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The United Nations’ Convention on Biological Diversity (1992) (CBD) has become the focal point for the regulation of traditional knowledge (TK) held by indigenous and local communities (ILCs). The legally binding CBD is bolstered by a supplementary, non-binding agreement, The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (2010) (Nagoya Protocol). Both instruments create the conditions for the access and benefit-sharing (ABS) of genetic resources, and for TK associated with those resources. There has been no consideration as to how TK might factor into virus ABS arrangements. Most of the literature on these issues relates to how the TK provisions of the CBD and Nagoya Protocol should be implemented; there is little guidance as to how to interpret the text itself. This article provides a textual analysis of all provisions of the CBD and Nagoya Protocol that relate to TK and the interests of ILCs. The analysis clarifies the differences in scope between the two instruments and will provide some insights as to how to interpret key terms, particularly “indigenous and local communities,” “traditional knowledge” and “traditional knowledge associated with genetic resources.” This is critical to understanding the obligations that apply to accessing virus samples that are regulated as genetic resources under the CBD.

Keywords: virus; access and benefit-sharing; traditional knowledge; Convention on Biological Diversity; Nagoya Protocol

I. INTRODUCTION

Viruses and viroids are subject to access and benefit-sharing (ABS) obligations as genetic resources under the Convention on Biological Diversity (CBD). This includes viruses isolated from animals and plants, environmental surveys and human clinical specimens, but probably does not include H5N1 influenza viruses and other influenza viruses with human pandemic potential that are covered by the World Health Organization’s Pandemic Influenza Preparedness Framework for the Sharing of Influenza Viruses and Access to Vaccines and Other Benefits, adopted in 2011.1 While there is a growing recognition that

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1 See M F Rourke, “Viruses for Sale – All Viruses Are Subject to Access and Benefit Sharing Obligations under the Convention on Biological Diversity” (2017) 39 European Intellectual Property Review 77.
viruses are regulated under the CBD’s ABS regime, little consideration has been given to how the CBD’s provisions, particularly those that deal with traditional knowledge (TK), apply specifically to viruses. The CBD outlines three objectives: “[1.] the conservation of biological diversity, [2.] the sustainable use of its components and [3.] the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.” The CBD explicitly affirms “the sovereign right of States over their genetic resources” and establishes that “the authority to determine access to genetic resources rests with the national governments [of Contracting Parties] and is subject to national legislation”. Importantly, this sovereignty is “in accordance with the Charter of the United Nations and the principles of international law”. Article 15 of the CBD provides that sovereign states have the authority to determine what genetic resources attract ABS regulation and the terms and conditions of ABS within their national jurisdiction. According to the CBD, access to genetic resources cannot be unreasonably restricted, must be on mutually agreed terms (MAT) and subject to prior informed consent (PIC). The CBD defines “genetic resources” as “genetic material of actual or potential value”, and further defines “genetic material” to mean “any material of plant, animal, microbial or other origin”, excluding human genetic material.

As a significant development in international law the CBD also addressed TK. Indeed, the CBD “has emerged as the primary instrument for indigenous and local communities to express their interests and demands for the protection of their traditional knowledge in biological resources”. The context behind the inclusion of TK provisions in the CBD during the negotiations that concluded with the adoption of the final text at the Rio Earth Summit in 1992 was broad in scope and highly contentious. Decolonisation and the North-South divide were key themes and there was a push by the biodiverse countries of South to end the exploitation of their biological resources by developed countries of the North. This process of exploitation, referred to by countries of the South as “biocolonialism”, disproportionately affects indigenous and local communities (ILCs) in the South. Prior to the developments in international law that were codified in the CBD, biological resources were seen as the “common heritage of humankind”, and the TK associated with those resources was “considered to be

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4 CBD Art 15(1).

5 CBD Art 3.

6 CBD Art 15(2).

7 CBD Art 15(4).

8 CBD Art 15(5).

9 CBD Art 2.

10 CBD Art 2.


12 CBD Arts 8(j), 10(c).


15 Panjabi, n 14, 137.


part of anthropological studies and the public domain”. The CBD confirmed that biological resources were the sovereign domain of the countries from which they originated and was the first legally binding instrument to document the connection between ILCs and biological resources, and recognise the legal interests of ILCs in their own TK. The CBD can be seen as “an attempt by the South to bring about some form of economic restructuring and greater fairness in the distribution of economic benefits in the world”. The international regulation of TK is continuing in various international fora, but today this is in a context of growing respect for the intrinsic value that TK holds for ILCs, as well as the role it can play in technological innovation.

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization (Nagoya Protocol) to the CBD was adopted by the Conference of the Parties (COP) to the CBD on 29 October 2010 and entered into force on 12 October 2014. The Nagoya Protocol is a supplementary agreement to the CBD intended to “provide legal certainty” to the ABS provisions of the original framework treaty. The authority to adopt protocols comes from the text of the CBD itself: contracting parties are expected to “cooperate in the formulation and adoption of protocols” to the CBD, and the COP is granted the authority to “consider and adopt” said protocols “at a meeting of the [COP]”. The Nagoya Protocol is an “instrument for the implementation of the access and benefit-sharing provisions of the [CBD]”, and accordingly, applies “to genetic resources within the scope of Article 15 of the [CBD] and to the benefits arising from the utilization of such resources”. The Nagoya Protocol also applies to “traditional knowledge associated with genetic resources within the scope of the [CBD] and to the benefits arising from the utilization of such knowledge”. It is important to note that the provisions of the Nagoya Protocol “shall not affect the rights and obligations of any Party deriving from any existing international agreement[s]”, including the CBD. That is, no hierarchy exists between the CBD and the Nagoya Protocol, rather the Nagoya Protocol is intended to be supportive of the CBD. Consequently, neither instrument indicates what is to be done in the event of a conflict between the texts, presumably because there is an assumption that no such conflict will arise. Indeed, the Vienna Convention on the Law of Treaties (1969) (Vienna Convention) precludes states from entering into new international agreements that are incompatible with their existing obligations.

With respect to the language used in these instruments, it can be assumed that the same terms used in both the CBD and Nagoya Protocol embody the same meaning. Some confusion arises in the provisions on TK because many of the key terms differ across the two instruments. For instance, the Preamble and Art 8(j) of the CBD refer to “indigenous and local communities embodying traditional lifestyles”, where the

19 Panjabi, n 14, 137.
22 Nagoya Protocol, UNEP/CBD/COP/10/27, Preamble.
23 CBD Art 28(1).
24 CBD Art 23(4)(c).
25 CBD Art 28(2).
26 Nagoya Protocol, UNEP/CBD/COP/10/27, Art 4(4).
27 Nagoya Protocol, UNEP/CBD/COP/10/27, Art 3.
28 Nagoya Protocol, UNEP/CBD/COP/10/27, Art 3.
29 Nagoya Protocol, UNEP/CBD/COP/10/27, Art 4(1).
Nagoya Protocol simply uses the term “indigenous and local communities” without the limiting modifier “embodying traditional lifestyles”. Of course, different terminology will carry different meanings. The Vienna Convention states that a “treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose”. The CBD and Nagoya Protocol are of fundamental importance to the consideration of the rights of ILCs under international law. Unlike the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), for example, the CBD is a legally binding instrument. Article 8(j) of the CBD is the key provision on TK and has subsequently become the legal springboard from which other international bodies approach indigenous issues. The subject of TK has been a key concern of the COP since its second meeting in 1995, but most of the discussion from the COP and from the literature has concerned the implementation (as opposed to the interpretation) of Art 8(j) and associated provisions. There is a scarcity of direct textual analyses that indicate how the TK provisions of the CBD and Nagoya Protocol are to be interpreted. The purpose of this article is to deliver a textual analysis of the language used in the CBD and Nagoya Protocol about TK, with the aim of revealing the breadth of meaning possible and as a starting point for applying the commitments by national governments according to their sovereignty. The analysis has broad application to genetic resources generally, and will provide insights as to how to interpret TK obligations with respect to viruses in particular. This article will directly address the text of the CBD and Nagoya Protocol, providing a short analysis of each of the introductory clauses and articles that pertain to TK or the interests of ILCs. The analysis will focus on the meanings of key terms that have not been specifically defined by the instruments themselves, including “indigenous and local communities”, “traditional knowledge” and “traditional knowledge associated with genetic resources” and provide insights as to how the interpretation of such terms affects the implementation of ABS laws in the domestic sphere. The analysis of individual provisions will be cross-referenced with related provisions throughout and the disparities between the CBD and Nagoya Protocol noted. It should be recognised that there are two separate ABS regimes being discussed here: one for those states that are party just to the CBD, and another for those states that are party to both the CBD and the Nagoya Protocol. This examination reveals that the text of the CBD and Nagoya Protocol may be conducive to the inclusion of TK from indigenous “Western” communities but that most provisions are so loosely defined as to impose no clear obligations related to TK. This means that for virus ABS, domestic laws in each jurisdiction will be required to impose binding obligations. This may have some unanticipated consequences for virus ABS, including possibly limiting the effectiveness and efficiency of current and future virus-sharing practices.

