision 1/CP.16, n. 10 above, para. 4; see also Decision 2/CP.15, n. 9 above, para. 2.

¹³ See UNFCCC Secretariat, Decision 1/CMP.8, 'The Doha Amendment' (8 Dec. 2012), UN Doc. FCCC/ KP/CMP/2012/13/Add.1. The Doha Amendment had not entered into force as of late 2017. See also

In late 2011 COP-17 agreed to launch the Durban Platform for Enhanced Action as 'a process to develop a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties'.¹⁴ The instrument (the Paris Agreement) would be adopted at COP-21 in December 2015. This new round of negotiations took full account of the experience of the Cancún Pledges. At COP-19 the parties were formally invited 'to initiate or intensify domestic preparations for their intended nationally determined contributions' in the context of adopting this instrument.¹⁵

Parties were asked to communicate their contribution 'in a manner that facilitates the clarity, transparency and understanding of the intended contributions'.¹⁶ It was agreed that the contributions could include:

as appropriate, inter alia, quantifiable information on the reference point ... time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches ... and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention.¹⁷

Furthermore, the Lima Call for Climate Action stated that 'each Party's [INDC] will represent a progression beyond the current undertaking of that Party'.¹⁸ These contributions were originally to be oriented towards the 'ultimate objective' of the UNFCCC, namely the 'stabilization of [GHG] concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system'.¹⁹ As such, INDCs were first and foremost national commitments on climate change mitigation. However, it was soon agreed that parties could also include 'an adaptation component' in their INDC.²⁰

Almost every state has communicated an INDC, most of them prior to COP-21 and a few of them soon after.²¹ INDCs were published on the UNFCCC website and a synthesis report, prepared by the UNFCCC Secretariat ahead of COP-21,

UNFCCC Secretariat, Decision 1/CP.23, 'Fiji Momentum to Implementation' (17 Nov. 2017), UN Doc. FCCC/CP/2017/L.13, paras 12–13.

¹⁴ UNFCCC Secretariat, Decision 1/CP.17, 'Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action' (11 Dec. 2011), UN Doc. FCCC/CP/2011/9/Add.1, para. 2.

¹⁵ UNFCCC Secretariat, Decision 1/CP.19, 'Further Advancing the Durban Platform' (23 Nov. 2013), UN Doc. FCCC/CP/2013/10/Add.1, para. 2(b). See also UNFCCC Secretariat, Decision 1/CP.20, 'Lima Call for Climate Action' (14 Dec. 2014), UN Doc. FCCC/CP/2014/10/Add.1, para. 9; UNFCCC Secretariat, Decision 1/CP.21, 'Adoption of the Paris Agreement' (13 Dec. 2015), UN Doc. FCCC/CP/ 2015/10/Add.1, available at: https://unfccc.int/documents/9097, para. 13.

¹⁶ Decision 1/CP.19, ibid., para. 2(b).

¹⁷ Decision 1/CP.20, n. 15 above, para. 14.

¹⁸ Ibid., para. 10.

¹⁹ Art. 2 UNFCCC. See Decision 1/CP.19, n. 15 above, para. 2(b).

²⁰ Decision 1/CP.20, n. 15 above, para. 12.

²¹ As of 1 Oct. 2015 the UNFCCC Secretariat had received 119 INDCs covering 147 parties and representing about 86% of global GHG emissions in 2010: UNFCCC Secretariat, 'Synthesis Report on the Aggregate Effect of the Intended Nationally Determined Contributions' (30 Nov.-11 Dec. 2015), UN Doc. FCCC/CP/2015/7, para. 8. See also UNFCCC Secretariat, 'Aggregate Effect of the Intended Nationally Determined Contributions: An Update' (7–18 Nov. 2016), UN Doc. FCCC/CP/2016/2 (Update Note). The EU's INDC applies to its 28 Member States.

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was updated a few months later to incorporate late communications.²² INDCs include various national commitments regarding climate change mitigation. Many INDCs address all major sources and sinks of GHG emissions within the country. About half of the INDCs contain quantified emissions reduction targets, which may, for example, be expressed in relation to a base year or a 'business as usual' scenario, or as gross domestic product (GDP) or per capita intensity targets.²³ Other INDCs include quantified targets (for example, regarding the deployment of renewable energy) or simply describe policies and actions.²⁴ A large number of INDCs are partly or fully conditional on various other factors and outcomes, such as the results of the Durban Platform for Enhanced Action, efforts carried out by other parties, the availability of flexibility mechanisms, or international support.²⁵ More than 80% of INDCs - covering almost every developing state - included an adaptation component which is expressed in various forms – for example, as an assessment of impacts, a statement of goals and visions, a description of measures or actions, or an assessment of the costs and limitations of adaptation.²⁶

INDCs vary widely in their form. That of the European Union (EU), for example, is contained in a five-page document, which includes the statement of a 'binding target of an at least 40% domestic reduction in [GHG] emissions by 2030 compared to 1990' and clarifications of a mostly methodological nature.²⁷ The United States (US) INDC has similar elements and also lists some 'domestic laws, regulations, and measures' relevant to its implementation.²⁸ By contrast, China submitted a 14-page original document in Chinese, followed by an 'unofficial translation'.²⁹ This document states four main mitigation targets (a peaking of carbon dioxide emissions, a reduction in carbon dioxide intensity, a diversification of energy sources, and an increase in forest stock volume) and details multiple 'policies and measures' involving sectoral or sub-sectoral targets.³⁰ India's 38-page communication also includes qualitative objectives (for example, 'to put forward and further propagate a healthy and sustainable way of living'), in addition to quantitative targets

²² In accordance with Decision 1/CP.20, n. 15 above.

²³ UNFCCC Update Note, n. 21 above, para. 9.

²⁴ Ibid., para. 10.

²⁵ Ibid., para. 11.

²⁶ Ibid., paras 59–74.

²⁷ Latvian Presidency of the Council of the EU, 'Submission by Latvia and the European Commission on behalf of the European Union and its Member States, Intended Nationally Determined Contribution of the EU and its Member States', 6 Mar. 2015, para. 3, available at: http://www4.unfccc.int/Submissions/ INDC/Published%20Documents/Latvia/1/LV-03-06-EU%20INDC.pdf (INDC of the EU).

²⁸ US Cover Note, 'INDC and Accompanying Information', 31 Mar. 2015, p. 4, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/United%20States%20of%20 America/1/U.S.%20Cover%20Note%20INDC%20and%20Accompanying%20Information.pdf (INDC of the US).

²⁹ 'Enhanced Actions on Climate Change: China's Intended Nationally Determined Contributions', 30 June 2015, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/ China/1/China's%20INDC%20-%20on%2030%20June%202015.pdf (the English translation provided by the Chinese government appears in the second half of the document) (INDC of China).

³⁰ Ibid., p. 5.

(for example, regarding GHG intensity and electric power installed capacity from non-fossil fuel-based energy resources).³¹

The Paris Agreement centres largely around the implementation of NDCs.³² An INDC becomes the party's NDC when the state becomes a signatory to the Paris Agreement, unless the state decides to communicate a different document.³³ Article 3 of the Paris Agreement recognizes 'nationally determined contributions to the global response to climate change' as efforts to be undertaken with regard to mitigation, adaptation, financial support, transfer of technology, capacity building and transparency.³⁴ Yet, it is mostly with regard to mitigation that other provisions of the Paris Agreement refer to NDCs.

In this respect, Article 4.2 contains two essential provisions. Its first sentence establishes a procedural obligation for each party to 'prepare, communicate and maintain successive [NDCs] that it intends to achieve'.³⁵ Other provisions clarify that successive NDCs are to be communicated every five years³⁶ and will 'represent a progression' beyond current NDCs.³⁷

Overall, the second sentence of Article 4.2 establishes a substantive obligation for the parties to 'pursue domestic mitigation measures, with the aim of achieving the objectives of such contribution'.³⁸ Relatedly, Article 13 establishes an 'enhanced transparency framework for action and support', which seeks in particular to provide 'clarity and tracking of progress towards achieving Parties' individual [NDCs] under Article 4'.³⁹ As such, parties must regularly provide 'information necessary to track progress made in implementing and achieving its [NDC] under Article 4'.⁴⁰

3. LEGAL FORCE DERIVED FROM THE PARIS AGREEMENT

This section assesses the international law obligations that arise under the Paris Agreement in relation to its Parties' NDCs. It first establishes the existence of a substantive obligation under Article 4.2 of the Paris Agreement, then characterizes its nature and object, and assesses its stringency. The section argues that the Parties to the Paris Agreement have an obligation of conduct to pursue measures expected to implement the mitigation target contained in their NDC.

- ³⁷ Ibid., Art. 4.3.
- ³⁸ Ibid., Art. 4.2 (second sentence).
- ³⁹ Ibid., Art. 13.5.
- ⁴⁰ Ibid., Art. 13.7(b).

