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Evaluating the WIPO Genetic Resources and Associated Traditional Knowledge Treaty: Critical History and Textual Analysis

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Prof Graham Dutfield, Professor of International Governance, School of Law, University of Leeds (G.M.Dutfield@leeds.ac.uk)

Dr Andrea Zappalaglio, Associate Professor in Intellectual Property Law, School of Law, University of Leeds (a.zappalaglio@leeds.ac.uk)

Abstract

The WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge (GRATK Treaty), adopted by consensus of over 150 states in May 2024, represents the first multilateral instrument to establish a mandatory patent disclosure requirement at the intersection of intellectual property law, biodiversity conservation, and the rights of Indigenous peoples. Yet the Treaty's substantive provisions are modest, its enforcement mechanisms weak, and its scope arguably already overtaken by the digital sequencing of genetic resources, an issue we identify as a priority for further research. This article addresses a central paradox: how an international instrument can be historically and symbolically significant while remaining legally and practically underwhelming. Through two complementary methodological approaches - an original legal-doctrinal analysis of the Treaty's operative provisions, evaluating their efficacy against the Treaty's stated objectives, and an in-depth historical-institutional analysis tracing the disclosure requirement's genesis from its first articulation in CBD-related proposals in 1993 through to the 2024 WIPO Diplomatic Conference - the article provides one of the first comprehensive scholarly accounts integrating critical textual analysis with the full institutional history across the CBD, WTO/TRIPS Council, Andean Community, and WIPO forums. In so doing, it identifies the phenomenon of 'forum-shifting' – the successive migration of the disclosure requirement debate across international organisations – as a determinative structural factor in progressively narrowing the Treaty's ambitions. The article will show how such forum-shifting was in places strategic but it was also – perhaps largely – circumstantial. Next, the article demonstrates that the GRATK Treaty, alongside the Marrakesh Treaty, represents a rare counter-movement within international IP lawmaking that, however modestly, reorients international intellectual property norms away from the exclusive interests of rights holders in high-income countries.

1. Introduction

The *WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge,* opened for signature in 2024, had a long and convoluted gestation. (WIPO 2024) Indeed, the Treaty's adoption marked the end of a 30-year process, triggered by a multilateral environmental treaty, a proposal in the context of that treaty made by three Danish lawyers, and follow-up activities first in several South American countries including an influential cross-regional legal regime. It involved at least one regional trade organisation (first, the one responsible for the above regime), three intergovernmental organisations, and much legal and regulatory action and advocacy at the national, regional, and international levels. That said, the Treaty does not really end anything. Ongoing reviews and further development of the Treaty are expected to take place, and national implementation will continue for the foreseeable future, at least as long as the Treaty remains relevant.

The WIPO Treaty (or GRATK Treaty as we call it henceforward) matters enormously for reasons we explain below. However, as will become apparent, there is nothing in the text offering much substance to advance justice for Indigenous peoples, biodiversity conservation, or benefit sharing. What explains this apparent paradox: an international instrument that is historically and symbolically significant, but that is also underwhelming legally and practically?

This article addresses the paradox identified above through two complementary methodological approaches: first, an original legal-doctrinal analysis that critically examines the operative provisions of the Treaty, evaluating their legal efficacy against the Treaty's stated objectives; and second, an in-depth historical-institutional analysis that traces the genesis and evolution of the disclosure requirement from its first articulations in the early 1990s, through its passage across the CBD, WTO/TRIPS, the Andean Community, and WIPO, culminating in the May 2024 Diplomatic Conference.

In combining critical textual analysis with institutional history, this article fills a gap in a body of scholarship that, to this date, has addressed these dimensions separately, without integrating the full institutional-historical trajectory with a systematic legal evaluation of the Treaty's text. Moreover, this article's identification of the Treaty's vulnerability to technological obsolescence — specifically, the growing reduction of genetic resources to digital sequence information — raises questions of significance not only for this Treaty but for the broader international regime complex of intellectual property, biodiversity, and Indigenous rights.

The work is structured as follows. Section 2 briefly elucidates the patent genetic resources disclosure requirement and its policy rationale. Section 3 critically examines the Treaty's substantive provisions. Section 4 provides a detailed account of the disclosure requirement's thirty-year institutional journey across multiple forums. The Conclusions synthesise the legal and historical analysis, identifying the strategic dynamics of 'forum-shifting' between international organisations as a determinative factor in the Treaty's limited ambition, and setting out a research agenda for its implementation – including the question of the Treaty's potential obsolescence in light of DSI – to be pursued in future research.

2. What is the patent genetic resource disclosure requirement?

The patent genetic resource disclosure requirement in patent law is not the same as the long-established obligation that applicants for a patent disclose particulars of the invention to enable its production by the person skilled in the art and thereby contribute to the state of the art, in doing so meriting the exclusivities arising from the grant of the patent. This principle is very old, having been first elucidated in court by Lord Mansfield in 1778.[1] The new disclosure requirement entails an obligation that patent applicants disclose information on biological or genetic matter relevant to the

[1] On the legal foundation of the disclosure obligation, see *Liardet v. Johnson*, [1778] 1 WPC 52 at 54; for a similar early statement from the United States, see *Lowell v. Lewis*, 15 F. Cas. 1018, 1020 (1817). For a wider overview, see Adams (2019, 2–26).

invention forming the subject matter of a patent, but that – it may be argued–is not strictly necessary to practice the invention. By analogy a recipe for Lobster thermidor does not require the cook to know where the lobster was caught, where the cheese, eggs or brandy forming basic ingredients of the meal were sourced, the location of the dairy, farm and vineyard where the milk, chicken and grapes came from, or the holders of cheese- and brandy-producing knowledge or skill. This is not to say that inventors never disclose such information in their patent specifications. It is just that they are not legally required to do so as long as the 'recipe' provided in the patent application is just good enough for the skilled person to follow the instructions and make the invention. Versions of this new disclosure requirement in some countries' laws, as in the GRATK Treaty, include that traditional knowledge relating to that resource must also be disclosed.

Our use of the rather anodyne terms 'relevant' and 'relating to' is deliberate as their vagueness captures wide variation among countries and regional associations in the extent to which the resource and associated knowledge must be essential for the invention to fall within the legal requirement to disclose. In many cases, such information must be directly disclosed, presumably as part of the written description of the invention forming the main part of the patent application, the main purpose being to prevent the erroneous grant of patents on inventions that the information would reveal to be less novel or more obvious than would otherwise be presumed.