II. CBD TEXT

The CBD has one introductory clause and four articles specifically about TK and ILCs:

A. CBD Preamble

The CBD Preamble provides, in part:

Recognizing the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising

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31 See discussion in Pt III A, B that indicate that Art 8(j) provides the legal authority for, but not the scope of the Nagoya Protocol.
32 Vienna Convention, Art 31(1).
35 Morgera and Tsionami have noted that “the CBD COP’s normative activity is testimony to an intense, evolving, and creative interpretation of the [CBD] by the international community”. See E Morgera and E Tsionami “Yesterday, Today, and Tomorrow: Looking Afresh at the Convention on Biological Diversity” (2010) 21 Yearbook of International Environmental Law 3, 4.
36 For an exploration of the types of TK likely to be relevant to virus ABS, see M F Rourke “When Knowledge Goes Viral: Assessing the Possibility of Virus-Related Traditional Knowledge for Access and Benefit Sharing” (2018) Journal of World Intellectual Property (in press).
from the use of traditional knowledge, innovations and practices relevant to the conservation of biological
diversity and the sustainable use of its components.

As a generalisation, this statement establishes a basis for acknowledging and recognising TK. The key
textual phrases are the “close and traditional dependence … on biological resources” of “indigenous and
communities embodying traditional lifestyles” with the “desirability” of sharing benefits from “the
use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity
and the sustainable use of its components”. This is aspirational and does not itself create any binding
obligations, but it is significant as the first recognition in international treaty law of the importance of
TK held by ILCs for the purposes of conservation. Additionally, introductory clauses form “[t]he context
for the purpose of the interpretation of a treaty”,37 and this context becomes important here as there are
phrases in this introductory statement that do not appear in the binding articles.38

B. CBD Art 8(j)
The substantive obligations are then set out in detail in the body of the CBD, Art 8(j) providing:

Each Contracting Party shall, as far as possible and as appropriate … (j) Subject to its national legislation,
respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities
embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity
and promote their wider application with the approval and involvement of the holders of such knowledge,
innovations and practices and encourage the equitable sharing of the benefits arising from the utilization
of such knowledge, innovations and practices.

This article creates the link between “traditional knowledge” and “genetic resources” without directly
citing either of those terms. Consequently, this link as it appears in the CBD is decidedly weak. The
concept of “traditional knowledge”, a term that does appear in the Preamble, is instead expressed as
the “knowledge, innovations and practices of indigenous and local communities embodying traditional
lifestyles”. “Genetic resources” are merely indicated in the wording “biological diversity”, a term that is
defined by Art 2 of the CBD to mean “the variability among living organisms from all sources”.39 This
is notable as Art 8(j) does not, therefore, create any specific benefit-sharing obligations for the use of
TK associated with genetic resources. It merely encourages the equitable sharing of the benefits arising
from the use of “knowledge, innovations and practices of indigenous and local communities embodying
traditional lifestyles” if that knowledge is in some way “relevant for the conservation and sustainable use
of biological diversity”.40 In many ways, this encouragement is no more substantive than the aspirational
introductory clause which recognises the “desirability” of such actions. Where Art 8(j) does create a
more tangible obligation on contracting parties is in the responsibility to “respect, preserve and maintain”
the “knowledge, innovations and practices of indigenous and local communities embodying traditional
lifestyles”, and in the promotion of the “wider application” of such knowledge “with the approval and
involvement of the holders of such knowledge, innovations and practices”41

That the term “traditional knowledge” is not used in the one and only article of the CBD that could
have created substantive TK benefit-sharing obligations on contracting parties is informative, particularly
as the term is used in the Preamble, and in Art 17 on “Exchange of Information” where “indigenous and
traditional knowledge” is recognised as a subset of specialised knowledge.42 The conception of TK in
Art 8(j) is therefore narrower than the conception of TK within the CBD as a whole. The term “TK”
unquestionably has a much broader scope than “knowledge, innovations and practices of indigenous and

37 Vienna Convention Art 31(2).
38 For instance, the term “traditional knowledge” as it appears in the Preamble is not used in Art 8(j). See discussion in Pt II B.
39 CBD Art 2.
40 Any traditional “knowledge, innovations and practices” that do not contribute to biodiversity conservation or that are not
environmentally sustainable are implicitly excluded from the obligations created under Art 8(j) of the CBD.
41 See discussion on the term “approval and involvement” in Pt III E.
42 CBD Art 17(2).
local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity”, 43 though that scope is not defined by the CBD.

Even if the term “TK” had been used, the ambiguous wording of Art 8(j) is such that no distinct obligations can be said to exist. This can be demonstrated by summarising the effect of the article using the shorthand “TK” as a substitute for “knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity”:

Art 8(j) requires that contracting parties “shall, as far as possible and appropriate” and “[s]ubject to its national legislation, respect, preserve and maintain” TK, and “promote” the “application” of that TK “with the approval and involvement of the holders of such” TK. Furthermore, contracting parties “shall, as far as possible and appropriate” and “[s]ubject to its national legislation … encourage the equitable sharing of the benefits arising from the utilization of” TK. The inherent imprecision of the terms “encourage” and “as far as possible and appropriate” provides sufficient latitude for contracting parties to defend an almost wholesale disregard of Art 8(j). Indeed, the introductory proviso “subject to its national legislation” seems to indicate that the existing legislative arrangements between contracting parties and their ILCs will have primacy over the requirements of Art 8(j).

C. CBD Art 10(c)

Article 10(c) of the CBD provides:

Each Contracting Party shall, as far as possible and as appropriate … (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.

Article 10 reflects the recognition of the “close and traditional dependence” of ILCs on biological resources that first appears in the Preamble of the CBD. The only terms in Art 10(c) that are specifically defined within the text of the CBD are “biological resources” which “includes genetic resources, organisms or parts thereof, populations or any other biotic component of ecosystems”, and “sustainable use” which means “the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations”. 44 While the term “customary use” is not defined by the CBD, to be considered “customary” any use would need to be an established, habitual and (probably) ongoing practice. 45 As the term “practice” can be defined as a customary act or performance, here the term “customary use” might be considered analogous to the term “practice” as it appears in Art 8(j).

Interestingly, unlike Art 8(j) which only addresses “knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles”, there is no restriction in Art 10(c) as to whom can engage in such customary use before it qualifies for protection. The only supplementary condition is that the customary use of biological resources “are compatible with conservation or sustainable use requirements”. The main effect of this article is to ensure that customary use of biological resources is not restricted and that any measures to implement the CBD at the domestic level is respectful of and amenable to traditional cultural practices. This protection, however, only extends to those traditional cultural practices that are compatible with biodiversity conservation; any customary uses that are incompatible with conservation or sustainable use are not protected.