³¹ 'India's Intended Nationally Determined Contribution: Working Towards Climate Justice', 1 Oct. 2015, p. 29, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/India/ 1/INDIA%20INDC%20TO%20UNFCCC.pdf (INDC of India).

³² See, in particular, Art. 3 Paris Agreement.

³³ Decision 1/CP.21, n. 15 above, para. 22.

³⁴ Ibid.

³⁵ Art. 4.2 Paris Agreement (first sentence).

³⁶ Ibid., Art. 4.9.

3.1. The Existence of an Obligation

The Paris Agreement is a treaty.⁴¹ As such, it 'is binding upon the parties to it and must be performed by them in good faith'.⁴² However, not every treaty provision necessarily creates an obligation. Various provisions of the Paris Agreement appear to define collective aspirations,⁴³ recognize the importance of certain efforts,⁴⁴ or encourage parties to adopt a particular course of action.⁴⁵ These provisions do not purport to create any legal obligations, in contrast to other provisions which do seek to establish international law obligations.⁴⁶ These obligations include, most obviously, obligations of a procedural nature,⁴⁷ but they may also include obligations of a substantive nature.

The Paris Agreement seeks to 'strengthen the global response to the threat of climate change'.⁴⁸ To do this, as with previous international agreements on climate change or MEAs, the Paris Agreement defines collective objectives and seeks to establish national commitments that will achieve these objectives.⁴⁹ However, unlike the Kyoto Protocol and other MEAs,⁵⁰ the parties' respective targets are neither included within, nor annexed to, the Paris Agreement. Instead, the NDCs communicated by the parties are to be included in a public registry maintained by the UNFCCC Secretariat.⁵¹ The Paris Agreement calls on all parties, '[a]s nationally determined contributions to the global response to climate change ... to undertake and communicate ambitious efforts ... with the view to achieving the purpose of this Agreement'.⁵² More specifically, the first sentence of Article 4.2 creates a procedural obligation for each party to 'prepare, communicate and maintain successive [NDCs] that it intends to achieve'.⁵³

The fact that the national commitments are not recorded in the body or an annex to the treaty, but instead can be found in a separate registry, says little about the legal

⁴¹ It falls within the definition of 'an international agreement concluded between states in written form and governed by international law': Vienna Convention on the Law of Treaties, Vienna (Austria), 23 May 1969, in force 27 Jan. 1980, available at: https://treaties.un.org/doc/Publication/UNTS/Volume %201155/volume-1155-I-18232-English.pdf Art. 2.1(a) (VCLT).

⁴² Ibid., Art. 26.

⁴³ See, in particular, Art. 2.1 Paris Agreement.

⁴⁴ See, e.g., ibid., Art. 8.1.

⁴⁵ See, e.g., ibid., Art. 7.7. These provisions typically use the auxiliary 'should'.

⁴⁶ To remove any doubt, ibid., Art. 20.2, mentions the existence of 'obligations under this Agreement'.

⁴⁷ See, e.g., ibid., Art. 13.7 (defining reporting obligations).

⁴⁸ Ibid., Art. 2.1.

⁴⁹ Ibid., Arts 2 and 3. Cf. Arts 2 and 4 UNFCCC; Kyoto Protocol, n. 1 above, Art. 3.1; Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, QC (Canada), 16 Sept. 1987, in force 1 Jan. 1989, available at: http://ozone.unep.org/new_site/en/montreal_protocol.php, Art. 2. See generally B. Mayer, 'Construing International Climate Change Law as a Compliance Regime' (2018) 7(1) *Transnational Environmental Law*, pp. 115–37.

⁵⁰ See, in particular, Kyoto Protocol, n. 1 above, Annex B.

⁵¹ Art. 4.12 Paris Agreement. The modalities of this registry are yet to be determined as part of the Paris Rulebook likely to be adopted at COP-24. For the moment, NDCs can be consulted through an interim registry available at: http://www4.unfccc.int/ndcregistry.

⁵² Art. 2 Paris Agreement.

⁵³ Ibid., Art. 4.2.

force of these commitments. It is not uncommon for a treaty to give legal force to external documents, such as UN Security Council resolutions,⁵⁴ the schedules of concessions under international trade agreements,⁵⁵ and the secondary law of the EU as a whole.⁵⁶ Similarly, the UNFCCC and the Paris Agreement empowered the COP to determine the modalities of treaty obligations relating to national inventories and transparency.⁵⁷ Whether the parties to the Paris Agreement are under an obligation to implement their NDCs depends entirely on the provisions of that treaty. These provisions are to be interpreted within the ordinary meaning of the treaty's terms, in their context and in light of the treaty's object and purpose.⁵⁸

The central provision, in this regard, is the second sentence of Article 4.2, which states that 'Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions'. This provision anchors NDCs in the Paris Agreement.⁵⁹ The word 'shall', as opposed to 'should', indicates an obligation. In the context of a treaty, this obligation is to be interpreted as an international law obligation.⁶⁰

Bodansky contended that this obligation contained in the second sentence of Article 4.2 belongs to 'parties' collectively, rather than to each individual party.⁶¹ However, this contention cannot be reconciled with the terms of the provision and their ordinary meaning. A legal obligation is, by definition, incurred by a legal person. Yet the parties to the Paris Agreement, taken as a group, do not have a legal personality. Therefore, if this provision indicates a collective obligation held by the 'parties' as a group, then it cannot be an obligation of a legal nature (although it could be a moral obligation). Such an interpretation would be inconsistent with the word 'shall', which, when contained in a treaty, indicates a legal obligation. Therefore, as Winkler notes, the obligation contained in this provision applies to each party individually.⁶² This latter interpretation is confirmed by the fact that other 'shall' provisions contained in the Paris Agreement clearly establish legal obligations applicable to each party, including obligations of a procedural nature, even when imposed on 'parties' in the plural form.⁶³

⁵⁴ See Charter of the United Nations, San Francisco, CA (US), 26 June 1945, in force 24 Oct. 1945, Art. 39, available at: http://www.un.org/en/documents/charter.

⁵⁵ See General Agreement on Tariffs and Trade, Havana (Cuba), 30 Oct. 1947, in force 1 Jan. 1948, Art. II.1, available at: https://www.wto.org/english/docs_e/legal_e/gatt47.pdf.

⁵⁶ See the consolidated version of the Treaty on the Functioning of the European Union, Lisbon (Portugal), 13 Dec. 2007, in force 1 Dec. 2009 [2012] OJ C 326/47, available at: http://eur-lex.europa.eu/ LexUriServ/LexUriServ.do?uri=OJ:C:2012:326:FULL:EN:PDF.

⁵⁷ Arts 4.1(a) and 12.1(a) UNFCCC; e.g. Art. 4.8 Paris Agreement.

⁵⁸ VCLT, n. 41 above, Art. 31.1.

⁵⁹ L. Rajamani, 'The 2015 Paris Agreement: Interplay between Hard, Soft and Non-Obligations' (2016) 28(2) Journal of Environmental Law, pp. 337–58, at 354.

⁶⁰ Cf. P. Lawrence & D. Wong, 'Soft Law in the Paris Climate Agreement: Strength or Weakness?' (2017) 26(3) Review of European, Comparative and International Environmental Law, pp. 276–86.

⁶¹ D. Bodansky, 'The Legal Character of the Paris Agreement' (2016) 25(2) Review of European, Comparative and International Environmental Law, pp. 142–50, at 146.

⁶² H. Winkler, 'Mitigation', in D. Klein et al., *The Paris Agreement on Climate Change: Analysis and Commentary* (Oxford University Press, 2017), pp. 141–65, at 147.

⁶³ Arts 4.13, 6.2, 9.5 and 13.9 Paris Agreement. See Rajamani, n. 59 above (according to whom all these provisions (including Art. 4.2, second sentence) create 'hard obligations').

3.2. The Nature of the Obligation

To understand the nature of the obligation created by the second sentence of Article 4.2 Paris Agreement it is useful to consider the distinction between obligations of result and obligations of conduct. The dichotomy has its origins in Roman law; at present it occupies a central place in the French law of obligations and appears to have influenced the drafting of a text of compromise under the French presidency of COP-21.⁶⁴

Lawyers from the civil law tradition understand an 'obligation of result' as the obligation to realize a specified performance.⁶⁵ The performance does not necessarily realize the ultimate purpose of the instrument creating the obligation; it may just represent a step that is likely to promote the ultimate purpose of the instrument. By contrast, an 'obligation of conduct' requires an endeavour towards the outcome that has been promised, which may be a specific objective or a general aspiration. A typical example of an obligation of conduct is the obligation of a medical doctor to take measures to cure her patients: she must try, but cannot reasonably be bound to succeed. To conclude that an obligation of result has been breached, a judge needs only to determine that the outcome that had been promised has not been achieved, and that extenuating circumstances do not apply. In contrast, the breach of an obligation of conduct may occur, for example, when a debtor has not acted in a manner that would be expected of a reasonable administrator in the specific circumstances, regardless of the ultimate outcome.⁶⁶

The wording of the second sentence of Article 4.2 means that it cannot be characterized as an obligation of result. Like the medical doctor, state parties are not obliged to achieve a particular outcome; a party would not breach its obligation based only on evidence that the mitigation objective of its NDC has not been realized. Rather, the wording of this provision indicates an obligation of conduct: the parties to the Paris Agreement must 'pursue measures' which, they have reasonable grounds to believe, will achieve its object.⁶⁷ 'Pursue' should be interpreted as requiring proactive conduct, consistently with other official versions of the Paris Agreement⁶⁸ – the French version ('*prennent des mesures*'), for example, implies that the parties are to 'take' measures, not just to envisage them.