An alternative, though one that is typically considered as another form of the disclosure requirement, is the submission of official documentation in the form of a certificate, permit, or contract guaranteeing the legal provenance of the genetic resource and/or legal compliance with the laws of the exporter or origin country with a patent application. Here, the main issue is perhaps less about conformity or otherwise with the patentability criteria (though this is important too), but with the exporter or origin country's Access and Benefit Sharing (ABS) rules. This legal linkage between the patent and the resource provider country was first proposed by lawyers from Sociedad Peruana de

Derecho Ambiental[2] (SPDA – in English: Peruvian Society of Environmental Law) and the international conservation organisation IUCN (that produced an early draft of the CBD), which they referred to as certificates of origin. They did so as a contribution to the Andean Community's[3] undertaking to develop a common regime on access to genetic resources. As we will see in 4.2 below, the resultant legal instrument does require intellectual property rights applicants to submit a copy of the access contract. Ongoing work on this topic was carried out by CBD working groups appointed by the Conference of the Parties, and by the United Nations University's Institute of Advanced Studies.[4] Although implementing the genetic resources ABS provisions of the CBD is the primary purpose of these certification schemes, Brazil and the Andean Community extended the scope of theirs to associated TK. A detailed exposition of the CBD's ABS rules is provided below.[5]

The CBD itself has little to say regarding making benefit sharing fully operative in practice, and its Nagoya Protocol, opened for signature in 2010, helps, albeit to a limited extent (see section 4.2). For instance, if a company accessed a genetic resource in Costa Rica and patented a gene, protein, drug, food additive, or personal care product derived from it in the UK, without a publicly available record of inventions developed using genetic resources and/or traditional knowledge, how would the state of origin and the community related to that genetic resource even know? (Pires de Carvalho 2000) And what if a product of such kind were commercialised but without a patent on it? This would suggest a need for an additional checkpoint than just a patent granting office or database of granted patents. Thus, the effectiveness of the disclosure of origin depends on the evidentiary contribution that the certification of origin might provide. Given the possible non-existence of a relevant patent, plus the importance of monitoring cross-border trade, some promoters of certificates of origin

[2] SPDA lawyers involved in this endeavour included Brendan Tobin and Manuel Ruiz Muller.
[3] In 1996, the Andean Pact changed its name to Andean Community.
[4] See Tobin, Burton, and Fernandez-Ugalde (2008); and Tobin (1997). Tobin played a key role in formulating and promoting certification of origin. At different times he worked for SPDA and for the United Nations University. He was also a delegate representing Peru at CBD meetings.
[5] See section 4.2 below.

consider their potential uses as extending beyond that of reducing the risk of biopiracy-by-patent: a way also to enhance transparency in the genetic resource trade, ensure that transactions are made on the basis of full knowledge concerning the origin of material and associated knowledge, and comply with the CBD and Nagoya Protocol. Accordingly, while certificates of this kind would accompany a patent application and perhaps preclude any requirement to disclose the origin in the specification itself, other checkpoints than intellectual property rights applications are envisaged, such as product regulatory approvals, research grant applications, and publications. Blockchain technology has been suggested as a supportive technology, especially in the context of the ever-increasing commercial and industrial value of genetic resources as information and the difficulty in tracking the movements of intangible resources for the purposes of benefit sharing. (WiLDSI 2020) As we will see, the certification of origin was excluded from the GRATK Treaty in favour of disclosure of origin *sensu strictu,* that is, disclosure of genetic resources *plus* the associated TK as requirements to acquire a patent. Furthermore, the Nagoya Protocol does not provide for the patent disclosure requirement but it has a whole article devoted to certification of origin, albeit with no reference to patent or intellectual property offices as possible checkpoints.

3. What does the Treaty say?

The text of the Treaty is groundbreaking in the sense this it represents the first time an international treaty explicitly addresses the interface between patent systems and genetic resources including traditional knowledge. In so doing, it bridges the divide between intellectual property as private property rights, collective human rights (by way of its explicit preambular reference to the *United Nations Declaration on the Rights of Indigenous Peoples*), and international biodiversity law. In doing so it reframes intellectual property law as a body of law that neither in theory or practice can any longer be treated as entirely distinct from these issues. (Wendland 2025, 2–7)

The GRATK Treaty's fundamental contribution lies in establishing a mandatory patent disclosure requirement that operates as a procedural formality within IP offices, thus helping to bridge the longstanding gap between IP, conservation of nature, and its sustainable and equitable utilisation. (Chiarolla 2019, 503) More specifically, where an invention is 'based on' genetic resources, meaning the latter were necessary for the claimed invention and the invention depends on their specific properties, (GRATK Treaty, art. 2) applicants must disclose the country of origin or source. Regarding TK associated with genetic resources, applicants must disclose the Indigenous people or local community providing such knowledge. This transforms the patent application process into a transparency mechanism that can identify potential biopiracy at the point of IP rights creation rather than attempting *ex post* enforcement. However, the Treaty merely introduces procedural requirements without extending the positive rights held by patent owners to the holders of TK associated with the invention.

Turning to the actual text, the GRATK treaty is composed of a Preamble and twenty-two articles. The present section focuses on the former as well as on the first eight articles, which include the most important substantive provisions.

The Preamble includes key elements concerning the importance of IP in this area, such as the acknowledgement of the importance of patent granting offices to prevent patents from being granted erroneously for inventions that are not novel or inventive, as well as of the patent system as a whole, as a tool to contribute to the protection of genetic resources and the TK associated with them. The Treaty also refers to IP as a system to 'promot[e] innovation, transfer and dissemination of knowledge and economic development, to the mutual advantage of providers and users of genetic resources and traditional knowledge associated with genetic resources'. Moreover, another key part of the Preamble concerns the recognition of the importance of Indigenous peoples and local communities and of the need to involve them in the implementation of the Treaty. Both are significant symbolically, but that

is not all: they make Indigenous peoples and local communities stakeholders in ongoing review and implementation processes.

Article 1 presents the two key objectives of the Treaty, and specifically:

> (a) enhance the efficacy, transparency and quality of the patent system with regard to genetic resources and traditional knowledge associated with genetic resources, and
> (b) prevent patents from being granted erroneously for inventions that are not novel or inventive with regard to genetic resources and traditional knowledge associated with genetic resources.

This is followed by Article 2, which presents a list of definitions that clarify the meaning of key expressions for the purpose of the application of the Treaty. Many of them draw heavily on CBD terminology. For instance, following the CBD, the GRATK Treaty defines 'genetic material' as any 'material of plant, animal, microbial or other origin containing functional units of heredity' and 'genetic resources' as 'genetic material of actual or potential value'. In addition, the definitions of 'country of origin of genetic resources' as 'the country which possesses those genetic resources in *in situ* conditions' overlap. (cf. CBD 1992, art. 2) This is of course deliberate and serves to highlight the point that the two treaties are intended to operate alongside each other without tensions or conflicts.