D. CBD Art 17(2)

Article 17(1) of the CBD provides that “Contracting Parties shall facilitate the exchange of information … relevant to the conservation and sustainable use of biological diversity”. This is further developed in Art 17(2), providing:

43 See schematic representation of indigenous and traditional knowledge concepts as framed by the CBD and Nagoya Protocol in Figure 1.
44 CBD Art 2.
Such exchange of information shall include exchange of results of technical, scientific and socio-economic research, as well as information on training and surveying programmes, specialized knowledge, indigenous and traditional knowledge as such and in combination with the technologies referred to in Article 16, paragraph 1. It shall also, where feasible, include repatriation of information.

This article can be seen to support Art 8(j) which, in part, promotes the wider application of “traditional knowledge, innovations and practices” that are relevant to conservation. The exchange of information is a vital prerequisite to the practical application of that knowledge for the purposes of conservation and sustainable use. Indeed, sharing knowledge is key to the preservation and maintenance of that knowledge, a central requirement of Art 8(j). The technologies referred to in Art 16(1) encompass any technology, including biotechnology, that are “relevant to the conservation and sustainable use of biological diversity or make use of genetic resources”. The term “biotechnology” is defined by the CBD to mean “any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use”. The exchange of such technologies is a significant focus of the CBD which recognises that access to and transfer of information and technology “are essential elements for the attainment of the objectives of [the CBD]”. This point is echoed in Art 18(4) which directs contracting parties to “encourage and develop methods of cooperation for the development and use of technologies”.

The main importance of this article with respect to TK, is that it specifically recognises “indigenous and traditional knowledge” as specialised subsets of all knowledge. While it is implied, it is not clear whether Art 17(2) differentiates between “indigenous knowledge” and “traditional knowledge” or intends for the term “indigenous and traditional knowledge” to be understood collectively. The consequence of this is that the CBD, as a complete instrument, seems to recognise three different, but overlapping, conceptions of what might be more broadly captured by the term “traditional knowledge”. Article 8(j) seemingly applies to the knowledge, innovations and practices of ILCs only when they are embodying traditional lifestyles, whereas Art 17(2) refers to the exchange and repatriation of “indigenous” knowledge and “traditional” knowledge. The boundaries around the TK concept in Art 8(j) are laboured and restrictive, especially the limit “embodying traditional lifestyles”. There are no such restrictions in Art 17(2). This becomes important when attempting to determine the scope of the TK concept covered by the Nagoya Protocol, which derives its scope from the entirety of the CBD instrument, not solely Art 8(j).

The final part of Art 17(2) refers to the “repatriation of information”. This is a peculiar inclusion as it is not afforded a clear context or explanation throughout the body of the CBD. Thus, the issue is left for interpretation by the COP without any further context.

E. CBD Art 18(4)

Article 18(4) on Technical and Scientific Cooperation provides, in part:

The Contracting Parties shall, in accordance with national legislation and policies, encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of [the CBD].

46 CBD Art 16(1).
47 CBD Art 2.
48 CBD Art 16(1).
49 See discussion on the scope of the Nagoya Protocol in Pt III B.
50 Guidelines for the repatriation of indigenous and traditional knowledge are currently being developed. See Conference of the Parties to the Convention on Biological Diversity, Decision XIII/19, CBD/COP/DEC/XIII/19 (2016) Decision XIII/19(D) (Task 15 of the Multi-Year Programme of Work on the Implementation of Article 8(j) and Related Provisions: Best Practice Guidelines for the Repatriation of Indigenous and Traditional Knowledge) 3. On a purely semantic note, however, repatriation is the act of returning, that is, bringing or sending something back to its original place or traditional owners. Information is an intangible, non-rivalrous and non-excludable commodity; it is unclear, therefore, how information can even be repatriated. Of course, any physical representation of that information, such as a text or an artefact, can be physically returned. Information can be shared, exchanged and accessed, and the information is not depleted by its transmission. The holding of information by one party does not preclude another party from holding that same information. The return of information to the originating party or traditional owners does not, therefore, constitute repatriation in any real sense of the term.
Article 18 requires that contracting parties encourage co-operation in the development and use of indigenous and traditional technologies that are important to the conservation and sustainable use of biological diversity. Such requirements simply bolster those stipulated in Art 17(2) which includes technology, and further encourages “technical and scientific cooperation” between all stakeholders, including ILCs. Like Art 17(2), the importance of Art 18(4) lies in the fact that it specifically recognises “indigenous and traditional technologies” as a subset of all technologies within the ambit of the CBD.

III. NAGOYA PROTOCOL TEXT

The Nagoya Protocol contains seven introductory clauses and 10 articles pertaining to TK and ILCs:

A. Nagoya Protocol Preamble

The Nagoya Protocol contains 27 introductory clauses, the final seven of which relate to TK and the interests of ILCs. The Preamble provides, in part:

Recalling the relevance of Article 8(j) of the [CBD] as it relates to traditional knowledge associated with genetic resources and the fair and equitable sharing of benefits arising from the utilization of such knowledge.

This statement recognises that the non-binding Nagoya Protocol borrows legal authority from the CBD. Note that the parties to the Nagoya Protocol do not recall Art 8(j) itself, rather the “relevance of Article 8(j)” to the ABS of TK. This could be construed as a distancing of the newly formed TK provisions in the Nagoya Protocol from the exact wording of the CBD’s Art 8(j). Despite relying on Art 8(j) of the CBD for its authority, the Nagoya Protocol applies to a somewhat modified and broader conception of TK. For example, there is no sense created by the Nagoya Protocol that the holders of TK need be ILCs “embodying a traditional lifestyle”. With relevance to the scope of TK covered by the Nagoya Protocol, it is noteworthy that this is the first instance of the term “traditional knowledge associated with genetic resources”. The CBD never specifies that “knowledge, innovations and practices” need be associated with genetic resources, only that they should be relevant to “conservation and sustainable use”. This implies that the Nagoya Protocol will apply to a modified range of TK, perhaps only the subset of TK that is associated with genetic resources irrespective of whether the TK is relevant to conservation and sustainable use.

The other key term in this introductory statement is “fair and equitable”. While Art 8(j) of the CBD does “encourage the equitable sharing of the benefits arising from the utilization of [TK]”, this is the first time that the word “fair” appears alongside “equitable” when addressing TK. This implies that instances of TK ABS might be considered subject to a “fair and equitable” minimum standard, akin to treatment standards applied in international trade law. The Preamble continues:

Noting the interrelationship between genetic resources and traditional knowledge, their inseparable nature for indigenous and local communities, the importance of the traditional knowledge for the conservation of biological diversity and the sustainable use of its components, and for the sustainable livelihoods of these communities.

This statement echoes closely the only TK introductory statement in the CBD that recognises “the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources”. The Nagoya Protocol, however, recognises the “interrelationship” that exists between TK, genetic resources and ILCs, whereas the CBD notes the “dependence” of ILCs on biological resources. The wording of the Nagoya Protocol is more suggestive of the stewardship role that ILCs play for the environment, rather than the existence of a one-way dependence on the environment. The Preamble continues:

Recognizing the diversity of circumstances in which traditional knowledge associated with genetic resources is held or owned by indigenous and local communities.

51 CBD Art 18(1).
52 See discussion on the scope of the Nagoya Protocol (Art 3) in Pt III B.
53 See discussion on Art 8(j) of the CBD in Pt II B.
Unlike the CBD’s comparatively narrow conception of TK, the Nagoya Protocol recognises “the diversity of circumstances” in which TK can exist, and be “held or owned” by ILCs. With respect to knowledge and information, the notion of ownership is usually recognised through intellectual property rights and protections, though this is not specifically addressed by the Nagoya Protocol (and will not be analysed here). The Preamble continues:

Mindful that it is the right of indigenous and local communities to identify the rightful holders of their traditional knowledge associated with genetic resources within their communities.