⁶⁴ B. Mayer, 'Obligations of Conduct in the International Law on Climate Change Mitigation: A Defence' (2018 forthcoming) *Review of European, Comparative & International Environmental Law.*

⁶⁵ See, e.g., C. Thomas, 'La distinction des obligations de moyens et des obligations de résultat' (1937) 57 Revue critique de législation et de jurisprudence, p. 636–56; J. Belissent, Contribution à analyse de la distinction des obligations de moyens et des obligations de résultat: à propos de évolution des ordres de responsabilité civile (Librairie générale de droit et de jurisprudence (LGDJ), 2001).

⁶⁶ See, e.g., R. Demogue, *Traité des obligations en général* (Editions Rousseau, 1925), Vol. 5, p. 538; J. Carbonnier, *Droit civil* (Presses universitaires de France (PUF), 1955), pp. 2190–1; J. Combacau, 'Obligations de résultat et obligations de comportement: quelques questions et pas de réponse', in D. Bardonnet et al. (eds), *Mélanges offerts à Paul Reuter: le droit international: unité et diversité* (Pedone, 1981).

⁶⁷ The object of this obligation is discussed in the next subsection.

⁶⁸ The 6 original versions of the Paris Agreement are equally authentic, as provided in Art. 29 Paris Agreement. Consequently, this provision is to be interpreted in a way that is consistent with all of these versions, or else be given 'the meaning which best reconciles the texts, having regard to the object and purpose of the treaty': see VCLT, n. 41 above, Art. 33.

3.3. The Object of the Obligation

The object of this obligation of conduct is to 'achiev[e] the objectives' of successive NDCs.⁶⁹ 'Objectives' may be a source of confusion. Some NDCs merely define one or several overall targets,⁷⁰ while others also describe the measures that a party is considering in order to realize these targets.⁷¹ In the context of the Paris Agreement and in light of its object and purpose, NDCs essentially appear as a national contribution to the 'global response to the threat of climate change'.⁷² As these 'objectives' are to be pursued through 'mitigation measures', they do not include targets relating to adaptation, financial support, transfer of technology, capacity building, and transparency. Therefore, the 'objectives' of successive NDCs are to be interpreted primarily as the mitigation outcomes described or implied by these successive NDCs.

The specific measures of implementation envisaged in some NDCs do not constitute part of the 'objective' of NDCs: they are not part of the object of the obligation arising from the second sentence of Article 4.2. The exclusion of measures of implementation from the object of this obligation is consistent with the 'principle of sovereignty of States in international cooperation to address climate change', which suggests that the freedom of states to choose particular mitigation measures should be preserved inasmuch as it does not affect the party's overall contribution to global efforts.⁷³

Bodansky has suggested that the second sentence of Article 4.2 constitutes nothing more than an obligation 'to pursue [unspecific] measures in good faith'.⁷⁴ This is based on a reading of this sentence as if there were two distinct components – an obligation to pursue domestic measures and an aim to achieve the objectives of NDCs – separated by an impenetrable comma. However, despite the comma,⁷⁵ the sentence suggests that the objectives of NDCs are a benchmark for the stringency of the measures to be pursued.⁷⁶ The French original ('*prennent des mesures internes … en vue de réaliser les objectifs*') indicates more clearly than the convoluted English version that the measures must reasonably be viewed, at the time when they are taken, as capable of realizing the objective.⁷⁷ Therefore, in contrast to the open-ended obligation to 'implement ... programmes containing measures to mitigate climate

⁶⁹ Art. 4.2 Paris Agreement (second sentence).

⁷⁰ See, e.g., INDC of the EU, n. 27 above.

⁷¹ See, e.g., INDC of China, n. 29 above.

⁷² Art. 2.1 Paris Agreement.

⁷³ See 10th Preambular recital UNFCCC.

⁷⁴ D. Bodansky, 'The Paris Climate Change Agreement: A New Hope?' (2017) 110(2) American Journal of International Law, pp. 288–319, at 304.

⁷⁵ This comma is absent from two of the six original languages of the Paris Agreement: French and Arabic. On the value of the six official versions, see n. 68 above.

⁷⁶ Cf. C. Voigt, 'The Paris Agreement: What Is the Standard of Conduct for Parties?', *Questions of International Law*, Vol. 26, Mar. 2016, pp. 17–28, para. 20, available at: http://www.qil-qdi.org/paris-agreement-standard-conduct-parties (interpreting Art. 4.2 as requiring measures which are 'meaningful and, indeed, effective to function as a means to this end').

⁷⁷ 'Mesures en vue de' (literally 'measures in the view of', corresponding to 'measures, with the aim of') has typically been translated as 'measures to' or 'measures for': see, respectively, Gabčíkovo-Nagymaros Project (Hungary v. Slovakia), Judgment, 25 Sept. 1997, ICJ Reports 1997, p. 7, para. 25,

change' under the UNFCCC,⁷⁸ the Paris Agreement creates an obligation directed towards a specific objective: the objectives that the parties have defined in their respective NDCs.⁷⁹ The latter obligation of conduct, being more specific, is likely to be significantly more effective than the vague commitment under the UNFCCC.

3.4. Assessment

Commentaries on the Paris Agreement so far have largely seen the obligation of conduct arising from the second sentence of Article 4.2 as less stringent than an obligation of result. Rajamani and Brunnée, for example, note that 'since Parties do not have an obligation of result in relation to their NDCs, a party could fall short of its NDC without the consequences that attach to breaches of a legal obligation under the law of state responsibility'.⁸⁰ This would be the case, however, only if the party had fallen short of its national commitment on climate change mitigation despite having pursued or taken the measures which could have reasonably been expected of it. This hypothesis is possible but unlikely because the Paris Agreement authorizes the use of internationally transferred mitigation outcomes towards NDCs.⁸¹ If a state fails to reduce GHG emissions within its own territory, for example, as a result of rapid economic growth, it would probably still be able to 'buy' mitigation outcomes from other countries and thus fulfil its own mitigation commitment.

In contrast, a party to the Paris Agreement could breach its obligation of conduct by failing to take relevant measures even if its mitigation commitment had nevertheless been realized.⁸² Furthermore, the breach of an obligation of conduct could be demonstrated well before conclusive evidence regarding the achievement of the mitigation commitment becomes available, thus bridging the gap which allowed Canada to avoid a finding of non-compliance during the commitment period of the Kyoto Protocol.⁸³ There is, for example, a strong argument to suggest that the US is

and Sovereignty over Pedra Branca/Pulau Batu Puteh, Middle Rocks and South Ledge (Malaysia/ Singapore), Judgment, ICJ Reports 2008, p. 12, para. 147.

⁷⁸ See Art. 4.1(b) UNFCCC. See Bodansky, n. 61 above, p. 146; but see also D. Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary' (1993) 18(2) Yale Journal of International Law, pp. 451–558, at 516 (where a lack of such individual benchmark was flagged as the main limitation of national commitments).

⁷⁹ Unlike the affirmation of a goal in Art. 4.2(b) UNFCCC, the second sentence of Art. 4.2 Paris Agreement contains a clear obligation of conduct for the parties to pursue this aim. Cf. Bodansky, n. 61 above, p. 146.

⁸⁰ L. Rajamani & J. Brunnée, 'The Legality of Downgrading Nationally Determined Contributions under the Paris Agreement: Lessons from the US Disengagement' (2017) 29(3) *Journal of Environmental Law*, pp. 537–51, at 542. See also D. Bodansky, J. Brunnée & L. Rajamani, *International Climate Change Law* (Oxford University Press, 2017), p. 231 (noting that, although this provision establishes 'binding obligations, they are obligations of conduct rather than result'). Others considered that this provision simply did not establish any international law obligation: see, e.g., Lawrence & Wong, n. 60 above; Bodansky, n. 61 above.

⁸¹ Art. 6.2 and 6.4 Paris Agreement.

⁸² See, e.g., Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Judgment, 16 Dec. 2015, ICJ Reports 2015, p. 665, para. 156.