Article 3 constitutes the core of the Treaty. For the first time in a multilateral legal instrument,[6] it introduces disclosure of origin as a general mandatory requirement, thus establishing an international standard – not left to national practices alone – linked to sanctions, presented under Article 5. More

[6] National practices already existed and constituted useful precedents for the drafting of this provision. See, for instance, the Andean Community's *Decision 486 — Common Provisions on Industrial Property* ('Cartagena Agreement', 14 September 2000), which requires the signing of access contracts including disclosure of origin (Sections 3, 26(h) and 275); and the Indian *Patents (Amendment) Act 2005*, No. 15 of 2005 (5 April 2005), which grants a ground for opposition where 'the complete specification does not disclose or wrongly mentions the source or geographical origin of biological material used for the invention' (Sections 25(1)(j) and 25(2)(j)).

specifically, this provision provides two related scenarios. Paragraph 1, concerning a patent claim for an invention based on genetic resources:

> 3.1 Where the claimed invention in a patent application is based on genetic resources, each Contracting Party shall require applicants to disclose:
>
> (a) the country of origin of the genetic resources[2], or,
>
> (b) in cases where the information in Article 3.1(a) is not known to the applicant, or where Article 3.1(a) does not apply, the source of the genetic resources.[7]

Paragraph 2, concerning applications 'based on' TK associated with genetic resources:

> 3.2 Where the claimed invention in a patent application is based on traditional knowledge associated with genetic resources, each Contracting Party shall require applicants to disclose:
>
> (a) the Indigenous Peoples or local community, as applicable[3], who provided the traditional knowledge associated with genetic resources, or,
>
> (b) in cases where the information in Article 3.2(a) is not known to the applicant, or where Article 3.2(a) does not apply, the source of the traditional knowledge associated with genetic resources.[8]

In both cases, the expression 'based on' constitutes the trigger that makes the mandatory disclosure requirement applicable.[9] Accordingly, 'genetic resources and/or traditional knowledge associated with genetic resources must have been necessary for the claimed invention, and that the claimed

[7] Footnote 2 to Article 3.1(a) refers to an 'agreed statement' according to which, 'in cases where there is more than one country of origin, the applicant shall disclose the country of origin from which the genetic resources were actually obtained'.

[8] Footnote 3 to Article 3.2(a) refers to the following 'agreed statement': 'It is understood that the term "as applicable" in Article 3.2(a) shall not be interpreted as providing flexibility to the Contracting Parties to not require applicants to disclose the information required in Article 3.2(a). For greater certainty, Article 3.2(a) will be implemented without having any effect on the scope of the disclosure requirement in Article 3'.

[9] This is the result of lengthy discussions between *demandeur* countries, which advocated for a broader scope of application, and non-*demandeurs*, which pushed for the opposite. For a detailed drafting history, see Oguamanam (2025, 356–359).

invention must depend on the specific properties of the genetic resources and/or on the traditional knowledge associated with genetic resources.' (GRATK Treaty, art. 2)

This formulation introduces a dual-element structure based on 'necessity' and 'dependence'. The first aims to trigger the requirement only when a genuine connection between the invention and the genetic resource and/or associated TK exists, whereas the second aims to limit its applicability to cases where the object of the application depends on the 'specific properties' of the genetic resource or associated TK, thus excluding tangential research uses.

Next, Paragraph 3 reads as follows:

> In cases where none of the information in Articles 3.1 and/or 3.2 is known to the applicant, each Contracting Party shall require the applicant to make a declaration to that effect, affirming that the content of the declaration is true and correct to the best knowledge of the applicant.

This provision essentially works as a safety valve. When none of the required information is known to the applicant, a declaration to that effect must be made, affirming truthfulness to the best of their knowledge. This provision prevents impossible compliance burdens while maintaining accountability through sworn statements.

Finally, the following paragraphs focus on the administrative parameters necessary to implement the provision. In particular, contracting parties must provide guidance and opportunities to rectify disclosure failures or correct errors (Paragraph 4). Patent granting offices themselves bear no obligation to verify disclosure authenticity (Paragraph 5). This clause is particularly relevant as it clarifies that these offices will not be required to carry out a substantial assessment of the disclosure, as this would exceed their traditional role and expertise. Finally, Paragraph 6 stipulates that disclosed

information shall be made publicly available in accordance with patent procedures, subject to confidentiality protections. Article 4 completes Article 3 by stipulating the non-retroactivity of the 'disclosure' requirement, which therefore applies to applications filed after the coming into force of the Treaty.

Article 5 is another fundamental provision that attempts to strengthen the disclosure requirement by providing a set of 'sanctions and remedies'. We say 'attempts' because this is the article that more than anyone else emphasises the need to find a compromise between the *demandeur* countries, that supported a more rigorous approach and non-*demandeur*, that advocated for a softer touch, mainly based on the possibility to 'rectify' missing or incomplete disclosures, while focusing specifically on fraudulent behaviour. (Oguamanam 2025, 359–360)

In particular, Paragraph 1 stipulates that each contracting party 'shall put in place appropriate, effective and proportionate legal, administrative, and/or policy measures' to address disclosure failures. In essence, this this grants flexibility to signatory parties to choose the measure that is more in line with their legal and administrative systems, such as administrative fines, patent application suspension until disclosure is provided, publication of non-compliance, or other measures.

Paragraph 2 provides that states must provide opportunities to correct disclosure failures before implementing any sanctions. This grace period prevents harsh penalties for good faith errors or initially unavailable information discovered post-filing. This rule is fine-tuned by Paragraph 2bis, according to which contracting parties may exclude rectification opportunities 'where there has been fraudulent conduct or intent as prescribed by national law'. This is a reasonable addition that distinguishes between honest applicants who made good-faith mistakes and plainly fraudulent conduct.

Paragraph 3 prohibits revocation for non-disclosure alone, stating that '[n]o Contracting Party shall revoke, invalidate, or render unenforceable the conferred patent rights solely on the basis of an applicant's failure to disclose' the required information. This is a provision included to 'reassure' applicants and non-*demandeur* countries by confirming that patent validity remains secure in the absence of fraud, ensuring legal certainty for patentees and third parties relying on patent rights. This will have repercussions for countries such as India, which may have to modify their national legislation, as that country provides for revocation for the mere lack of disclosure in a relevant patent's specification. (Indian Patents Amendment Act 2005) Indeed, this, coupled with the absence of positive rights for TK holders and their communities, is bound to disappoint other countries likely to regard the Treaty as toothless and essentially unchallenging to the status quo. Indeed, some leading scholars have already argued for higher standards of protection at the national level, even those apparently not permitted under the Treaty. (Gopalakrishnan, Ragavan, and Thiruthy 2024) Obviously no country is required to ratify the Treaty even after signing it. Some may opt to selectively adopt some principles, rules, and articles nationally but omit those they disapprove of.

Similarly, Paragraph 4 permits post-grant sanctions for fraud; that is, countries may provide post-grant sanctions or remedies 'where there has been fraudulent intent' regarding Article 3 disclosures, per national law. This creates a narrow avenue for post-grant consequences, including potential revocation, but only upon proving fraud. This introduces a high evidentiary bar, as it requires demonstrating that applicants knowingly concealed required information with the specific intent to deceive.

4. How did we get here? Origins and drafting history of the GRATK Treaty

4.1 Thirty-four years of international treaties and policymaking to prepare the ground

Starting from the beginning, the GRATK Treaty is the result of the so far 34-year existence of the international regime complex of intellectual property, genetic resources and traditional knowledge,

broadly construed. The first element of this complex of interacting elements was the 1992 Convention on Biological Diversity, adopted in Nairobi and opened for signature shortly after the Earth Summit in Rio de Janeiro. (CBD 1992) We need also to include the Nagoya Protocol to the CBD,[10] intended to advance the third objective of the CBD: 'the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding'. Also to be included is the second element comprising the World Trade Organization's TRIPS Agreement, entering into force in 1995, with its provisions on patents and the life sciences.[11] We then come to the third, namely the 2001 FAO 'International Treaty on Plant Genetic Resources for Food and Agriculture', (FAO 2001) which we will not consider further. The fourth is WIPO and the present Treaty under discussion.