This is recognition of the fact that, in many cases, it will be difficult to establish who has a claim to TK, and who, therefore, can participate in ABS negotiations. This essentially provides that it is the ILCs themselves who can authorise a party to negotiate terms of access to their TK on their behalf. The Preamble continues:

Further recognizing the unique circumstances where traditional knowledge associated with genetic resources is held in countries, which may be oral, documented or in other forms, reflecting a rich cultural heritage relevant for conservation and sustainable use of biological diversity.

Further to acknowledging the “diversity of circumstances” in which TK can exist, this statement indicates that the Nagoya Protocol intends to capture all types of TK associated with genetic resources, no matter how that TK exists or is expressed. It is also an implicit recognition that the prevailing systems of knowledge ownership (intellectual property) are ill-equipped to deal with the unique characteristics of TK. The penultimate introductory statement provides:

Noting the United Nations Declaration on the Rights of Indigenous Peoples.

The UNDRIP was adopted by the UN General Assembly in September 2007. While it was considered “a major moral and political step forward in the struggle for indigenous rights”, it is a non-binding and therefore largely symbolic instrument. The UNDRIP recognises the rights of indigenous peoples to “practise and revitalise their cultural traditions and customs”, and to “own, use, develop and control the lands, territories and resources they possess by reason of traditional ownership … occupation or use”. In relation to TK and genetic resources, the key article of UNDRIP is Art 31 which states that “[i]ndigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources … They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge and traditional cultural expressions”. While non-binding, UNDRIP presents a “comprehensive articulation of indigenous claims” and provides grounding for the final introductory clause of the Nagoya Protocol, which concludes:

Affirming that nothing in this Protocol shall be construed as diminishing or extinguishing the existing rights of indigenous and local communities.

The Nagoya Protocol is to be read and implemented in such a way that its effect does not diminish the “existing rights” of ILCs. The citation of UNDRIP in the preceding clause provides a starting point for defining what those “existing rights” include, and UNDRIP therefore becomes the basis on which any purported deviations might be contested.

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54 The Nagoya Protocol indirectly recognises this ownership facet of TK in another introductory statement: “[a]knowledging the ongoing work in other international forums relating to access and benefit-sharing,” of which the World Trade Organization and the World Intellectual Property Organization are key players. Whether intellectual property regimes should offer protections to TK, and the most appropriate methods for doing so, are currently being addressed by both organisations.

55 D Robinson, Confronting Biopiracy (Earthscan, 2010) 130.


57 UNDRIP, UN Doc A/RES/61/295, Art 26(2).

58 Oguananam, n 33, 82.

59 Unlike the CBD, the Nagoya Protocol has inbuilt monitoring and compliance provisions (see discussion in Pt III J, for example, as well as Nagoya Protocol, UNEP/CBD/COP/10/27, Arts 15–18).
B. Nagoya Protocol Art 3

Article 3 states that the Nagoya Protocol applies to “genetic resources within the scope of Article 15 of the [CBD]”. Furthermore:

[The Nagoya] Protocol shall also apply to traditional knowledge associated with genetic resources within the scope of the [CBD] and to the benefits arising from the utilization of such knowledge.

It is interesting to note here the use of the phrase “within the scope of the CBD” as opposed to “within the scope of Article 8(j) of the CBD”. As discussed, Art 8(j) of the CBD does not use the term “traditional knowledge” but “knowledge, innovations and practices” and further limits this to those “indigenous and local communities embodying traditional lifestyles”.60 The conception of TK within the whole of the CBD document (including the Preamble) is broader than that which is presented specifically in Art 8(j).61 The Nagoya Protocol, therefore, starts with the more comprehensive conception of TK from the entire CBD and then goes on to narrow that concept somewhat, by specifying that the TK within the scope of the Nagoya Protocol is only the subset of TK that is “associated with genetic resources” (see Figure 1). In accordance with this article, any TK under consideration by the Nagoya Protocol must also lie within the scope of the CBD, which presumably means that the TK must also be “relevant for the conservation and sustainable use of biological diversity”, though this is not specifically stated in the Nagoya Protocol. It is also noteworthy that the Nagoya Protocol never once uses the phrase “indigenous and local communities embodying traditional lifestyles”, simply using the term “indigenous and local communities”, seemingly disregarding or functionally removing any requirement for ILCs to embody a traditional lifestyle before their TK associated with genetic resources can be said to qualify for benefit-sharing obligations.

C. Nagoya Protocol Art 5

Article 5(2) of the Nagoya Protocol provides:

Each Party shall take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.

This provision reuses much of the language from Art 15 of the CBD on the ABS of sovereign genetic resources. By reaffirming the sovereign right of states over their genetic resources, Art 15 of the CBD places the “authority to determine access to genetic resources” squarely in the hands of the national governments of its contracting parties.62 Article 5(2) of the Nagoya Protocol attempts to reach into the domestic sphere and directs these sovereign nations to institute specific ABS measures for the genetic resources that are “held” by ILCs. This lays the groundwork for the additional consideration of TK prescribed in Art 5(5):

Each Party shall take legislative, administrative or policy measures, as appropriate, in order that the benefits arising from the utilization of traditional knowledge associated with genetic resources are shared in a fair and equitable way with indigenous and local communities holding such knowledge. Such sharing shall be upon mutually agreed terms.

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60 See discussion on Art 8(j) of the CBD in Pt II B.
61 See discussion in Pt II D.
62 Article 15 of the CBD on Access to Genetic Resources provides, in part: “1. Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation. 2. Each Contracting Party shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention … 4. Access, where granted, shall be on mutually agreed terms and subject to the provisions of [Article 15]. 5. Access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, unless otherwise determined by that Party.”
Article 5(2) directs parties to institute benefit-sharing measures for the genetic resources held by ILCs and Art 5(5) requires the institution of benefit-sharing measures for any TK associated with such genetic resources. In both cases, benefit-sharing should be based on “mutually agreed terms”. Any parties to the Nagoya Protocol will necessarily be contracting parties to the CBD. This means that they should (theoretically) have instituted ABS measures for their sovereign genetic resources in accordance with Art 15 of the CBD. The effect of Art 5(2) and (5) of the Nagoya Protocol will require parties to modify their existing benefit-sharing rules to take into account the interests of ILCs, if they have not already done so.

**D. Nagoya Protocol Art 6(2)**

Article 6(2) of the Nagoya Protocol provides:

> In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that the prior informed consent or approval and involvement of indigenous and local communities is obtained for access to genetic resources where they have the established right to grant access to such resources.

This is the first time that the condition of PIC is presented in regard to genetic resources held by ILCs. In the CBD, Art 15(1) recognises “the sovereign rights of States over their natural resources” and Art 15(5) provides for the PIC of any state providing genetic resources. Article 6(2) of the Nagoya Protocol is the first time in either instrument that the PIC requirement is extended to the access of genetic resources held by a subpopulation of the sovereign state. This could be said to present an encroachment on the sovereignty of the state, but Art 6(2) neatly avoids this by asserting that ILCs must first establish that they have the right to grant access to the genetic resources held, presumably “[i]n accordance with domestic law”.

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63 The condition of “prior informed consent” is addressed in Art 6(2) for access to genetic resources, and Art 7 for access to associated TK. See discussion in Pt III D and E, respectively.

64 Note that “prior informed consent” and “approval or involvement” have different meanings. This is discussed in Pt III E.