⁸³ See Kyoto Protocol Compliance Committee, Facilitative Branch, Report on the Meeting (22–23 Oct. 2012), CC/FB/12/2012/3, 9 Nov. 2012, available at: https://unfccc.int/files/kyoto_protocol/compliance/facilitative_branch/application/pdf/cc-fb-12-2012-3_report_on_the_meeting.pdf.

currently in breach of its obligation of conduct. The Trump administration has revoked most of the measures which had been taken for the purpose of realizing the US NDC, and no alternative steps have been taken.⁸⁴ This conclusion would remain unaffected if the efforts of non-state actors, or even subnational authorities, were able to achieve the objectives included in the US NDC,⁸⁵ as an obligation of conduct has generally been interpreted as requiring a chain of instructions originating from the competent national authorities.⁸⁶

In summary, the Paris Agreement imposes an obligation on its parties to take adequate measures towards the realization of the mitigation targets contained in their NDCs. This obligation is potentially demanding, depending on the level of ambition contained in each NDC. The obligation, however, is limited to the climate change mitigation targets themselves as opposed to the specific measures envisaged by some NDCs to implement these targets or the targets or measures regarding adaptation to climate change. As this is an obligation of conduct (an obligation to take relevant measures), the responsibility of a party to the Paris Agreement would not automatically be engaged based on the finding that the target was not achieved; but its responsibility could immediately be engaged for failure to take adequate steps towards achieving that target, regardless of whether the target was ultimately achieved.

4. LEGAL FORCE DERIVED FROM A UNILATERAL DECLARATION CAPABLE OF CREATING LEGAL OBLIGATIONS

This section seeks to demonstrate that legal obligations may arise from communications such as (I)NDCs independently of their endorsement in the Paris Agreement.⁸⁷ The first subsection provides a brief overview of the recognition of unilateral declarations as a source of law. The second subsection explores the possibility of characterizing some (I)NDCs and related declarations as instruments capable of creating legal obligations. Finally, the third subsection discusses the conditions, object and nature of the obligations that are most likely to arise from (I)NDCs and related declarations.

⁸⁴ See, e.g., N. Popovich, 'Trump's Executive Order Pushes the U.S. Climate Pledge Further Out of Reach', *The New York Times*, 28 Mar. 2017, available at: https://www.nytimes.com/interactive/ 2017/03/28/climate/trumps-executive-order-pushes-the-us-climate-pledge-further-out-of-reach.html.

⁸⁵ See the Letter of M.R. Bloomberg to the UN Secretary-General and Executive Secretary of the UNFCCC, Dec. 2017, available at https://www.americaspledgeonclimate.com/about.

⁸⁶ See, e.g., LaGrand (Germany v. United States of America), Judgment, ICJ Reports 2001, p. 466, para. 111; Difference relating to Immunity from Legal Process of a Special Rapporteur of the Commission on Human Rights, Advisory Opinion, ICJ Reports 1999, p. 62, para. 62.

⁸⁷ This question has largely been ignored in the climate law literature, which, instead, has focused on the Paris Agreement. For a rare exception see J.E. Viñuales, 'The Paris Climate Agreement: An Initial Examination (Part II of III)' *EJIL: Talk*, 8 Feb. 2016, available at: https://www.ejiltalk.org/the-paris-climate-agreement-an-initial-examination-part-ii-of-iii; H. Hellio, 'Les "contributions déterminées au niveau national", instrument au statut juridique en devenir' (2017) HS Revue juridique de l'environnement, pp. 33–48, at 33. See also B. Müller, W. Geldhof & T. Ruys, 'Unilateral Declarations: The Missing Legal Link in the Bali Action Plan', European Capacity Building Initiative Policy Report, May 2010, available at: https://www.law.kuleuven.be/iir/nl/onderzoek/opinies/ecbiUDsfinal.pdf.

4.1. Unilateral Declarations as a Source of Law

Along with treaties, customs and general principles,⁸⁸ unilateral declarations have long been recognized as a source of international law.⁸⁹ In the case regarding the Legal Status of Eastern Greenland, the Permanent Court of International Justice (PCII) held that international law obligations had arisen from a reply given by a Minister for Foreign Affairs to the representative of another state.⁹⁰ Similarly, in the Nuclear Tests case the ICI stated that it is 'well recognized that declarations made by way of unilateral acts ... may have the effect of creating legal obligations'.⁹¹ According to the 'principle of good faith', the ICI noted that 'interested States may take cognizance of unilateral declarations and place confidence in them, and are entitled to require that the obligations thus created be respected'.⁹² The ICJ insisted that 'to have legal effect, there was no need for [unilateral declarations] to be addressed to a particular State, nor was acceptance by any other State required'.⁹³ As the ICJ observed in a later case, unilateral declarations are an instrument of choice for states willing to enter into an obligation addressed not just towards one or several other states (as it could do through a treaty), but rather towards the international community as a whole.⁹⁴

The regime of unilateral declarations capable of creating international law obligations was clarified by a study carried out by the International Law Commission (ILC) from 1996 to 2006 and led by Víctor Rodríguez Cedeño. The 'Guiding Principles Applicable to Unilateral Declarations of States Capable of Creating Legal Obligations', which the ILC adopted in 2006, considered that unilateral declarations create legal obligations as follows:

• the declaration must be made by a competent state agent⁹⁵ and 'manifest ... the will to be bound',⁹⁶ as evidenced by the content of the declaration, its context and the reactions which followed;⁹⁷

⁹² Nuclear Tests, ibid., para. 46.

⁸⁸ ICJ Statute, n. 5 above, Art. 38.1.

⁸⁹ In addition to the references contained in the following notes, see generally P. Saganek, Unilateral Acts of States in Public International Law (Brill, 2016), Chs 10 and 11; E. Suy, Les actes juridiques unilatéraux en droit international public (LGDJ, 1962).

⁹⁰ Legal Status of Eastern Green/and (Denmark v. Norway), Judgment, (1933) PCIJ, Series A/E, No. 53, p. 71, para. 192.

⁹¹ Nuclear Tests (Australia v. France), ICJ Reports 1974, p. 253, para. 43. See also Case concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Judgment, 27 June 1986, ICJ Reports 1986, p. 132, para. 261, and Case concerning the Frontier Dispute (Burkina Faso v. Republic of Mali), ICJ Reports 1986, p. 573, para. 39.

⁹³ Ibid., para. 50.

⁹⁴ Case concerning the Frontier Dispute, n. 91 above, para. 40.

⁹⁵ 'Guiding Principles Applicable to Unilateral Declarations of States Capable of Creating Legal Obligations, with Commentaries Thereto', in *Yearbook of the International Law Commission*, 2006, Vol. II, Part Two, Principle 4.

⁹⁶ Ibid., Principle 1.

⁹⁷ Ibid., Principle 3. See generally Nuclear Tests, n. 91 above, para. 43; and Case concerning the Frontier Dispute, n. 91 above, para. 39.

- the declaration 'may be formulated orally or in writing',⁹⁸ but it must be 'stated in clear and specific terms';⁹⁹ and
- the declaration may 'be addressed to the international community as a whole, to one or several States or to other entities'.¹⁰⁰

4.2. (I)NDCs and Related Declarations as Unilateral Declarations Capable of Creating Legal Obligations

INDCs (for the parties to the UNFCCC not party to the Paris Agreement) and NDCs (upon ratification of the Paris Agreement) appear to meet most of the conditions under which unilateral declarations create international obligations. That (I)NDCs were adopted in the context of a treaty regime (under a decision of the COP to the UNFCCC and then under the Paris Agreement) is no hurdle: the ICJ has routinely recognized unilateral declarations as capable of creating legal obligations in relation to statements recognizing the Court's jurisdiction under Article 36 of its Statute.¹⁰¹ As is required for a unilateral declaration to be capable of creating legal obligations, (I)NDCs are made publicly and, presumably, by the competent national authority.

Similarly, considerable efforts have been made to ensure that INDCs are stated in clear and specific terms. The parties were repeatedly encouraged to communicate their (I)NDCs 'in a manner that facilitates the clarity, transparency and understanding of the intended contributions'.¹⁰² In particular, the COP suggested the inclusion of 'quantifiable information on the reference point ..., time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches'.¹⁰³ Such elements would ensure that the achievement of the mitigation objectives of (I)NDCs would be objectively verifiable. A synthesis report by the UNFCCC Secretariat notes that 'most Parties explicitly addressed the information elements' which the COP had requested with regard to mitigation action.¹⁰⁴ Even though many modalities remain to be defined through ongoing negotiations on the Paris Rulebook, the provisions of many (I)NDCs are phrased in terms that are sufficiently clear and specific to express a meaningful commitment. In contrast, the provisions of (I)NDCs with regard to adaptation or support are seldom stated in clear and specific terms.

⁹⁸ Guiding Principles, n. 95 above, Principle 5. See generally Case concerning the Temple of Preah Vihear (Cambodia v. Thailand), Preliminary Objections, Judgment, 26 May 1961, ICJ Reports 1961, p. 17, at 31; Nuclear Tests, n. 91 above, para. 45.

⁹⁹ Guiding Principles, n. 95 above, Principle 7. See also Nuclear Tests, n. 91 above, para. 43; Armed Activities on the Territory of the Congo (New Application: 2002) (Democratic Republic of the Congo v. Rwanda), Jurisdiction and Admissibility, Judgment, ICJ Reports 2006, p. 6, paras 50 and 52.