Moreover, there are supplementary legal instruments and institutions, one of which is older than the CBD. These include the International Union for the Protection of New Varieties of Plants (UPOV) and its 1961 Convention subsequently revised providing intellectual property protection for plant varieties, (UPOV 1961) and the 2007 'United Nations Declaration on the Rights of Indigenous Peoples' which is groundbreaking for several reasons including its extension of the right to self-determination to Indigenous peoples, but is not legally binding. (United Nations 2007) Also important for some time was the United Nations Conference on Trade and Development (UNCTAD), (UNCTAD n.d.) whose programme on traditional knowledge protection in the early 2000s and ongoing work on disclosure of origin helped to drive the discussion forward. (UNCTAD 2000a, 2000b) These institutions did not operate in isolation from each other. Ideas and proposals shifted

[10] The formal title of this instrument is 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity'. See CBD (2010).
[11] Formally, the 'Agreement on Trade-Related Aspects of Intellectual Property Rights'. For a focus on the relationship between this Treaty and biological diversity, see WTO (n.d.).

between them, as did the documents they produced at the request of other institutions.[12] NGOs played a substantial role in this cross-fertilisation as did the very fact that the same negotiators, policy entrepreneurs and NGOs operated in, or else sought to influence, more than one at the same time.

4.2 The drafting history of GRATK Treaty

After having presented the complex galaxy of international treaties and other supernational instruments that anticipated the introduction of GRATK treaty, and that provided the necessary preconditions to its conclusion, it is now possible to dig deeper into its complex drafting history. The ideal starting point is 5 June 1992 when the Convention on Biological Diversity (CBD) was opened for signature, subsequently coming into force just before the end of 1993. The CBD is the first treaty to explicitly affirm that genetic resources are not the 'common heritage of mankind' but are subject to national sovereignty. This is in line with a key principle of international law, according to which sovereignty includes exclusive legal control of everything on, in, above, or below lands and watercourses inside the bounded zones of a country's national jurisdiction.[13] At the core of the CBD system, Article 15, specifically its Paragraphs 4, 5 and 7 state:

> 4. Access, where granted, shall be on mutually agreed terms and subject to the provisions of this Article.
>
> 5. Access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources …
>
> 7. Each Contracting Party shall take legislative, administrative or policy measures … with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms.

[12] To give just one example, see Sarnoff and Correa (2006), prepared as a contribution to UNCTAD's response to the invitation of the Seventh Conference of the Parties of the Convention on Biological Diversity.

[13] See CBD (1992, art. 15(1)); de Klemm (1993, 1). For a discussion on this point, see Fredriksson (2021, 720).

Article 15 does not address associated traditional knowledge. Separately, Article 8(j) requires that state parties 'encourage the equitable sharing of the benefits arising from the utilization of … the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles'. Much of the debate and the subsequent evolution of the international protection of genetic resources and TK revolve around providing practical implementation of these rules.

The patent disclosure requirement was initially suggested at a conference in Nairobi in 1993, long pre-dating any interest from WIPO. Contributions from the conference were published in a book edited by Vicente Sánchez and Calestous Juma.[14] One of these was by Veit Koester, previously chair of a negotiating group that drafted a section of the CBD including provisions on access to genetic resources and transfer of technology, Christian Prip, another leading negotiator on international environmental instruments, plus a third author also from Denmark.[15] The credentials of the editors and authors are given here as testimony to the CBD-embeddedness of the disclosure requirement proposal in its early years. The article states as follows:

> A national patenting system can eventually be linked to the national patenting legislation of the user country in those cases where the collected genetic material is patentable. This could be done, for example, by making demands on application for patents and patent descriptions concerning the development of genetic resources dependent on the provision of certain information, in filing an application, the applicant would have to retrace the origin of the genetic material used, indicate to what extent it was used and state the conditions under which the material was acquired. (Hendrickx, Koester, and Prip 1994, 148)

[14] Sánchez was previously Chairman of the Intergovernmental Negotiating Committee for the CBD whereas Juma later became Executive Secretary of the CBD.

[15] Hendrickx, Koester, and Prip (1994). An almost identical article by the same authors and with the same title was published in a 1993 issue of *Environmental Policy and Law* (vol. 23, no. 6, 250–258). The 1993 article has an additional sentence immediately after the passage quoted below: 'Only in the case of sufficient information and when proof of an adequate compensation to the providing country can be given, the genetic material will be patentable.'

In passing, Denmark followed up this proposal by advocating for a binding disclosure requirement in the text of what became the 1998 'EU Directive on the Legal Protection of Biotechnological Inventions'. (Council of the European Union 1998) Ultimately, language on disclosure was provided in the Recitals to the Directive, but due to pushback, it was watered down.

Another early proposal for disclosure of origin was published in 1995 in India. (Gadgil and Devasia 1995) The lead author was Madhav Gadgil, a prominent ecological scientist.[16] While acknowledging that some patents already disclose the origins of genetic resources and associated traditional knowledge, the authors proposed a version that included associated traditional knowledge ('knowledge and practices of sustainable use by indigenous communities') to the information that needs to be disclosed. Acknowledging that this falls short of requiring benefit sharing, it would incentivise documentation, conservation, and perpetuation of traditional knowledge and sustainable practices.

Up to this point, disclosure of origin was being proposed and debated almost exclusively by that network of individuals dedicated to operationalising the ABS provisions of the CBD. In passing, some of these people became early sceptics of ABS. The Andean Community of South American countries[17] was a pioneer in terms of regional access and benefit sharing regulation and traditional knowledge protection laws, in large part due to ABS activism, and this region became an important participation in advancing policy and negotiations in relevant forums. In 1996, the Andean Community adopted *Decision No. 391: Establishing Common Regime on Access to Genetic Resources*. This legal instrument provides as follows:

[16] Gadgil was India's representative at the first meeting of the CBD's Subsidiary Body on Scientific, Technical and Technological Advice. According to the acknowledgements, the authors discussed their ideas with other meeting attendees. One of these, Professor N. S. Gopalakrishnan, is one of India's best-known legal experts on intellectual property law and traditional knowledge, and had earlier published on disclosure of origin (Gopalakrishnan 1994). The authors are grateful to Anson C. J. for bringing this article to our attention.

[17] Member states comprise Colombia, Ecuador, Peru and Bolivia. Venezuela withdrew from the organisation in 2006.