65 Robinson notes that “[t]here may be relatively few countries where ILCs have clearly established legal rights over genetic resources under existing formal/codified law, but there are probably many which grant these rights under customary law”. See D Robinson, *Biodiversity, Access and Benefit Sharing* (Routledge, 2015), 30.
The sovereignty of nation-states is conferred by the UN Charter, and the sovereign right of states over their natural resources is the foundation principle of the CBD. The CBD is a multilateral framework treaty between UN-recognised sovereign nation-states. The CBD framework, therefore, cannot recognise or create an analogous “sovereignty” for indigenous peoples without impinging on the sovereign right of individual nation-states to self-govern. The self-determination of indigenous peoples so often discussed in international fora must necessarily occur within the confines created by the governments of the states in which indigenous peoples reside. The Nagoya Protocol, therefore, cannot recognise that ILCs have any rights, akin to those of sovereign states, over natural resources. It can, however, recognise a legitimate interest in such resources, as is provided for in Art 6(2).

E. Nagoya Protocol Art 7

Article 7 of the Nagoya Protocol deals specifically with access to TK associated with genetic resources. It provides:

In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established.

Articles 5(5) and 7 of the Nagoya Protocol appear to address the same thing: the ABS of TK, but there are some subtleties to consider. Article 5 looks specifically at the benefit-sharing side of the equation, which must occur with MAT, while Art 7 focuses specifically on accessing TK associated with genetic resources, which must occur both with PIC and MAT. That PIC is left out of the benefit-sharing side of the equation makes sense: it is the access to TK that will require the prior consent of the providing party, who can then establish MAT for access. Benefit-sharing occurs after the point of access (so PIC has already been gained) and the distribution of benefits can be negotiated separately. This is an equivalent arrangement to the ABS of genetic resources under Art 15 of the CBD which specifies that access to genetic resources shall occur on MAT and with PIC, while benefit-sharing need only require MAT.

It is interesting to note that when dealing with the ABS of TK, Art 8(j) of the CBD uses only the phrase “approval and involvement”, where Art 7 uses “prior and informed consent or approval and involvement”, indicating that these are two similar, but different prerequisites to access, thus confirming that the “approval and involvement” in Art 8(j) of the CBD does not equate to PIC. The remaining question is the distinction between the disjunctively phrased “prior and informed consent” or “approval and involvement”. The terms “consent” and “approval” appear to be synonymous in Art 7 but the difference may not be based in semantics so much as usage, therefore, to determine their point of

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66 Charter of the United Nations Art 2(1) provides that the UN “is based on the principle of the sovereign equality of all its members”.
67 CBD Art 3.
68 For instance, Art 3 of UNDRIP provides that “[i]ndigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development”. Further, in recognition of the primacy of the State under international law, Art 46(1) of UNDRIP provides that “[n]othing in [UNDRIP] may be … construed as authorizing or encouraging any action which would dismember or impair, totally or in part, the territorial integrity or political unity of sovereign and independent States”. See UNDRIP, UN Doc A/RES/61/295, Arts 3, 46(1).
69 CBD Art 15(4).
70 CBD Art 15(5).
71 CBD Art 15(7).
72 Emphasis added.
73 In 2016 the COP to the CBD adopted the “Mo’otz Kuxtal Voluntary Guidelines” designed to guide the domestic implementation of TK ABS. These guidelines provide definitions for “prior and informed consent” and “approval and involvement”. See Conference of the Parties to the Convention on Biological Diversity, Decision XIII/18, CBD/COP/DEC/XIII/18 (2016) [1], Annex (Mo’otz Kuxtal Voluntary Guidelines) [7]–[11].
difference it is important to note patterns of use across both instruments. In the CBD, the term “approval and involvement” appears only in Art 8(j) in relation to ILCs and TK, while the condition of PIC is used exclusively in Art 15(5) regarding access to sovereign genetic resources. In the Nagoya Protocol, the terms PIC and “approval and involvement” are used in clauses that address access to both genetic resources and associated TK, but the term “approval and involvement” never appears in relation to the access of sovereign genetic resources in isolation. That is, access to sovereign genetic resources always requires PIC, whereas access to associated TK requires “approval and involvement” of ILCs, or PIC if there are sovereign genetic resources involved.75

The point of difference between PIC and “approval and involvement”, then, is based on whether legal title can be established by the holders of the resource. The CBD and Nagoya Protocol recognise the sovereign rights of nation-states over their genetic resources, but makes no such assertions for ILCs. The CBD and Nagoya Protocol can only recognise that ILCs have an interest in genetic resources and associated TK, not legal title.76 Consequently, “approval and involvement” avoids the perception that the CBD or Nagoya Protocol imbues ILCs with legal title over genetic resources.77 Article 6(2) of the Nagoya Protocol which does consider PIC for genetic resources held by ILCs avoids this perception by including the rider “where [ILCs] have the established right to grant access to such resources”.78

PIC is used to address the legalities of transfer of property (genetic resources) to which states hold sovereign title. This conception of PIC has been employed by various international environmental instruments (under both the United Nations Environment Programme and the Food and Agriculture Organization), and while it has not been explicitly defined, PIC could be said to embody a set of practices deserving of status under international law.79 The same cannot be said for the term “approval and involvement”. Ostensibly, PIC, as the higher standard, automatically entails the “approval and involvement” of ILCs, but not vice versa. Consequently, Art 7 of the Nagoya Protocol creates a distinction between “approval and involvement” and the stricter requirement of PIC, but does not then prescribe any obligation to meet that higher standard.79

Unlike access to genetic resources held by ILCs, the access to TK does not require ILCs to “have the established right to grant access” to their TK. It is worth recalling the Nagoya Protocol’s Preamble here, which states “that it is the right of [ILCs] to identify the rightful holders of their [TK] associated with genetic resources within their communities”. Therefore, ILCs are presumably the only parties who can legitimately determine the holders of TK and, consequently, the parties to which benefit-sharing obligations are owed. Adding further ambiguity to the practicalities of TK ABS is the use of the term “associated with genetic resources”. Association comes in levels. While an association to genetic resources ought to exist before Art 7 applies to TK, it is not clear precisely how associated that TK must be in order to qualify for ABS considerations.80 Like determining who holds TK, it may be up to the ILCs themselves to decide whether there is a sufficient link between their TK and a genetic resource before it is deemed “traditional knowledge associated with [a] genetic resource”.81

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74 As in the Nagoya Protocol’s Preamble, Arts 6(3), 7, 13(b)(1).
75 As in Art 7 of the Nagoya Protocol.
76 See discussion in Pt III D.
77 Although the Preamble of the Nagoya Protocol does recognise that TK associated with genetic resources can be “held or owned” by ILCs. See discussion in Pt III A.
78 Precisely what those practices might entail is difficult to pin down. See K Kummer Peiry, “Prior Informed Consent” in Max Planck Encyclopedia of Public International Law (OUP, 2011) 1457.
79 Article 6(3) of the Nagoya Protocol does provide some guidance to Parties as to the development of PIC standards. See Nagoya Protocol, UNEP/CBD/COP/10/27, Art 6(3).
80 See discussion in Pt III C.
81 Emphasis added.
Despite being a multilateral treaty, the CBD prescribes the conditions for bilateral ABS arrangements between contracting parties. Article 10 of the Nagoya Protocol sets the conditions for the establishment of a multilateral benefit-sharing mechanism, providing:

Parties shall consider the need for and modalities of a global multilateral benefit-sharing mechanism to address the fair and equitable sharing of benefits derived from the utilization of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary situations or for which it is not possible to grant or obtain prior informed consent. The benefits shared by users of genetic resources and traditional knowledge associated with genetic resources through this mechanism shall be used to support the conservation of biological diversity and the sustainable use of its components globally.