¹⁰⁰ Guiding Principles, n. 95 above, Principle 6. See also Nuclear Tests, n. 91 above, para. 50.

¹⁰¹ See, e.g., Fisheries Jurisdiction (Spain v. Canada), Jurisdiction of the Court, Judgment, ICJ Reports 1998, p. 432, para. 46; Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v. Nigeria), Preliminary Objections, Judgment, 11 June 1998, ICJ Reports 1998, p. 293, para. 30.

¹⁰² Decision 1/CP.19, n. 15 above, para. 2(b). See also Decision 1/CP.20, n. 15 above, paras 13–14; Decision 1/CP.21, n. 15 above, para. 13.

¹⁰³ Decision 1/CP.20, n. 15 above, para. 14; Decision 1/CP.21, n. 15 above, para. 27.

¹⁰⁴ UNFCCC Update Note, n. 21 above, para. 8.

The critical question is whether (I)NDCs manifest the will of the party to be bound. This question is not necessarily one which allows a one-size-fits-all response. The content of each declaration, its context and the reactions it produced must be taken into account, along with any other relevant circumstances, to determine whether a given (I)NDC is capable of creating legal obligations.¹⁰⁵ (I)NDCs vary substantially, not only with regard to their wording and content but also as to the context in which they were communicated. In many cases, the objectives of (I)NDCs were announced before their formal communication to the UNFCCC Secretariat, and reiterated subsequently, through a series of oral and written statements by top government officials.¹⁰⁶ Just like (I)NDCs, these related declarations may create obligations, notwithstanding their form, as long as they are publicly made in clear and specific terms.¹⁰⁷ Taken as a whole, these repeated statements form a context which may confirm, or possibly exclude, the will of the state to be bound.¹⁰⁸ While some states may have expressed strong objections to being bound by the contribution they communicated, ¹⁰⁹ others have not.¹¹⁰

In general terms, (I)NDCs seem, by their very nature, to involve a will to be bound. (I)NDCs are essentially an attempt to resolve a collective action problem: the parties recognize that every state is better off if all states cooperate to mitigate climate change.¹¹¹ The very reason for a state to communicate its (I)NDC to the UNFCCC Secretariat is to give others confidence that it will seek to implement the commitment on climate change mitigation contained in its (I)NDC, thus encouraging other states to take similar steps. If nothing else, good faith should demand that parties fulfil the promises they made through their (I)NDCs and upon which other parties relied to determine their own conduct.¹¹² Such would be most obviously the case when a state receives international support directly or indirectly that is intended to support its mitigation action in response to a conditional mitigation commitment contained in an (I)NDC.

¹⁰⁵ See Case concerning the Frontier Dispute, n. 91 above, para. 40; Armed Activities on the Territory of the Congo, n. 99 above, para. 53 ('to assess the intentions of the author of a unilateral act, account must be taken of all the circumstances in which the act occurred').

¹⁰⁶ For a prominent example, see The White House, Office of the Press Secretary, 'US-China Joint Announcement on Climate Change', Beijing (Peoples' Republic of China (PRC)), 12 Nov. 2014, available at: https://obamawhitehouse.archives.gov/the-press-office/2014/11/11/us-china-jointannouncement-climate-change. See also The White House, Office of the Press Secretary, 'Remarks by President Obama and President Xi Jinping in Joint Press Conference', Beijing (PRC), 12 Nov. 2014, available at: https://obamawhitehouse.archives.gov/the-press-office/2014/11/12/remarks-presidentobama-and-president-xi-jinping-joint-press-conference; and The White House, Office of the Press Secretary, 'Remarks by President Obama at G20 Press Conference', Brisbane, Qld (Australia), 16 Nov. 2014, available at: https://obamawhitehouse.archives.gov/the-press-office/2014/11/12/remarks-presidentsecretary, 'Remarks by President Obama at G20 Press Conference', Brisbane, Qld (Australia), 16 Nov. 2014, available at: https://obamawhitehouse.archives.gov/the-press-office/2014/11/16/remarkspresident-obama-g20-press-conference-november-16-2014.

¹⁰⁷ See nn. 95–100 above.

¹⁰⁸ See, by analogy, Nuclear Tests, n. 91 above, paras 36-41.

¹⁰⁹ Bodansky, n. 74 above, p. 304, note 102. See, e.g., 'Intended Nationally Determined Contribution of Turkmenistan in Accordance with Decision 1/CP. 20, UNFCCC', 30 Sep. 2015, p. 1, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Turkmenistan/1/ INDC_Turkmenistan.pdf.

¹¹⁰ See, e.g., Council of the European Union, 'Outcome of the Council Meeting: 3373rd Council Meeting, Environment', Document 6932/15, 6 Mar. 2015, p. 3, available at: https://www.consilium.europa.eu/ media/23403/st06932en15.pdf (committing to a 'binding EU target').

¹¹¹ See generally E.A. Posner & D.A. Weisbach, *Climate Change Justice* (Princeton University Press, 2010). ¹¹² See, by analogy, n. 92 above.

The global context in which the parties to the UNFCCC were invited to communicate their (I)NDCs provide some support for this view. Admittedly, the decisions of the COP to the UNFCCC to call upon parties to communicate their INDCs were 'without prejudice to the legal nature of the contributions'.¹¹³ However, this caveat appears to relate to the nature of the obligation (whether it is an obligation of result or an obligation of conduct) rather than to the very existence of an obligation: (I)NDCs were always framed as outcomes that parties intended to pursue or to achieve.¹¹⁴ In any case, 'without prejudice to' would not exclude the possibility of an individual party expressing an individual will to be bound. (I)NDCs were worded in various terms, with some clearly stating a 'commit[ment] to a binding target' (EU),¹¹⁵ or an 'intent[ion] to achieve' targets (US).¹¹⁶

Overall, the context of (I)NDCs includes the text of the Paris Agreement, which was adopted by a consensus of all UNFCCC parties.¹¹⁷ Article 4.2 of the Paris Agreement, in its first sentence, calls upon each party to prepare, communicate and maintain the successive NDCs 'that it intends to achieve'. As Rajamani justly notes, this provision does not create any substantive obligation with regard to achieving the NDCs.¹¹⁸ Rather, this provision reflects a common understanding of the nature of (I)NDCs as declarations of what parties *intend to achieve*.

The ICJ concluded, in the *Nuclear Tests* case, that an intention to be bound was implied by a public communication of an 'intention to achieve' an outcome, particularly given that this communication was made with full knowledge that other states were interested in the outcome. In that case the French government had 'made public its *intention to cease* the conduct of atmospheric nuclear tests',¹¹⁹ without explicitly declaring an intention to be bound by this declaration. The ICJ held that, as a result of a statement expressing 'its intention effectively to terminate these tests', France 'was bound to assume that other States might take note of these statements and rely on their being effective'.¹²⁰ The Court concluded that, through a series of unilateral declarations of its 'intent', France had undertaken an obligation to cease its nuclear tests.¹²¹ By analogy, the communication of mitigation outcomes, and the confirmation of an intention to achieve these contributions through the adoption by

121 Ibid.

¹¹³ Decision 1/CP.19, n. 15 above, para. 2(c); see also Decision 1/CP.20, n. 15, para. 8.

¹¹⁴ Decision 1/CP.19, n. 15 above, para. 2(b); Decision 1/CP.20, n. 15 above, paras 8–9, 14, 16(a); Decision 1/CP.21, n. 15 above, para. 27.

¹¹⁵ INDC of the EU, n. 27 above, p. 1 ('committed to a binding target'). This position was reiterated, for instance, in the 'Council Conclusions on the Paris Agreement and Preparations for the UNFCCC Meetings', 13 Oct. 2017, para. 8, available at: http://data.consilium.europa.eu/doc/document/ ST-13198-2017-INIT/en/pdf.

¹¹⁶ INDC of the US, n. 28 above, p. 1 ('intends to achieve'). See also 'Israel's Intended Nationally Determined Contribution', 29 Sept. 2015, p. 1, available at: http://www4.unfccc.int/Submissions/ INDC/Published%20Documents/Israel/1/Israel%20INDC.pdf (distinguishing between a target that it 'intends to achieve' by 2030 and an interim target 'expected' by 2025).

¹¹⁷ See Decision 1/CP.21, n. 15 above.

¹¹⁸ Rajamani, n. 59 above, p. 354.

¹¹⁹ Nuclear Tests, n. 91 above, para. 41.

¹²⁰ Ibid.

consensus of the text of the Paris Agreement, strongly suggest a will of the parties to be bound by their (I)NDCs.