> The Competent National Offices on Intellectual Property shall require the applicant to give the registration number of the access contract and supply a copy of it as a prerequisite for granting the respective right, when they are certain or there are reasonable indications that the products or processes whose protection is being requested have been obtained or developed on the basis of genetic resources or their by-products which originated in one of the Member Countries

The certification of origin approach thus provided was not taken up by WIPO. Nonetheless, as we will see in section 3.2, it was included in the Nagoya Protocol, and possibly for that reason, proved to be an important trigger for multilateral action that culminated in the WIPO Treaty. Suffice it to say that four years later, Article 3 of Andean Community *Decision No. 486: Common Intellectual Property Regime* added provisions on Indigenous and local knowledge to those hitherto only concerning genetic resources:

> The Member Countries shall ensure that the protection granted to intellectual property elements shall be accorded while safeguarding and respecting their biological and genetic heritage, together with the traditional knowledge of their indigenous, African American, or local communities. As a result, the granting of patents on inventions that have been developed on the basis of material obtained from that heritage or that knowledge shall be subordinated to the acquisition of that material in accordance with international, Andean Community, and national law.

To provide some necessary context, the GATT negotiations on intellectual property, which began with the 1986 Punta del Este Declaration that formed the framework for the Uruguay Round of trade negotiations, injected a degree of urgency and event militancy among low- and middle-income countries and civil society organisations in both the Global South and North, not just in Latin America but globally, including Asia, the Pacific, and Africa. Once the Uruguay Round was concluded in 1994 and the World Trade Organization was established at the start of the following year, the latter became

a parallel forum for substantive discussion, *inter alia,* on the patent genetic resources disclosure requirement. Specifically, it was the relationship between the provisions of TRIPS concerning biotechnology patents and the third objective of the CBD that came up as matter for considerable debate among member states at the WTO, and NGOs seeking to influence the debate.[18] Most high-income countries saw no legal conflicts between the two agreements, although some European nations, including Norway and Switzerland, were willing to concede the existence of policy tensions to the extent of introducing forms of the disclosure requirement in their national patent laws. Several low- and middle-income countries saw a fundamental conflict between the CBD and TRIPS Article 27's broad scope for patentable subject matter, including pharmaceuticals, microorganisms, and industrial microbial processes, optional protection of plants and animals, and the absence of explicit prohibitions on patenting of genes, metabolites, and other chemicals extracted from living things. The official trigger for the debate with the review of Article 27.3(b) mandated to take place four years after the entry into force of the 'Agreement Establishing the WTO', (WTO 1994) as well as the review of TRIPS as a whole provided under its Article 71.1. At the Doha Ministerial Conference of the WTO in 2001, member states adopted a Declaration, (WTO 2001) paragraph 12 which has this to say, in part:

> We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 …, to examine, *inter alia*, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore

Following this, in June 2002, Brazil, China, Cuba, Dominican Republic, Ecuador, India, Pakistan, Thailand, Venezuela, Zambia and Zimbabwe jointly submitted a paper to the Council for TRIPS.

[18] The role of NGOs in driving debates and devising policy and legal approaches was substantial. However, space is insufficient here to elaborate on this role and evaluate its effectiveness.

Taking account of a document recently drafted by a working group set up by the Conference of the Parties to the CBD called the 'Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing Arising out of their Utilization', (CBD 2002) their paper proposed that TRIPS be amended to require:

> that an applicant for a patent relating to biological materials or to traditional knowledge shall provide, as a condition to acquiring patent rights: (i) disclosure of the source and country of origin of the biological resource and of the traditional knowledge used in the invention; (ii) evidence of prior informed consent through approval of authorities under the relevant national regimes; and (iii) evidence of fair and equitable benefit sharing under the national regime of the country of origin. (WTO 2003)

Several follow-up proposals were tabled, the most substantial coming in May 2006. Submitted by Brazil, Pakistan, Peru, Thailand, and Tanzania, it provided an annex comprising text that would form an additional section of TRIPS, namely, Article 29*bis* ('Disclosure of Origin of Biological Resources and/or Associated Traditional Knowledge'). The most substantial part, paragraph 2, states:

> Where the subject matter of a patent application concerns, is derived from or developed with biological resources and/or associated traditional knowledge, members shall require applicants to disclose the country providing the resources and/or associated traditional knowledge, from whom in the providing country they were obtained, and, as known after reasonable inquiry, the country of origin. members shall also require that applicants provide information including evidence of compliance with the applicable legal requirements in the providing country for prior informed consent for access and fair and equitable benefit-sharing arising from the commercial or other utilization of such resources and/or associated traditional knowledge. (WTO 2006a)

This ambitious proposal gained support from many member states. However, for political reasons amending a WTO agreement, while hardly impossible, is very difficult to achieve, and this attempt was a failure. Another forum was needed to progress international lawmaking on the patent disclosure requirement. As it turned out one was available. This was thanks in no small part to a modest proposal from an Andean Community member state.

This was in 1999 at the WIPO Standing Committee on the Law of Patents. In the context of deliberations on the development of a substantive patent law harmonisation treaty, a development that was of great concern to many low and middle-income countries, Colombia's representative proposed as follows:

> 1. All industrial property protection shall guarantee the protection of the country's biological and genetic heritage. Consequently, the grant of patents or registrations that relate to elements of that heritage shall be subject to their having been acquired legally.
> 2. Every document shall specify the registration number of the contract affording access to genetic resources and a copy thereof where the goods or services for which protection is sought have been manufactured or developed from genetic resources, or products thereof, of which one of the member countries is the country of origin. (WIPO Standing Committee on the Law of Patents 1999)

In hindsight, the Colombian proposal seems quite innocuous. It attracted support from various developing countries as well as some EU Member States, and of course, merely reflected the Andean Community's own laws. However, it met with vehement opposition from several industrialised countries, particularly the United States.[19] The Colombian proposal was excluded from the 2000 Patent Law Treaty, but the latter turned out to be modest in its legal substantiveness, as perhaps

[19] As Oguamanam (2025, 340–341) explains, the proposal was presented six years after the coming into force of the CBD, which had highlighted the issues related to the inadequate protection of Indigenous knowledge and, in general, biological diversity. Hence, the fact that it was welcomed by several WIPO members is not surprising.

Colombia had intended.[20] In fact, the proposal was timely for other reasons too. Indeed, it was historic in the sense that – for good or ill – it triggered a decisive forum shift: in effect, within a few years, substantive negotiations on the patent disclosure requirement would fall entirely within the remit of WIPO, where it would stay until 2024.