For the purposes of TK, this is a recognition that there may be multiple ILCs that hold genetic resources and associated TK, that this may “occur in transboundary situations”, and that such situations could present a problem for ABS arrangements which are regulated at the national level in accordance with the CBD. Article 10 proposes a solution for such cases: rather than negotiating and providing benefits bilaterally with multiple providers, parties could establish a multilateral benefit-sharing mechanism where any benefits would go towards general biodiversity conservation efforts. Article 10 of the Nagoya Protocol has become the basis for negotiations aimed at establishing a generalised multilateral benefit-sharing regime, but it may also provide an opportunity for user parties to avoid entering into a series of bilateral ABS agreements. Transboundary and multiple-provider situations create a problem for ILCs who, in accordance with the Nagoya Protocol’s Preamble, may themselves arbitrate over who is deemed the rightful holder of TK associated with genetic resources. If there are multiple ILCs laying claim to the same TK, user parties wishing to access TK associated with genetic resources could attempt to by-pass the bilateral ABS route in favour of participating in some manifestation of Art 10’s vaguely defined multilateral benefit-sharing mechanism.

Further direction for dealing with the sorts of situations that precipitated Art 10 are addressed in Art 11 on transboundary co-operation. Article 11(1) provides:

In instances where the same genetic resources are found in situ within the territory of more than one Party, those Parties shall endeavour to cooperate, as appropriate, with the involvement of indigenous and local communities concerned, where applicable, with a view to implementing this Protocol.

Article 11(2) continues:

Where the same traditional knowledge associated with genetic resources is shared by one or more indigenous and local communities in several Parties, those Parties shall endeavour to cooperate, as appropriate, with the involvement of the indigenous and local communities concerned, with a view to implementing the objective of this Protocol.

Where a multilateral benefit-sharing mechanism, as considered in Art 10, does not exist, Art 11 asks parties and ILCs to cooperate in situations where genetic resources and associated TK is shared by one
or more stakeholders. This envisages a type of collective bargaining arrangement, where access will be provided by a coalition of parties and/or ILCs (as appropriate) on the basis that PIC (or approval and involvement) and MAT are met, and benefits will be shared between the coalition on MAT.

H. Nagoya Protocol Art 12

Article 12 introduces provisions to facilitate the ABS of TK associated with genetic resources. Article 12(1) provides:

In implementing their obligations under this Protocol, Parties shall in accordance with domestic law take into consideration indigenous and local communities’ customary laws, community protocols and procedures, as applicable, with respect to traditional knowledge associated with genetic resources.

That is, parties to the Nagoya Protocol are to take into account the “customary laws, community protocols and procedures” of ILCs when developing and implementing domestic ABS measures for TK associated with genetic resources. The wording here is significant in that Art 12(1) separates “customary laws” from “community protocols and procedures”, which again raises questions as to whom such TK provisions apply.

The Nagoya Protocol does not limit ILCs to those communities “embodying traditional lifestyles” as is the case in Art 8(j) of the CBD. This is not only an interesting point of difference, but may also have a dramatic impact on the interpretation of the term “indigenous and local communities” in the Nagoya Protocol. There are two plausible interpretations here: the first holds that the term “indigenous and local communities” is understood to mean “indigenous communities” and “local communities” as separate subsets of a state’s population. In the second interpretation, the term “indigenous and local communities” is understood to mean “indigenous communities” that are also “local communities”. As the term “indigenous” means “originating in and characterising a particular region or country”, and “local” means “relating to, characteristic of, or restricted to a particular place or particular places”, this second interpretation is tautological. Accordingly, the first interpretation, where indigenous communities are separate to local communities, is the more suitable interpretation. Such an understanding is reinforced by the wording of Art 12(1), which ostensibly considers the “customary law” of indigenous communities as distinct from the “community protocols and procedures” of local communities.

The exact effect of this distinction is unclear and precisely who can be considered a “local community” under the purview of the Nagoya Protocol is not defined. But that such a distinction can be said to exist within the text of the Nagoya Protocol creates an opportunity for groups who identify as “local communities” to claim that any provisions applicable to ILCs includes them. Such groups may be as disparate as horticultural societies, amateur entomology clubs, plant taxonomists or taxidermy associations, all of whom would be operating under “community protocols and procedures” and could credibly claim recognition under the Nagoya Protocol. Of course, the same argument could be made about the wording in the CBD which does refer to “indigenous and local communities” (without the limiting modifier) throughout, but not of Art 8(j) specifically, which stipulates that such “indigenous and local communities” must be said to be “embodying traditional lifestyles”. Notwithstanding this supplementary requirement, some local communities could plausibly claim to be embodying a traditional lifestyle of sorts. Article 12(2) continues:

Parties, with the effective participation of indigenous and local communities concerned, shall establish mechanisms to inform potential users of traditional knowledge associated with genetic resources about their obligations, including measures as made available through the Access and Benefit-sharing Clearing-House for access to and fair and equitable sharing of benefits arising from the utilization of such knowledge.

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85 In 2004 the COP to the CBD adopted the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity. See Conference of the Parties to the Convention on Biological Diversity, Decision VII/12, UNEP/CBD/COP/7/21 (2004), 209. The Addis Ababa “Practical Principle 8” provides operational guidelines for situations in which biodiversity resources are found across boundaries. See Addis Ababa, Practical Principle 8 <https://www.cbd.int/sustainable/addis-principles.shtml>.

86 Macquarie Dictionary, n 45.
To facilitate the process of ABS, Art 12(2) calls for the establishment of mechanisms to inform potential users of genetic resources and associated TK about their obligations under the Nagoya Protocol. This is consistent with the sorts of awareness raising activities outlined in Art 21 of the Nagoya Protocol. Article 18(3) of the CBD provides that “[t]he [COP], at its first meeting, shall determine how to establish a clearing-house mechanism to promote and facilitate technical and scientific cooperation”. The CBD clearing house had already placed an emphasis on the information-sharing requirements of the contracting parties to the CBD, so Art 12(2) can be seen simply as an extension of that requirement to now cover any TK associated with genetic resources. Article 12(3) provides:

Parties shall endeavour to support, as appropriate, the development by indigenous and local communities, including women within these communities, of:

(a) Community protocols in relation to access to traditional knowledge associated with genetic resources and the fair and equitable sharing of benefits arising out of the utilization of such knowledge;
(b) Minimum requirements for mutually agreed terms to secure the fair and equitable sharing of benefits arising from the utilization of traditional knowledge associated with genetic resources; and
(c) Model contractual clauses for benefit-sharing arising from the utilization of traditional knowledge associated with genetic resources.

Parties are expected to support ILCs in developing community protocols for access to genetic resources and associated TK, as well as defining minimum requirements for MAT and model contractual clauses for benefit-sharing. Like Art 12(1), the vague language is such that there is no solid obligation to support the ILCs in such endeavours, but the article does further highlight the need to put some tangible parameters around TK ABS and the desirability of involving ILCs in that process. Article 12(4) continues:

Parties, in their implementation of this Protocol, shall, as far as possible, not restrict the customary use and exchange of genetic resources and associated traditional knowledge within and amongst indigenous and local communities in accordance with the objectives of the [CBD].

Parties cannot “restrict the customary use and exchange of genetic resources and associated [TK]” amongst ILCs. This article acts in concert with Art 12(1) in ensuring that parties take the “customary laws, community protocols and procedures” into account when implementing domestic ABS measures resulting from the Nagoya Protocol. This point becomes especially important if the term ILC is interpreted to include “local communities” who are not also “indigenous communities”. For instance, if an entomological society has traditionally traded insects over many generations in accordance with its own “community protocols and procedures”, it may be reasonable for the society to claim an exemption to domestic ABS obligations on the grounds that it would constitute a restriction of their “customary use and exchange” practices.