Unilateral declarations are generally interpreted restrictively,¹²² as it is not the case that everything said on behalf of a state is meant to create an obligation. However, other factors militate in favour of a broader interpretation of (I)NDCs. Many states recognize, albeit often implicitly, that their (I)NDCs reflect something more than a purely voluntary action, for example, by referring to the party's 'international responsibility'¹²³ as a basis for determining its action on climate change mitigation. All parties were invited to provide information on 'how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2'.¹²⁴ Many states insist that their commitment represents their fair share of necessary global efforts.¹²⁵

These statements allude to the fact that (I)NDCs do not take place in a legal vacuum: states already have an obligation to prevent activities within their jurisdictions that may cause transboundary damage¹²⁶ and an obligation to mitigate climate change.¹²⁷ (I)NDCs communicate each party's vision of what they consider to be the fair way of implementing these obligations. Inasmuch as (I)NDCs confirm and implement states' pre-existing obligations under the UNFCCC and under general international law – in particular, the no-harm principle – they should be subject to a more extensive interpretation.¹²⁸

4.3. Obligations Possibly Arising from (I)NDCs

Just as within a treaty, a distinction needs to be made between those provisions of a unilateral declaration which actually create legal obligations and those provisions which do not. To determine whether a provision creates an obligation, regard must be had to the content of the provision as well as its context. For example, the sections of (I)NDCs that describe national circumstances or recount the steps that a state has already taken do not create any obligations.¹²⁹

¹²² Guiding Principles, n. 95 above, Principle 7. See also Nuclear Tests, n. 91 above, para. 51; Armed Activities on the Territory of the Congo, n. 99 above, paras 50 and 52.

¹²³ INDC of China, n. 29 above, p. 5. See also, e.g., Republic of the Philippines, 'Intended Nationally Determined Contributions', 1 Oct. 2015, p. 1, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf ('recognizes its responsibility to contribute its fair share in global climate action') (INDC of the Philippines).

¹²⁴ Decision 1/CP.20, n. 15 above, para. 14.

¹²⁵ INDC of the US, n. 28 above, p. 1.

 ¹²⁶ See, e.g., Rio Declaration on Environment and Development, adopted by the UN Conference on Environment and Development, Rio de Janeiro (Brazil), 3–14 June 1992, UN Doc. A/CONF.151/26/Rev.1 (Vol. I), 14 June 1992, Principle 2, available at: http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm; and generally B. Mayer, 'The Relevance of the No-Harm Principle to Climate Change Law and Politics' (2016) 19(1) Asia Pacific Journal of Environmental Law, pp. 79–104.
¹²⁷ Sex in particular Art 41(k) and 42(k) UNECCC.

¹²⁷ See, in particular, Art. 4.1(b) and 4.2(a) UNFCCC.

¹²⁸ On a construction of the UNFCCC regime as a collective effort to promote compliance with the no-harm principle, see Mayer, n. 49 above.

¹²⁹ See, e.g., INDC of China, n. 29 above.

In general, it is in relation to mitigation targets that (I)NDCs are most likely to create obligations. Most INDCs contain a clear and specific statement of a mitigation target.¹³⁰ These targets are prepared and communicated for other states to rely on in determining their own conduct. An instrumental consideration leading to a state's preparation and communication of its (I)NDCs is the contribution that it will make in persuading other states to implement action on climate change mitigation. To paraphrase the ICJ in the *Nuclear Tests* case, a state communicating a clear and specific mitigation commitment publicly, in whichever form, is 'bound to assume that other States might take note of these statements and rely on their being effective'.¹³¹

Other provisions of (I)NDCs are, by nature, less likely to be relied on by other states. In particular, while many (I)NDCs identify and describe the measures envisaged in order to achieve a mitigation target, sometimes in clear and specific terms, these measures appear to be included as a show of good faith and as a way to build confidence in the ability of a state to achieve its target. Whether a state pursues its target through a market-based mechanism, a carbon tax or more traditional command-and-control policies, for instance, does not generally have a direct impact on the interests of third states. Some states have explicitly stated that their INDC could not 'bind [them] to any sector specific mitigation obligation or action', ¹³² thus confirming that these measures were not intended to create obligations, but also implying that others were.

Likewise, the statement of an objective on climate change adaptation is generally of little relevance to third states, as the success of adaptation action in one country is typically unrelated to adaptation action in other countries. Obligations could conceivably arise where adaptation goals have intended transboundary benefits, for example, with regard to the preservation of a transboundary water body or the protection of transnational ecosystems. Even then the provision would need to be expressed in clear and specific terms in order to reflect an intention to create an obligation. Provisions on adaptation and, even where they do, are usually written in vague and aspirational terms.¹³³ Some parties have clearly excluded the possibility that the adaptation component of their INDC could create international law obligations (thus also confirming that other parts of the declaration could create such obligations).¹³⁴

¹³⁰ See n. 102 above and accompanying text.

¹³¹ See n. 120 above.

¹³² INDC of India, n. 31 above, p. 30.

¹³³ See, e.g., Lao People's Democratic Republic, 'Intended Nationally Determined Contribution', 30 Sept. 2015, p.3, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Laos/1/Lao%20PDR%20INDC.pdf. For other non-specific adaptation targets see, e.g., INDC of China, n. 29 above, p. 5 (end of section I); Ministry of Environment and Forest of the Government of the People's Republic of Bangladesh, 'Intended Nationally Determined Contributions', 25 Sept. 2015, p. 10 (section 3.2), available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Bangladesh/1/INDC_2015_of_Bangladesh.pdf; INDC of the Philippines, n. 123, above, pp. 4–5; INDC of India, n. 31 above, pp. 19–20.

¹³⁴ See 'Zambia's Intended Nationally Determined Contribution (INDC) to the 2015 Agreement on Climate Change', 29 Sept. 2015, p. 7, available at: http://www4.unfccc.int/Submissions/INDC/Published

International support is an area where clear and specific provisions could readily be included to create international obligations for high-income countries to promote mitigation action in developing countries. So far, however, potential donor states have been reluctant to include any clear or specific provisions on financial assistance, transfer of technology or capacity building in their (I)NDCs. Some have avoided entirely any mention of support in their INDC (such as the EU and the US¹³⁵), while others (such as Japan)¹³⁶ have included only very vague provisions. As NDCs are adjusted and updated, however, political trade-offs could soon result in a clearer commitment by donor states to provide support to developing countries that engage in mitigation action.

Furthermore, obligations may arise from (I)NDCs in relation to the modalities of implementation of climate action, whether related to mitigation, adaptation or support. For example, Macedonia's INDC contains a clear commitment ('shall') to exclude the construction of any nuclear power plant.¹³⁷ Brazil's INDC expresses the commitment of the Government of Brazil 'to implementing its INDC with full respect to human rights, in particular rights of vulnerable communities, indigenous populations, traditional communities and workers in sectors affected by relevant policies and plans, while promoting gender-responsive measures'.¹³⁸ While such commitments are unlikely to be invoked in interstate disputes, given that they relate to internal issues, obligations under international human rights law or international environmental law could arguably be raised before domestic jurisdictions.¹³⁹

The obligations that arise from (I)NDCs – most often in relation to mitigation targets – are frequently conditional. For example, Australia pledged a mitigation commitment '[u]nder a Paris Agreement applicable to all'.¹⁴⁰ Even though Australia also stated that its INDC was 'unconditional',¹⁴¹ it seemingly assumed that no obligation would arise without the adoption of a 'Paris Agreement applicable to all'.

¹³⁹ See, by analogy, Asghar Leghari v. Federation of Pakistan (W.P. No. 25501/2015), Lahore High Court Green Bench, Orders of 4 and 14 Sept. 2015.

^{%20}Documents/Zambia/1/FINAL+ZAMBIA'S+INDC_1.pdf (noting that the adaptation component of its INDC 'does not constitute an international obligation').

¹³⁵ INDC of the EU, n. 27 above; INDC of the US, n. 28 above.

¹³⁶ 'Submission of Japan's Intended Nationally Determined Contribution (INDC)', 17 July 2015, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Japan/1/20150717_Japan's% 20INDC.pdf (INDC of Japan).

¹³⁷ 'Submission by the Republic of Macedonia: Intended Nationally Determined Contributions', 4 Aug. 2015, p. 3, available at: http://www4.unfccc.int/submissions/INDC/Published%20Documents/ The%20former%20Yugoslav%20Republic%20of%20Macedonia/Submission_Republic_of_Macedonia_20150805144001_135181.pdf.

¹³⁸ Federative Republic of Brazil, 'Intended Nationally Determined Contribution towards Achieving the Objective of the United Nations Framework Convention on Climate Change', 28 Sept. 2015, p. 1, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Brazil/1/BRAZIL% 20iNDC%20english%20FINAL.pdf.

¹⁴⁰ 'Australia's Intended Nationally Determined Contribution to a New Climate Change Agreement', 11 Aug. 2015, p. 1, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/ Australia/1/Australias%20Intended%20Nationally%20Determined%20Contribution%20to%20a% 20new%20Climate%20Change%20Agreement%20-%20August%202015.pdf (INDC of Australia). See also 'South Africa's Intended Nationally Determined Contribution (INDC)', 25 Sept. 2015, p. 3, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/South%20Africa/1/ South%20Africa.pdf (INDC of South Africa).