To explain this, some context must be provided. Just before the Colombian proposal was submitted, the new Director-General of WIPO, Kamil Idris, set up a new programme to explore the issue of genetic resources and to identify possible new beneficiaries of intellectual property rights, including producers and holders of traditional knowledge and expressions of folklore. However, this programme was exploratory and lacked any clear direction going forward. But following Idris's consultations with WIPO members triggered in part by the Colombian submission, the WIPO Assembly in 2000 agreed to establish a forum called the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore (IGC). Its founding mandate was to explore IP-related issues arising from '(i) access to genetic resources and benefit sharing; (ii) protection of traditional knowledge, whether or not associated with those resources; and (iii) the protection of expressions of folklore'.[21] The IGC's creation marked the rise of WIPO as the venue for substantive discussions on these topics, and the possible development of international legal instruments, whilst accepting that parallel deliberations would continue at the CBD Conference of the Parties and the WTO, [22] and, in particular, in the TRIPS Council, stalled.[23] Indeed, the Global South and North were unable even to agree whether or not conflicts between TRIPS provisions and

[20] Subsequent efforts to draw up a substantive patent law treaty a few years later failed thanks to strong opposition from low- and middle-income countries; see Dutfield (2014).
[21] WIPO General Assembly (2000, 4). For a volume specifically dedicated to this body, see Robinson, Roffe, and Abdel-Latif (2019).
[22] For a detailed report on the situation in the TRIPS Council between 1999 and 2006, see WTO Council for Trade-Related Aspects of Intellectual Property Rights (2006).
[23] Specifically, the debate focused on Article 27(1) on patentable subject matter; Article 29 on conditions on patent applicants, including 'sufficient disclosure'; Article 62 on acquisition and maintenance of intellectual property rights and related *inter partes* procedures; and Article 32 on revocation and forfeiture of patents. See Ribeiro de Almeida [reference incomplete in original], 379–389; Oguamanam (2025, 337–338). By contrast, as late as 2004, leading scholars such as Carlos Correa argued that the WTO should remain the 'main forum for negotiation on [the matter of disclosure]' (Correa 2005). See also Abbott (2003).

the CBD existed at all. It is important here to note also that WIPO had already laid the groundwork for a prominent role in the field of TK in 1998-1999 by carrying out groundbreaking fact-finding missions in various parts of the world on the relationships between intellectual property, traditional knowledge and folklore (subsequently labelled traditional cultural expressions). (WIPO 2001) The CBD-COP had done much to link genetic resources, traditional knowledge, and benefit sharing to intellectual property, as had academics and advocacy groups, both of whom were producing vast amounts of literature on this. WIPO was now starting to mainstream these connections.

The IGC introduced the topic of the disclosure requirement in its very first meeting. In particular, it stated its intention to join the debate that was already in place in various international organisations, such as the CBD, UNCTAD, and the WTO. Moreover, this agenda point was coupled with the suggestion for WIPO Member States to consider developing criteria to allow the effective integration of TK into prior art for patentability purposes, thus countering biopiracy and TK theft. (WIPO IGC 2001, paras. 44–45)

Now our narrative needs again to switch between forums. While this debate was taking place in the IGC, other international organisations were discussing and approving agreements whose object and scope intersected the activities of the IGC. (Goss 2025) The CBD remained active at this time. In 2002, the aforementioned Bonn Guidelines were drawn up by the CBD-COP-appointed Ad Hoc Open-ended Working Group on Access and Benefit-sharing. (see WTO 2003) This is a voluntary set of rules designed to assist countries in developing measures for access to genetic resources and the fair and equitable sharing of the benefits arising from their use. The text focuses for the most part on the implementation of the CBD's ABS rules, and provides guidance on how to obtain prior informed consent, establish mutually agreed terms, and share benefits with the country of origin and local communities. However, as mentioned above, it also encompasses disclosure of origin. (CBD 2002, art. 16(d)(ii))

During the same period, the CBD-COP invited the IGC to produce a technical study on patent disclosure requirements relating to genetic resources and associated TK. This document reviews the background and technical issues surrounding patent disclosure requirements and provides a snapshot of a divided scenario in which the disclosure requirement was far from unanimously supported. For instance, among other things, the document presented the results of a survey showing that explicit legal provisions requiring disclosure of the use or origin of genetic resources were rare and confined to general, non-binding statements.[24] The report also suggested that conventional patentability requirements, such as sufficiency of disclosure, could already oblige applicants to reveal information about genetic resources and TK in certain circumstances. For instance, the document referred to a Spanish study produced by an officer of that country's patent office, Asha Sukhwani, which had initially been submitted by that country to the fourth meeting of the CBD-COP in Bratislava in 1998. The study provides examples of patents involving rare or exotic plant resources that *did* identify the country of origin; that is to say, the country or countries where they grow in *in situ* conditions if not from where they were actually sourced. Also traditional use is disclosed *as far as it is known.* However, understandably origin was not indicated for well-known and widespread plants.[25] In passing, an empirical study by Oldham and others , (Oldham, Hall, and Forero 2013) based on patent claims found in 11 million patent documents suggests that the key concern should be that the patent system fails to incentivise commercially oriented scientific interest in biodiversity beyond an extremely narrow range of species. In short, the problem is not that there is too much bioprospecting for rare or exotic species having valuable properties, but that there is not enough. However, further discussion on this matter is beyond the scope of this article.

[24] The report refers, for instance, to Recital 27 of the EU Biotech Directive (Council of the European Union 1998); see WIPO IGC (2002, paras. 53–56).
[25] WIPO IGC (2002, para. 57); see also WIPO IGC (2001b). Cf. the traditional position of the United States on this topic, according to which the disclosure requirement would be ineffective in achieving the objective of enabling a better assessment by patent examiners of novelty and inventive step in claimed inventions: South Centre (2007, 2–3).

After 2002, in this complex scenario, the IGC began focusing on a number of issues, such as defensive approaches to IP protection, that is on how to make sure that TK, TCEs and genetic resources are protected from misappropriation through IP[26] and, from 2004, on the relationship between patents and TK/genetic resources and on how to ensure their acknowledgement in the traditional IP paradigm. In this context, WIPO presented a 'Technical Study on Patent Disclosure Requirements Related to Genetic Resources and Traditional Knowledge', focusing on how IP could promote the goals of the CBD, especially supporting access to genetic resources and benefit sharing. (WIPO 2004) This was followed by a key document entitled 'Disclosure of origin or source of Genetic Resources and associated Traditional Knowledge in patent applications' submitted by the European Community, as it then was. (WIPO IGC 2005a) This document further fuelled the discussion by proposing the introduction of a mandatory requirement to disclose the country of origin or source of genetic resources in patent applications, supported by sanctions for missing, incomplete, or untruthful declarations. (WIPO IGC 2005a, annex, 5) This was discussed in parallel with two related texts, 'The protection of Traditional Knowledge: revised objectives and principles' (WIPO IGC 2005b) and 'Recognition of Traditional Knowledge in the Patent System', (WIPO IGC 2005c) both including the issue of disclosure requirements.

As for the CBD-COP, its work in this area did not end with the Bonn Guidelines. The Nagoya Protocol was adopted on 29 October 2010 and entered into force four years later when it reached its fiftieth ratification. As mentioned earlier, this supplementary agreement to the CBD improves upon the latter by transforming its benefit-sharing principles into enforceable legal requirements. (see CBD 2010) However, the substantiality of the final text of the Protocol belies the difficult compromises that reduced a broad menu of possibilities in favour of the path of least resistance, one that had no place for the patent disclosure requirement. A heavily bracketed draft of Nagoya, then referred to as the

[26] See, as an example, WIPO IGC (2003).

'International Regime on Access and Benefit Sharing' circulated at the 8th meeting of the Conference of the Parties in Curitiba, Brazil in March 2006 contained a broad set of measures under the following two (bracketed) headings: '[Disclosure [of [legal provenance] [origin] [prior informed consent and benefit-sharing]'; and '[[Certificate of origin] [International certificate of [origin/source/]legal provenance]'. (CBD 2006) An annex to this document provided a list of potential rationales, needs and objectives, potential characteristics and features, and implementation challenges of establishing international certification through the international regime.