I. Nagoya Protocol Art 13(1)

Article 13(1) of the Nagoya Protocol pertains to National Focal Points (NFPs) and Competent National Authorities. It provides, in part:

Each Party shall designate a national focal point on access and benefit-sharing. The national focal point shall make information available as follows: …

(b) For applicants seeking access to traditional knowledge associated with genetic resources, where possible, information on procedures for obtaining prior informed consent or approval and involvement, as appropriate, of indigenous and local communities and establishing mutually agreed terms including benefit-sharing; and
(c) Information on competent national authorities, relevant indigenous and local communities and relevant stakeholders. The national focal point shall be responsible for liaison with the Secretariat.

See discussion in Pt III K.
The creation of a NFP is positioned as a vital step to ensuring that potential users of genetic resources and associated TK are informed of their obligations under a nation’s domestic ABS regulations. This article, therefore, acts in support of all preceding TK ABS provisions, particularly Arts 7 and 5(5) which create the conditions for bilateral ABS on genetic resources held by ILCs and the associated TK. For each party, the NFP is to make potential users aware of their procedures for obtaining PIC (on MAT) for accessing genetic resources and associated TK, and establishing MAT for benefit-sharing. The NFP, therefore, becomes the first “port of call” for any parties wanting to obtain transnational access to genetic resources and associated TK, and in accordance with Art 13(1)(c) is also the conduit for the provision of information to the Secretariat of the Nagoya Protocol. It should be noted that the Secretariat to the Protocol is the same as the Secretariat to the CBD, per Art 28(1) of the Nagoya Protocol.

J. Nagoya Protocol Art 16(1)

Article 16 of the Nagoya Protocol creates the conditions for an ABS compliance regime. Article 16(1) provides:

Each Party shall take appropriate, effective and proportionate legislative, administrative or policy measures, as appropriate, to provide that traditional knowledge associated with genetic resources utilized within their jurisdiction has been accessed in accordance with prior informed consent or approval and involvement of indigenous and local communities and that mutually agreed terms have been established, as required by domestic access and benefit-sharing legislation or regulatory requirements of the other Party where such indigenous and local communities are located.

The requirement to monitor compliance is a notable point of difference between the CBD and Nagoya Protocol. For instance, where the CBD directs aggrieved parties to the International Court of Justice for the arbitration of disputes within the remit of the CBD,88 the Nagoya Protocol creates a specific obligation on parties to monitor compliance within their territories. The onus is therefore on individual nation-states to ensure user compliance with their own domestic legislative, administrative and regulatory ABS requirements. This applies as much to TK as it does to the genetic resources themselves and is supported by provisions on enforcement: Art 16(2) asks parties to “take appropriate, effective and proportionate measures to address situations of non-compliance”, and Art 16(3) urges parties to “cooperate in cases of alleged violation”. This imbues all provisions of the Nagoya Protocol with a compliance and enforcement device, and while imperfect (it cannot be assumed that “appropriate, effective and proportionate measures” will be implemented in a vacuum of political or diplomatic realities), it still provides greater sovereign regulatory control and an option for recourse that is not found in the CBD.

K. Nagoya Protocol Art 21

The final article of the Nagoya Protocol that specifically addresses TK and the interests of ILCs is Art 21 on awareness raising. It provides:

Each Party shall take measures to raise awareness of the importance of genetic resources and traditional knowledge associated with genetic resources, and related access and benefit-sharing issues. Such measures may include, inter alia:

(a) Promotion of this Protocol, including its objective;
(b) Organization of meetings of indigenous and local communities and relevant stakeholders;
(c) Establishment and maintenance of a help desk for indigenous and local communities and relevant stakeholders;
(d) Information dissemination through a national clearing-house;
(e) Promotion of voluntary codes of conduct, guidelines and best practices and/or standards in consultation with indigenous and local communities and relevant stakeholders;
(f) Promotion of, as appropriate, domestic, regional and international exchanges of experience;
(g) Education and training of users and providers of genetic resources and traditional knowledge associated with genetic resources about their access and benefit-sharing obligations;

88 CBD Art 27(3)(b).
(h) Involvement of indigenous and local communities and relevant stakeholders in the implementation of this Protocol; and
(i) Awareness-raising of community protocols and procedures of indigenous and local communities.

Unlike Arts 12(2) and 13(1)(b) which aim to ensure that potential users of genetic resources and associated TK are informed of their ABS obligations, Art 21 is aimed at informing both users and providers, as well as empowering the ILCs as “stakeholders” in the ABS process. Without an awareness of the existence of the CBD and Nagoya Protocol and the types of resources that are regulated under this regime, there is little chance that either users or providers will employ the processes therein. Furthermore, the sharing of experience regarding “domestic, regional and international exchange” will allow stakeholders to leverage the experiences of others to streamline the ABS process. Indeed, Art 21(f) is an acknowledgment of the fact that bilateral negotiations of this nature are rarely made public and that such experiences can be instructive for future ABS agreements. Awareness raising is especially important for users of genetic resources and associated TK who many not be aware of the fundamental shift in the way that international law treats genetic resources and associated TK. What was once considered the “common heritage of humankind” is now within the sovereign domain of individual nation-states. 89 Subsequently, potential users of genetic resources may be oblivious to the existence of ABS obligations. The supplementary goal of awareness raising is to ensure that the ILCs are fully aware of their rights under the CBD and Nagoya Protocol, and to this end Art 21(h) calls for the involvement of ILCs in the implementation of the Nagoya Protocol, thus guaranteeing, at least in theory, that ILCs have a stake in the outcomes.

IV. THE SEARCH FOR MEANING

With respect to the provisions on TK, there are three essential terms, none of which are specifically defined by either the CBD or the Nagoya Protocol. 90 Each of the terms “indigenous and local communities”, “traditional knowledge” and “traditional knowledge associated with genetic resources” do not have a predefined meaning and there is no common agreement as to their ordinary meaning. The textual analysis in this article has provided some insights as to how these terms may be interpreted:

A. ILCs

Every attempt to define “indigeneity” is doomed to fall short by some standard. 91 Rather than defining “indigenous and local communities” as an overall concept, the term will be examined as it is framed in the CBD and Nagoya Protocol. Article 8(j) of the CBD uses the term with the limiting modifier “embodying traditional lifestyles” which seemingly excludes any peoples who are the descendants of, and identify as ILCs, but who can no longer be said to be “embodying traditional lifestyles”. This requirement might be strict enough to exclude almost any ILCs: can anyone participating in decidedly non-traditional ABS negotiations for the use of their TK truly be said to be embodying a traditional lifestyle?

As discussed, the wording of the Nagoya Protocol is such that a distinction is made between “indigenous communities” and “local communities”. 92 Accordingly, the protections and exemptions

89 See Lawson, n 17, 14–16.

90 The Working Group on Article 8(j) and Related Provisions has been charged with developing (and revising) a glossary for key terms related to the implementation of Art 8(j) of the CBD. As at the time of writing, this glossary is still a work-in-progress. See Conference of the Parties to the Convention on Biological Diversity, A Glossary of Relevant Key Terms and Concepts to be Used Within the Context of Article 8(j) and Related Provisions, UNEP/CBD/COP/13/17 (2016); Conference of the Parties to the Convention on Biological Diversity, Decision XIII/19, CBD/COP/DEC/XIII/19 (2016) 2.

91 One of the more comprehensive and sensible efforts to define the term “indigenous peoples” can be found in F Mauro and P D Hardison, “Traditional Knowledge of Indigenous and Local Communities: International Debate and Policy Initiatives” (2000) 10 Ecological Applications 1263, 1264. “The current definition of indigenous peoples most accepted in the international framework includes parts or all of the following elements: self-identification as indigenous; descent from the occupants of a territory prior to an act of conquest; possession of a common history, language, and culture regulated by customary laws that are distinct from national cultures; possession of a common land; exclusion or marginalization from political decision-making; and claims for collective and sovereign rights that are unrecognized by the dominating and governing group(s) of the state.”