¹⁴¹ INDC of Australia, ibid., p. 1.

Other INDCs may be deemed to have implied a similar condition based on the context in which they were adopted – the communication of an *intended* contribution under a forthcoming agreement. Yet, some parties decided to implement their target notwithstanding the adoption of a new agreement. Such is arguably the case of the EU, which started implementing its 'binding target' even before the adoption of the Paris Agreement.¹⁴² Likewise, in the brief period of doubt which followed US President Trump's decision to withdraw from the Paris Agreement, the Indian government confirmed unequivocally that it would implement the mitigation commitment contained in its NDC with or without the Paris Agreement.¹⁴³ Moreover, the (I)NDCs of some developing countries associate conditions of international support with the realization of their mitigation commitment, ¹⁴⁴ while others include two alternative mitigation commitments, with or without international support.¹⁴⁵ By contrast, some of the INDCs of developed countries assume that the agreement would allow for the international transfer of mitigation outcomes.¹⁴⁶

The obligations arising from (I)NDCs also vary with regard to their nature. INDCs were communicated, as noted above, 'without prejudice to the legal nature of the contributions',¹⁴⁷ because of the lack of consensus on whether parties would commit to a form of conduct or to a result.¹⁴⁸ The obligation contained in the Paris Agreement in relation to the implementation of NDCs is an obligation of conduct.¹⁴⁹ Yet, some (I)NDCs, including that of the EU, seem to indicate an obligation of result.¹⁵⁰ Others contrasted an obligation of conduct with an obligation of result: China and the US both committed 'to achieve' an outcome (obligation of result) and 'to make best efforts' towards a higher outcome (obligation of conduct).¹⁵¹ When read in the context of the Paris Agreement, these provisions are qualified by the terms of Article 4.2, second sentence, thus excluding any obligation of result. Yet, inasmuch as these INDCs constitute unilateral declarations capable of creating legal obligations, they also commit these parties to an obligation of result.¹⁵²

¹⁴² See 'Conclusions of the European Council', EUCO 169/14, 23–24 Oct. 2014, paras 1–6, available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf.

¹⁴³ See the statements reported in A. Vishnoi & D.R. Chaudhury, 'Dismissing Donald Trump's Snarl, India Vows To Stay on the Green Path' *The Economic Times*, 3 June 2017, available at: https://economictimes.indiatimes.com/news/politics-and-nation/dismissing-donald-trumps-snarl-indiavows-to-stay-on-the-green-path/articleshow/58969162.cms.

¹⁴⁴ See, e.g., INDC of South Africa, n. 140 above, p. 7.

¹⁴⁵ See, e.g., Republic of Indonesia, 'Intended Nationally Determined Contribution', 24 Sept. 2015, pp. 5–6, available at: http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Indonesia/ 1/INDC_REPUBLIC%200F%20INDONESIA.pdf.

¹⁴⁶ See, e.g., INDC of Japan, n. 136 above, p. 4, available at: http://www4.unfccc.int/Submissions/INDC/ Published%20Documents/Japan/1/20150717_Japan's%20INDC.pdf.

¹⁴⁷ Decision 1/CP.19, n. 15 above, para. 2(c); see also Decision 1/CP.20, n. 15 above, para. 8.

¹⁴⁸ See n. 113 above and accompanying text.

¹⁴⁹ Art. 4.2 Paris Agreement (second sentence). See Section 3.3 above.

¹⁵⁰ INDC of the EU, n. 27 above, p. 1 (stating that the EU and its Member States are 'committed to a binding target ... to be fulfilled jointly' – language which suggests an obligation of conduct).

¹⁵¹ INDC of the US, n. 28 above, p. 3; INDC of China, n. 29 above, p. 5.

¹⁵² China and the US could have amended their INDC when ratifying the Paris Agreement, but neither of them did.

5. IMPLICATIONS OF THE 'DOUBLE-BINDINGNESS' OF NDCs

The two previous sections identified substantive international law obligations relating to NDCs which arise from two different sources – respectively, the second sentence of Article 4.2 of the Paris Agreement and the NDCs themselves as unilateral declarations capable of creating legal obligations. As these obligations generally call upon states to pursue the same objectives, they are extremely unlikely to conflict.¹⁵³ Therefore, these obligations arising from different sources in connection with the same NDC. These two obligations remain distinct, however, because they have different implications. Obligations arising from the Paris Agreement may exist when no obligation arises from unilateral declarations, or extend beyond the latter, and vice versa. The following section illustrates the implications of the 'double-bindingness' of NDCs in four particular respects – namely, with regard to the subject, the object, the nature, and the beneficiaries of the obligations arising from these two sources.

Firstly, obligations arising from different sources may be imposed on different subjects. As a treaty, the Paris Agreement creates obligations applicable to its parties, which are the 'States and regional economic integration organizations that are Parties to the [UNFCCC]'.¹⁵⁴ A state cannot be a party to the UNFCCC unless it is a member of the UN or any of its specialized agencies or a party to the Statute of the ICJ.¹⁵⁵ By contrast, it is largely recognized that 'any State possesses capacity to undertake obligations through unilateral declarations'.¹⁵⁶ Beyond states, there appears to be no reason why other entities that can enter into a treaty, such as international organizations or even some subnational entities, would not also be able to undertake international law obligations through unilateral obligations within their domain of competence.¹⁵⁷

Therefore, states and entities with legal personality under international law could bind themselves by a unilateral declaration analogous to an NDC, even if they are not or could not become party to the UNFCCC. As such, Taiwan – which a few countries recognize as a state and others see as a seditious province of the People's Republic of China – has communicated an 'Intended Nationally Determined Contribution'.¹⁵⁸

¹⁵³ 'Conclusions of the Work of the Study Group on the Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law', in Yearbook of the International Law Commission, 2006, Vol. II, Part Two, para. 2 (according to which a conflict arises between two norms when the norms 'point to incompatible decisions so that a choice must be made between them'). There exists a strong presumption against such conflict, according to the 'principle of harmonization': ibid., para. 4.

¹⁵⁴ Art. 20 Paris Agreement.

¹⁵⁵ Art. 20 UNFCCC.

¹⁵⁶ Guiding Principles, n. 95 above, para. 2.

¹⁵⁷ See J. Dehaussy, 'Les actes juridiques unilatéraux en droit international public: à propos d'une théorie restrictive' (1965) 92 Journal de droit international, pp. 41–66, at 52–3. See generally P. Daillier & A. Pellet, Droit international public, 7th edn (LGDJ, 2002), pp. 367ff. See also, by analogy, VCLT, n. 41 above, Art. 5; ILC, 'Draft Articles on the Responsibility of International Organizations, with Commentaries', in Yearbook of the International Law Commission, 2011, Vol. II, Part Two.

¹⁵⁸ 'Submission by Republic of China (Taiwan): Intended Nationally Determined Contribution', available at: https://enews.epa.gov.tw/enews/enews_ftp/104/1117/174044/Submission%20by%20Republic% 200f%20China%20(Taiwan)Intended%20Nationally%20Determined%20Contribution.pdf.

In this document, Taiwan announced that it would 'implement an economy-wide target' to reduce its GHG emissions by half from a business-as-usual level by 2030.¹⁵⁹ Other territorial entities have made similar declarations.¹⁶⁰ This includes self-governing subnational entities, such as the Hong Kong Special Administrative Region, which can enter into international agreements in some domains.¹⁶¹ Provided that they are made by an authority vested with the power to do so and express a will to be bound, declarations from these non-state entities could also create international obligations. This may include subnational entities which are not self-governing but which have, in particular circumstances, been recognized as having the competence to conduct international relations.¹⁶²

Secondly, the obligations which arise from the Paris Agreement and from unilateral declarations may have a different object. As noted above, Article 4.2, second sentence, of the Paris Agreement creates an obligation limited to the mitigation objective contained in each NDC. This excludes specific measures of implementation as well as action on adaptation or international support.¹⁶³ On the other hand, unilateral declarations may touch on virtually any conduct, even though a state or entity is more likely to undertake international obligations which are of interest to third parties. Some (I)NDCs and related declarations appear to create obligations with regard to mitigation targets,¹⁶⁴ while others could soon create obligations to provide financial support, capacity building or transfer of technology, or to cooperate on plans, programmes or policies to address transboundary impacts of climate change. In ongoing negotiations in the coming years, NDCs may be a useful vehicle through which developed states could bind themselves to a commitment to provide predictable international support for climate change mitigation in developing countries in exchange for an increased commitment to climate change mitigation in these countries. Unilateral declarations would have the advantage of bypassing the lengthy and arduous processes associated with the negotiation and adoption of a treaty or its amendment. Politically, it may also be a way for the executive branch to bypass the ratification of a treaty by the legislature.¹⁶⁵

Thirdly, the obligations that arise from these two sources may differ in nature. Article 4.2, second sentence, of the Paris Agreement creates an obligation of

¹⁶⁴ See Section 4.3 above.