However, many possible options contained in these bracketed sections were deleted so that by 2010, the patent disclosure requirement was no longer being considered. Seemingly, the CBD parties were ceding this ground to WIPO. In the event, the agreed text of Nagoya provided some important text.[27] Thus, Article 17 deals with monitoring use of genetic resources and an international recognised certificate of compliance. However, the latter article makes no reference to traditional knowledge. Checkpoints are envisaged, but there is no mention of intellectual property offices. Indeed, intellectual property rights are scarcely mentioned in the whole of the Protocol's text. It seems clear that by 2010, with the CBD process on the patent disclosure requirement finally grinding to a halt, and with stalemate at the WTO, this left WIPO as the sole organisation left where legal binding international norms on the disclosure requirement could be agreed. However, nothing at all was certain.

From 2005 to 2012, the IGC emerged as *the* driving force behind, and the discussion forum for, a number of various initiatives, such as developing reports, carrying out surveys and other data collection activities, and receiving submissions from member states. In parallel, discussion was also

[27] An in-depth analysis of the contents of the Nagoya Protocol exceeds the scope of the present article. For an in-depth analysis, see Morgera, Tsioumani, and Buck (2015).

fuelled by academic work: research projects, reports, books and articles, conferences and so on.[28] The WIPO international bureau alone produced a huge volume of materials, revised and updated several times,[29] including in 2012 the document 'Disclosure of origin or source of genetic resources and associated Traditional Knowledge in Patent applications'. (WIPO IGC 2011) Very importantly for our discussion here, this was followed by a set of 'Draft Articles on the Protection of Traditional Knowledge', and in 2013 by the 'Consolidated document relating to Intellectual Property and Genetic Resources'. The latter included the draft of a negotiating text on 'Intellectual Property and the protection of Genetic Resources [their derivatives] and associated Traditional Knowledge'. (WIPO IGC 2012) The text was of course a work in progress, as highlighted by the number of square brackets surrounding text, indicating disagreement and matters for further debate. Nonetheless, it makes an important contribution, by incorporating the discussion on the disclosure requirement, presented as a general policy objective, as well as a system to enhance fairness and mutual trust.[30]

The following period, and until 2019, saw a deadlock in the discussion within the IGC. To provide a taste of the complexity of the discussion, in 2014, a group of developed countries presented a 'Joint Recommendation on Genetic Resources and Associated Traditional Knowledge' which did not include the disclosure requirement at all.[31] On the opposite side of the spectrum, some experts have criticised the disclosure requirement as unable to contribute to the empowerment of Indigenous people or even to adequately recognise their important roles by dint of their knowledge, and have advocated instead for the introduction of specific positive rights for the custodians of TK related to genetic resources. (WIPO IGC 2016, 4)

[28] See, among many, Queen Mary Intellectual Property Research Institute (2004); Hoare and Tarasofsky (2006); and Hoare and Tarasofsky (2007).
[29] To get an idea of the dozens of documents of various kinds produced in this period, see WIPO IGC (2009a) and WIPO IGC (2009b).
[30] These texts were discussed in the Forty-Third (21st Ordinary Session) of the WIPO General Assembly in September/October 2013. See WIPO General Assembly (2013).
[31] These countries were Canada, Japan, Norway, the Republic of Korea and the United States. See WIPO IGC (2014). The recommendation was updated and expanded in subsequent years, but never came to include the disclosure requirement.

After five years, little progress was made. The 'Consolidated document relating to Intellectual Property and Genetic Resources' presented at the IGC Thirty-Fifth Session (19 – 23 March 2018) was still riddled with square brackets. (WIPO IGC 2017) A year later, a 'Gap Analysis' concerning the protection of TK in the international legal frame reported that, while the idea of the inclusion of an international disclosure requirement was supported by several WIPO Member States, others questioned its actual value, leaving the gap open. (WIPO IGC 2019, paras. 98–100) As observed by Oguamanam, an academic who attended IGC meetings and took part in negotiations on behalf of Nigeria, a group of non-*demandeur* countries, mostly highly industrialised states such as the US, Japan, the Republic of Korea, Canada and a few EU member states, actively engaged in filibustering practices '… literarily dumping an interminable deluge of partisan reports and commissioned studies – all pointing to how harmful, onerous, and deleterious a treaty with mandatory disclosure of the origin of genetic resources and associated traditional knowledge would be to patent holders, industries, and research.' (Oguamanam 2025, 345) Thus, this conduct led to accusations of bad-faith negotiations by the *demandeur* bloc. (WIPO IGC 2018, para. 234)

The deadlock was broken on 30 April 2019 when Mr Ian Goss, Chair of the IGC, presented an ambitious draft, commonly known as the 'Chair's Draft'.[32] This text skilfully blended all the key results of the previous years of discussions as well as the legitimate concerns of the WIPO Member States that had prevented an agreement until that point. In particular, Mr Goss observed the following:

> The IGC's inability so far to find a consensus position is reflected in the different policy interests contained in the alternate objectives within the IGC's current draft text on genetic resources and Associated TK. There is, in my view, scope for bridging these different perspectives and room for balancing the rights and interests of users and the rights and interests of providers and knowledge

[32] The text was published on the occasion of the IGC Forty-Third Session (30 May – 3 June 2022). See WIPO IGC (2022).

> holders. In addition, a clearer understanding of the modalities of an international disclosure requirement would enable policymakers to make informed decisions regarding the costs, risks and benefits of a disclosure requirement.[33]

This ambitious proposal was welcomed by several Member States, which defined it as more complete and mature than the materials that preceded it.[34] The WIPO General Assembly, taking into account the possibility of finally finding a convergence on a text based on the 'Chair's Draft', decided, following the initiative of the African Group, to 'convene a Diplomatic Conference to conclude an International Legal Instrument Relating to Intellectual Property, Genetic Resources and Traditional Knowledge Associated with Genetic Resources … to be held no later than 2024'.[35]

Implementing the 2022 mandate, WIPO member states agreed on a two-step preparatory structure for September 2023. First, a Special Session of the IGC focused on revising the substantive provisions of the Chair's draft. (WIPO IGC 2023) This was followed by a meeting of a Preparatory Committee that finalised several practicalities related to the Diplomatic Conference, including the Rules of Procedure and other administrative provisions. (WIPO n.d.-a)

On the basis of this preparatory work, WIPO convened the Diplomatic Conference on Genetic Resources and Associated Traditional Knowledge for 13-24 May 2024 in Geneva. The Conference was formally described as the final stage of negotiations aimed at adopting an international legal instrument that would improve transparency and quality in the patent system and help prevent patents from being erroneously granted over inventions that were not truly novel or inventive in light of

[33] WIPO IGC (2022, para. 2). For an account of how the 'Chair's text' came to life, overcoming some resistance, namely from the United States, see Oguamanam (2025, 346–351).
[34] For a first-hand account of the goals, development and debates surrounding the 'Chair's Draft', see Goss (2025, 48–58).
[35] For a summary of the decisions of the General Assembly, as well as a collection of opinions of many member states on the 'Chair's Draft', see WIPO General Assembly (2022). The roadmap adopted by the General Assembly is presented at paragraph 309.