92 Particularly Art 12 of the Nagoya Protocol. See discussion in Pt III H.
offered to indigenous communities (and read to mean only indigenous communities in the CBD), could also be argued to apply to groups who identify as “local communities”. A local horticulture society, for example, could claim that their “customary use and exchange” of seeds (genetic resources) in accordance with their longstanding “community protocols” cannot be restricted through the domestic implementation of the Nagoya Protocol. This is admittedly an atypical interpretation of the term “indigenous and local communities”, but not an invalid one based on the above textual analysis and one that could be said to be gaining traction. It should therefore be considered as a possibility by those charged with implementing the TK and related provisions of these instruments. Furthermore, very often the term “indigenous peoples” is interpreted as a by-product of colonisation and fails to recognise that various Western cultures may also be defined as “indigenous” to a particular region. It is noteworthy here that the traditional claims of various European communities have been validated in the international arena with the registration of “geographical indication” rights for specialised agricultural products, including Champagne, Roquefort cheese and Prosciutto Toscano.

B. TK

The difficulty in classifying (and then regulating) TK comes from the fact that indigenous peoples do not represent a single homogenous group, and knowledge, no matter what the origin, is a difficult concept to define. The wider concept of “TK” in these instruments (and within this analysis where “TK” is used as shorthand) encompasses “indigenous knowledge” and “traditional knowledge” as referred to in Art 17 of the CBD, and any number of possible subcategorisations therein (see Figure 1). The subset of TK covered by Art 8(j) of the CBD, for instance, must be relevant to conservation and sustainable use and must originate with ILCs embodying traditional lifestyles. The subset of TK covered by Arts 5(5) and 7 of the Nagoya Protocol must be “associated with genetic resources” and may also need to be relevant for conservation and sustainable use, though this requirement is not clearly articulated within the Protocol’s text. The key point to be drawn out of this analysis is that ILCs have the right “to identify the rightful holders of their [TK]” and that ILCs themselves are likely the sole arbiters of what does and does not qualify as TK for the purposes of ABS. It is important to note, however, that not all TK is covered by these instruments, possibly only that which is compatible with sustainable use (and therefore, the overall objectives of the CBD). There is no requirement for ILCs to establish the right to grant access to their TK; the right of access is simply implied. This undeniably creates a series of practical problems for ABS negotiations, however, it also creates some flexibility in domestic implementation, and it is up to individual states to determine how best to capture and regulate the TK of their ILCs at the national level.

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93 Nagoya Protocol, UNEP/CBD/COP/10/27, Art 12. Likewise, Art 10(c) of the CBD does not restrict “customary use” to those users who specifically identify as ILCs. See discussion in Pt II C.

94 In 2014, the COP to the CBD adopted Decision XII/12(F), stating that the COP “[d]ecides to use the terminology ‘indigenous peoples and local communities’ in future decisions and secondary documents under the Convention, as appropriate”, as opposed to the original usage “indigenous and local communities”. This was based on recommendations from the Ad Hoc Working Group on Article 8(j) and Related Provisions. The Decision, however, also outlined multiple caveats, stating inter alia that this usage “shall not affect in any way the legal meaning of Article 8(j) and related provisions” and that it “may not be interpreted as implying for any Party a change in rights or obligations under the [CBD]”. See Conference of the Parties to the Convention on Biological Diversity, Decision XII/12, UNEP/CBD/COP/DEC/XII/12, XII/12(F) (2014) 15–16. This move was made ostensibly to ensure that the usage of the term “indigenous peoples and local communities” was “consistent with international practice”. See Conference of the Parties to the Convention on Biological Diversity, Report of the Eighth Meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity, UNEP/CBD/COP/12/5 (2014) [19].

95 For a discussion on colonialism, post-colonialism and conceptions of indigeneity, see J Weaver, “Indigenousness and Indigeneity” in H Schwartz and S Ray (eds), A Companion to Postcolonial Studies (Blackwell, 2005).


97 See discussion in Pt III E.
C. TK Associated with Genetic Resources

Textual analysis of Art 8(j) of the CBD demonstrates that the link between TK and genetic resources in the CBD is so weak as to create no binding obligations on contracting parties (other than to “respect, preserve and maintain” TK). The first use of the term “traditional knowledge associated with genetic resources” appears in the Preamble of the Nagoya Protocol, where it is repeated three more times, creating and emphasising a definitive link between TK and genetic resources that the CBD did not deliver. As difficult as it is to pin down precisely what TK is, it may be harder still to determine when TK is relevant to the use of genetic resources. The term “traditional knowledge associated with genetic resources” does not provide any guidance as to the level of association required. The Nagoya Protocol’s Preamble uses the term “held or owned” regarding TK and that notion of TK ownership is reinforced throughout the Nagoya Protocol, while the CBD only ever recognises an interest of ILCs over their TK. Part of those ownership rights highlighted by the Nagoya Protocol entail the ability to determine who has a legitimate (legal) interest in their TK. As discussed,98 it may also be the case that ILCs are the arbiters of what degree of connection should exist before their TK can be deemed to be “associated with” a genetic resource. Therefore, it may be sufficient for TK to be only tangentially associated with a genetic resource for that TK to attract ABS obligations.

V. CONCLUSION

This textual analysis has revealed that what might first appear to be binding obligations surrounding TK in the CBD actually exist as a set of principles that are so loosely defined as to be largely ineffective.99 The combination of the CBD and Nagoya Protocol, however, does create some tangible obligations related to TK and the genetic resources held by ILCs. These are strengthened by the Nagoya Protocol’s inbuilt monitoring and enforcement provisions. Like all of the ABS provisions in both instruments, they require domestic legislative or regulatory implementation to deliver a functioning bilateral ABS regime.

While there are serious ambiguities contained within these instruments, the ultimate purpose and intent regarding TK is relatively clear. Indeed, it may be essential that the CBD maintains a level of ambiguity surrounding some of its key terms, not just for the purposes of getting countries to consent to the provisions in the first instance, but to ensure that they are given the flexibility to implement the provisions according to state requirements, and within state limitations. By specifically giving sovereign countries the right to determine their own ABS regulations, the CBD must be imprecise in parts. No definitions for the terms “indigenous and local communities” or “traditional knowledge” are proffered by the CBD, and none provided elsewhere is ever considered to be universally applicable.100 Therefore, in ratifying the CBD, contracting parties have the authority to determine their own definitions for such terms.101 These definitions can be as broadly interpreted as the parties wish, but cannot be narrower than those conceptions offered by the CBD and/or the Nagoya Protocol, as appropriate. This means that domestic ABS regulations could encompass an extensive range of TK associated with genetic resources. Viruses are genetic resources within the remit of the CBD and Nagoya Protocol, so it is important to understand the facets of this regime that could shape future virus ABS agreements. If ILCs hold TK associated with viruses, users of viral genetic resources may be required to provide reciprocal benefits (monetary or otherwise) to the holders of both the genetic resources themselves and the related TK. The process of accessing viruses may therefore be hampered by further regulatory considerations and the expenditure associated with negotiating bilateral ABS contracts with (perhaps multiple) providing parties.

98 See Pt III E.
99 Robinson notes that the “principles relating to [ABS] and free prior informed consent (PIC) [found in Article 8(j) of the CBD] all provide some important tools which could also protect and promote traditional knowledge”. Robinson, n 55, 28. It should also be noted that these are principles that set powerful norms, and in that sense, may be said to be legally binding as customary international law.
100 Indeed, of TK it has been noted that “many scholars are of the view that no simple or universal criterion can be deployed to isolate indigenous from Western scientific knowledge” and the same author notes that “[i]nternational law has yet to arrive at a precise characterisation of indigenous peoples that fits all parts of the world”. Oguamanam, n 33, 18, 20, respectively.
101 It is also up to the Parties themselves to determine what genetic resources are covered by their domestic ABS rules. For instance, viruses are genetic resources but have not, until recently, been identified as or regulated as such. See Rourke, n 1, 77.