¹⁵⁹ Ibid., p. 1.

¹⁶⁰ See generally the various commitments gathered in the Non-State Actor Zone for Climate Action, available at: http://climateaction.unfccc.int.

¹⁶¹ See, e.g., Z. Sun, 'International Legal Personality of the Hong Kong Special Administrative Region' (2008) 7(2) *Chinese Journal of International Law*, pp. 339–52. See also B. Mayer, 'Climate Change Mitigation in the Hong Kong Special Administrative Region' (2017) 7(2–3) *Climate Law*, pp. 65–96.

¹⁶² See, in particular, Conseil d'État (France), Assembly, 15 Oct. 1993, No. 144590, Receuil Lebon, p. 238, available at: https://www.legifrance.gouv.fr/affichJuriAdmin.do?idTexte=CETATEXT000007835398 (recognizing a unilateral declaration by the state of Texas that a defendant would not be subjected to capital punishment as a basis to allow for his extradition).

¹⁶³ See Section 3.3 above.

¹⁶⁵ This may raise questions of constitutional law within the domestic legal order. Yet, the validity of a unilateral declaration could be questioned only if the authority was manifestly incompetent: see Guiding Principles, n. 95 above, Principle 4; and, by analogy, VCLT, n. 41 above, Art. 46.

conduct.¹⁶⁶ By contrast, some unilateral declarations express or, in their context, imply a promise to achieve a target – that is, an obligation of result.¹⁶⁷ This discrepancy occurs as a result of differences in negotiating positions: while the EU argued for an obligation of result, the US opposed the inclusion in the Paris Agreement of any provision that would require a more stringent ratification process. The compromise involved not only the creation of an obligation of conduct under the Paris Agreement (Article 4.2, second sentence) but also an allusion to an 'intent[ion] to achieve' NDCs (Article 4.2, first sentence), thus implying that an obligation of result could arise from these unilateral declarations. Following the adoption of the Paris Agreement, the EU, the US, and China all tacitly confirmed their commitment to the obligation of result, which appears to arise from their INDC by ratifying the Paris Agreement without communicating a different NDC.¹⁶⁸

Fourthly and finally, the obligations that arise from these two sources are arguably addressed to different beneficiaries. On the one hand, treaties like the Paris Agreement are essentially transactions between states. States make commitments to other parties to the treaty (*erga omnes partes*), but they do not normally confer rights on third parties.¹⁶⁹ Treaty provisions expressing an obligation owed to the international community as a whole generally reflect pre-existing obligations under customary international law.¹⁷⁰ On the other hand, unilateral declarations such as (I)NDCs are not directed towards any particular state. They are made to the international community as a whole (*erga omnes*), which includes, but is not necessarily limited to, states. Therefore, unilateral declarations can be invoked by states not parties to the relevant treaty. They may also create obligations owed towards non-state actors perhaps more readily than treaties do.¹⁷¹ Individuals, groups and societies within a state and abroad have a stronger basis for calling on states to comply with such obligations because they arguably are intended to benefit all.

Beyond these general observations on the subject, object, nature and beneficiaries of obligations, the double-bindingness of NDCs may have other implications that will unfold in concrete cases. For example, the preceding observations regarding the beneficiaries of the obligations may be of particular relevance in the context of domestic litigation. In countries that do not follow an entirely monist tradition, the particular source of an international law obligation may influence its applicability before domestic courts.¹⁷² A domestic court might recognize the direct applicability

¹⁶⁶ See Section 3.2 above.

¹⁶⁷ See Section 4.2 above, in particular nn. 113 and 114.

¹⁶⁸ See Decision 1/CP.21, n. 15 above, para. 22 (in effect permitting any state or entity having communicated an INDC to revise it and submit a different NDC when ratifying the Paris Agreement).

¹⁶⁹ See VCLT, n. 41 above, Art. 36.

¹⁷⁰ See, e.g., Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, Advisory Opinion, ICJ Reports 1951, p. 15, at 23. See, however, Barcelona Traction, Light and Power Company Ltd, Judgment, ICJ Reports 1970, p. 3, para. 34 (which notes, as an obiter dictum, that some obligations erga omnes 'are conferred by international instruments of a universal or quasi-universal character').

¹⁷¹ See, e.g., Dehaussy, n. 157 above, pp. 57 et passim.

¹⁷² P.M. Dupuy, 'International Law and Domestic (Municipal) Law', in Max Planck Encyclopedia of Public International Law (Oxford University Press, 2011).

of the obligations arising under an NDC or related declarations even when it is not ready to admit the direct applicability of the obligation contained in the second sentence of Article 4.2 of the Paris Agreement.

In addition, the conditions for a party to withdraw from the Paris Agreement may differ from the conditions that apply to revocation of a unilateral declaration.¹⁷³ Absent specific provisions in the declaration, the rule is that a unilateral declaration cannot be revoked in an arbitrary manner.¹⁷⁴ Courts have generally required notice of withdrawal within 'a reasonable time'.¹⁷⁵ Read in the context of general international law – in particular, the no-harm principle¹⁷⁶ and the emerging notion of non-regression¹⁷⁷ – the time-bound mitigation commitments that the party presented as its 'fair' share of global efforts should arguably be construed as excluding revocation on any ground short of a fundamental change of circumstances.

Likewise, debates on the possibility of downgrading an NDC should relate not only to the framework provided by the Paris Agreement but also to the conditions for amending or, more likely, revoking a unilateral declaration. While several authors have convincingly argued that the Paris Agreement does not allow parties to downgrade an NDC,¹⁷⁸ this may not prevent a state from withdrawing from the Paris Agreement and immediately re-acceding to it with a different NDC. However, such indirect downgrading would be prohibited inasmuch as it involves an arbitrary revocation of an NDC.

6. CONCLUSION

Distinct obligations may arise under NDCs in two different ways: either through a treaty provision – namely the second sentence of Article 4.2 of the Paris Agreement – or under NDCs themselves, as unilateral declarations, along with related declarations. Obligations arising from these two sources may coexist without conflicting as they pursue the same objectives, but they do so without merging as they often differ as to their subject, object, nature and beneficiaries. Consideration for the double-bindingness of NDCs should be central to the interpretation of international law obligations on climate change mitigation.

¹⁷³ Art. 28 Paris Agreement.

¹⁷⁴ Guiding Principles, n. 95 above, Principle 10. See also, by analogy, VCLT, n. 41 above, Art. 56.1 (which excludes revocation in the absence of explicit or implied provision). See generally V.R. Cedeño & M.I. Torres Cazorla, 'Unilateral Acts of States in International Law', in *Max Planck Encyclopedia of Public International Law* (Oxford University Press, 2017), para. 31.

¹⁷⁵ Case concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Jurisdiction and Admissibility, Judgment, 26 Nov. 1984, ICJ Reports 1984, p. 392, para. 63. See also African Court of Human and Peoples' Rights, In the Matter of Ingabire Victoire Umuhoza v. Republic of Rwanda, Application 003/2014, Ruling on Jurisdiction, para. 66.

¹⁷⁶ See discussion and reference at n. 128 above.

¹⁷⁷ See International Union for the Conservation of Nature (IUCN), World Declaration on the Environmental Rule of Law (adopted by the IUCN World Congress on Environmental Law, 26–29 Apr. 2016), Principle 12, available at: https://www.iucn.org/sites/dev/files/content/documents/world_declaration_on_the_environmental_rule_of_law_final_2017-3-17.pdf.

¹⁷⁸ See, e.g., Rajamani & Brunnée, n. 80 above; J. Church, 'Why the US Can't Downgrade Its Paris Pledge for Political Convenience', *ClientEarth*, 12 May 2017, available at: https://www.clientearth.org/whythe-us-cannot-downgrade-its-paris-climate-pledge-for-the-sake-of-political-convenience.

More generally, this analysis highlights a source of international law which, so far, has been given scant attention in the literature on the international law on climate change. The adoption of the Paris Agreement has justly been saluted as a milestone in the development of the field. Yet, the adoption of unilateral declarations by virtually every state, often in a way that strongly suggests a will to be bound by an international obligation, is no less significant an event. Bypassing (temporarily at least) the hurdles of international negotiations and domestic lawmaking, unilateral declarations are an alternative tool through which states may increase their ambition to address climate change mitigation – and be held to achieve it.

Finally, this analysis begs more questions than it answers. To what extent do (I)NDCs and related declarations recognize pre-existing legal obligations (for example, under general international law or under the UNFCCC), rather than create new obligations? What links, if any, exist between the obligations arising from NDCs as unilateral declarations and the diverse mechanisms and institutions established under the UNFCCC regime to foster transparency and compliance? What are the limitations of the constitutional power of the executive branch to make unilateral declarations binding the state beyond the term of a particular government? These and many related questions are beyond the scope of this article and call for further research focused not on the Paris Agreement as a treaty but on the widening array of unilateral declarations capable of creating legal obligations on climate change.