GR/TK. During the Diplomatic Conference, delegations negotiated on the basis of the Special Session draft, named 'Basic Draft' which was still essentially based on the Chair's Draft, (WIPO 2023) and adopted a series of amendments that crystallised a single, mandatory patent law disclosure obligation as set out above. (Yu 2024) In the early hours of 24 May 2024 more than 150 WIPO member states adopted by consensus the *WIPO Treaty on Intellectual Property, Genetic Resources, and Associated Traditional Knowledge* (GRATK), which was opened for signature later that day.[36]

5. Conclusions

This article has made three principal contributions to scholarship in this field. First, it has provided a detailed integrated account of the GRATK Treaty that combines critical legal-doctrinal analysis of the Treaty's operative provisions with a comprehensive institutional history spanning the CBD, WTO, Andean Community, and WIPO processes from 1992 to 2024. Second, it has analysed 'forum-shifting' which the article implicates in the successive migration of the disclosure requirement debate from the CBD to WIPO via the WTO. While this undeniably led to a substantive legal outcome, as a determinative structural factor in producing the treaty, forum-shifting's eventual consequence was a progressively narrowed ambition due to the institutional constraints and political dynamics inherent to each successive forum. Third, by situating the Treaty within the broader trajectory of what Drahos has termed the 'global intellectual property ratchet', it has demonstrated that the GRATK Treaty, alongside the Marrakesh Treaty, represents a rare counter-movement within multilateral IP lawmaking — one that, however modestly, reorients the normative direction of international intellectual property law away from the exclusive interests of rights holders in high-income countries. Drawing upon these contributions, it is now possible address the question posed at the beginning: how to explain the paradox of an international instrument's being historically and symbolically significant, and yet underwhelming both legally and practically.

[36] All the resources concerning this Treaty, including its approval process, are accessible at WIPO (n.d.-b). For a reflection on this rule-making process, see Goss (2025, 59–67).

The key substantive provisions of the GRATK Treaty introduce a mandatory patent genetic resources disclosure requirement and operationalise it by linking it directly to patent law practice. If that is a positive, the enforcement side is bland, evidently the product of a compromise between *demandeurs* and non-*demandeurs* that may well truly satisfy nobody. Hence, even if mandatory disclosure is now a uniform international standard, the landscape of national legislation will likely remain highly diverse, as domestic rules, some of which pre-date the Treaty, will still reflect the relevant interests and values of each WIPO member state, thus leading to a complex scenario the Treaty does little to clarify or simplify. Perhaps, this is not a bad thing, merely the best that could be hoped for. The United States surely will not ratify the Treaty and nor will several other high income countries. On the other hand, it is perfectly reasonable to suggest that Indigenous peoples who followed and intervened in CBD and WIPO processes from the earliest days may well, and perfectly understandably, feel a sense of ownership towards the Treaty which does envisage them as being key participants in the Assembly established to oversee the Treaty by virtue of its Article 10.

However, let us now consider the wider context, including some recent history. Since the WTO introduced the TRIPS Agreement in 1995, the trend has been largely unidirectional: towards a significant elevation of global IP standards. As intended, these primarily benefit rights holders from high-income countries. This shift, which Peter Drahos refers to as the 'global intellectual property ratchet', has been driven by various IP standard-setting treaties, including TRIPS and the 1996 so-called Internet treaties,[37] plus numerous bilateral and regional trade agreements that reflect the political and diplomatic pressures that global powers, especially the USA and the EU, exert on weaker nations. Essential as the latter deals have contributed to the aforementioned ratchet-effect, multilateral agreements remain essential. However, along with the 2013 'Marrakesh Treaty to Facilitate Access

[37] These are the WIPO Performances and Phonograms Treaty and the WIPO Copyright Treaty, both opened for signature in 1996.

to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled', which groundbreakingly facilitates access to books for the visually impaired, prioritising the needs of consumers over the interests of IP owners, the GRATK Treaty also departs from conventional IP norms that favour corporations in the Global North. Furthermore, the latter's explicit link to the Declaration on the Rights of Indigenous Peoples and its support for Indigenous and local community's participation in the Assembly formed by the Treaty are symbolically important, fostering a balance of sorts between patent rights and Indigenous rights. The stakes of addressing critical intersections of biodiversity and cultural heritage are high. By re-balancing rights with the interests of vulnerable groups, the Treaty – as with Marrakech – represents, but also promotes, legal change this time not in favour of hegemonistic countries and corporations. This is no small achievement. Having successfully blocked substantive patent law harmonisation the door is open far wider than previously for countries to tailor their patents laws in favour of national interests and underprivileged groups including creative and innovative peoples and communities that intellectual property law hitherto has ignored to the point of tacitly if not overtly condoning their exploitation.

This discussion inevitably raises further questions which may form a useful framework for ongoing research. These are as follows: (i) Was the shift of forum to WIPO necessary for any such international instrument, however weak, to be agreed? Or (ii) did this move to a specialised intellectual property agency foreclose possibilities for more radical multilateral approaches to combat biopiracy and facilitate benefit sharing via the Conference of the Parties to the CBD or the World Trade Organization (WTO)? (iii) Why did countries seeking to gain from disclosure of origin invest so much time and effort to achieve an outcome apparently destined to be modest in its ambitions and likely attainments? (iv) Or was there little choice in that no more promising alternatives to the disclosure of origin requirement (henceforward 'the patent disclosure requirement') were feasible? And (v), distinct from (iv) but related: what weight should be given to the Treaty's grounding in genetic resources as physical matter at a moment when the commercial and scientific value of those resources is increasingly

mediated by digital sequence information? This last question, which a developing literature is beginning to address systematically, lies beyond the scope of the present article but constitutes, in our view, one of the most important determinants of the Treaty's long-term relevance. In passing, although DSI is not mentioned in the Treaty, Ogumanam (2025) argues that the text does not foreclose the option for countries to insert them into their implementing laws. The same author also highlights the opportunity to revisit the DSI issue when the Treaty is reviewed for four years after its entry into force.

Our initial thoughts are that had the patent disclosure requirement not first been devised as part of the debate on operationalising the third objective of the CBD, it would never have gotten off the ground and there could not have been a WIPO legal instrument on this. Moreover, the amount and substantiality of work on the topic that took place in CBD forums, by outside organisations working on CBD implementation issues, and by governments operationalising the CBD provisions nationally and regionally, formed much of the underlying basis for what ultimately became the approved text of the Treaty. Further, if a multilateral IP treaty was to be the objective – and it certainly did not have to be given the amount of national and regional level norms that were already in place – the present text, from the *demandeurs*' perspectives, was about as good as it was going to get. As to whether the Treaty has a future, time will tell, but treating genetic resources purely as physical matter suggests that it may be doomed to partial or complete obsolescence, and that may not be many years away. Whether that would be a matter for regret and for whom is something that only time will tell.

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