

Do Non-State Perspectives Matter for Treaty Ratification and Implementation? The case of the European Consultation on the Nagoya protocol

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ABSTRACT

This article investigates what happens when governmental actors foster the participation of non-state actors (NSAs) in treaty ratification and implementation decisions. NSAs, being non-governmental organizations, business groups, citizens, or research institutions, among others, represent interests that will be ultimately impacted by policy choices. While governments have long consulted them on an ad hoc basis, a ‘deliberative turn’ happened in the 2000s to encourage their involvement, for greater legitimacy and transparency through, among others, the use of public consultations. This proactive turn raises questions about public consultations: are such instruments effective? Do they encourage new thinking? Do they matter for final decisions? This article answers these questions by investigating, using lexicometry as main research tool, the public consultation organized by the European Commission in 2011 before the ratification of the Nagoya Protocol on access and benefit sharing by the European Union in 2014. The results are mixed. Although the studied public consultation favoured the expression of small national NSAs, the process remains poorly inclusive. NSAs did not propose any fresh ideas on the access and benefit sharing issue and their final influence on European decision-makers is blurred by the diversity of interests expressed. Copyright © 2016 John Wiley & Sons, Ltd and ERP Environment

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Introduction

GLOBAL ENVIRONMENTAL POLITICS IS A LIVELY POLICY DOMAIN. NEW INTERNATIONAL ENVIRONMENTAL AGREEMENTS ARE regularly negotiated, such as, recently, the 2010 *Kuala-Lumpur Nagoya Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety*, the 2010 *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization*, and the 2013 *Minamata Convention on Mercury*. As a result, the issue of treaty ratification and implementation, although discussed since the early 1970s, remains topical.

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Another constant feature of global environmental politics through time is the importance that non-state actors (NSAs), i.e. entities that are not governmental, including non-governmental organizations (NGOs), business groups, citizens and research institutions, play in its development. Concerning the aforementioned issues, genetically modified organisms are the result of biotechnology manipulations performed by research teams or agribusiness groups; access and benefit sharing is required when commercial applications are developed on the basis of traditional remedies used by indigenous peoples; mercury pollution is provoked by fossil fuel combustion and waste incineration by diverse industrial sectors.

Several studies, inspired by a liberal intergovernmentalist perspective, have shown that NSAs play an important role in the ratification and implementation of international environmental treaties (Raustiala, 1997; DeSombre, 2000; Bernhagen, 2008). By expressing their preferences directly to policy-makers they can push governments towards the ratification, or not, of treaties. This perspective giving weight to interest groups is known as 'the domestic adjustment model' (Perkins and Neumayer, 2007: 20–21).

While the involvement of NSAs in decision-making has often been performed on an ad hoc basis, through closed advisory groups, recent developments, representing a 'deliberative turn' (Goodin, 2008), aim at encouraging their participation, for greater legitimacy and transparency. New modes of participation have developed such as public consultations, citizen juries or open policy forums (Bäckstrand *et al.*, 2010), for discussing the adoption of regulations. This proactive involvement of NSAs poses new questions: is it effective? Are NSAs able to express their views through these new instruments? At the end of the process, do non-state perspectives matter?

This article answers these questions by investigating the participation of NSAs in the public consultation undertaken in 2011 by the European Commission, before the ratification of the Nagoya Protocol by the European Union (EU) in 2014. The next section introduces the puzzle, reviewing the current literature on the domestic adjustment model and links to the participation turn paradigm. It identifies three research questions. I then detail the case study and the methodology, investigate the research questions, and finally conclude and propose future research paths.

Non-State Contributions to Treaty Ratification and Implementation: State of the Art and Research Questions

The Domestic Adjustment Model and the Deliberative Turn

Three main models have been proposed to investigate environmental treaty ratification and implementation: the domestic adjustment model, the reputational model and the managerial model (Perkins and Neumayer, 2007). Focusing on non-state participation to ratification decisions falls into the domestic adjustment model, inspired by the liberal intergovernmentalist perspective.

According to this model, the ratification and implementation of environmental agreements depends to a great extent on the preferences of domestic players. The domestic adjustment model relies on two assumptions regarding the link between NSAs and decision-makers. First, because the interests of NSAs are affected by the policy adopted, the opinion they have on its implementation is key to ensure adoption and compliance (Raustiala, 1997; Velázquez Gomar, 2014). Secondly, states are sensitive to the opinion of the electorate (Hovi *et al.*, 2009). This means that powerful civil society interests, more often than not economic ones, can drive the environmental decisions of states (Chasek, 2007; Bernhagen, 2008).

Depending on the environmental issue at hand, the model indicates that interests can push for or stop ratification. For instance, biotechnology firms opposed the ratification of the Convention on Biological Diversity (CBD) by the United States (Chasek, 2007). By contrast, the American fur industry pushed for the ratification of the Washington Convention on endangered species by the American government to ensure that competitors would be subject to the same restrictive rules they were facing at the national level (DeSombre, 2000).

While initially the domestic politics adjustment model does not predict the direction of non-state influence, other studies, on ratification of environmental treaties by democracies, have complemented it and shown that pluralism usually favoured ratification. Democracies have higher rates of ratification (Roberts *et al.*, 2004) in part thanks to

the participation of NSAs regarding policy decisions. Firstly, democracies respect individual rights and therefore give more space for environmental activists to express their views. Secondly, they are more sensitive to public opinion, which can favour environmental agreements. Thirdly, democracies tend to be more open to trade liberalization, meaning that their companies are more likely to push for the harmonization of international environmental norms (Carbonell and Allison, 2015).

Yet the involvement of NSAs in decisions about ratification has not necessarily been the norm, even in democracies. States have long preferred to set up closed advisory groups, rather than open public consultations. In 1992, the UK future ratification and implementation of the CBD was discussed within a private group including representatives of World Wildlife Fund, Imperial Chemical Industries, the Congress of British Industry, the Cambridge Monitoring Center and Kew Gardens (Raustiala, 1997). The difficulty is that closed advisory groups reinforce inequalities and create a 'domestic politics problem' (Hovi *et al.*, 2009: 25), whereby domestic constituencies that were not included in consultations block the implementation of rules.

Around 1990, as follow-up to these practical limits, scholars noted the need for a 'deliberative turn' requiring 'authentic deliberation among those affected by a collective decision' (Dryzek 2002: 1; see also Eckersley, 2000; Goodin, 2008). Although this turn was challenging established institutions, democratic states embraced it and adopted new policy instruments proactively involving NSAs (Bäckstrand *et al.*, 2010). The new deliberative regime is marked by a wide spectrum of mechanisms ranging from open expert-orientated instruments reminiscent of traditional expert groups, to stakeholder-orientated instruments such as policy forums and citizen-orientated instruments such as citizens' conferences, online consultations or online forums. Decision-makers realized that they often relied on input from consultations to show them where the bulk of support lied on an issue as well as to gather the technical expertise needed to help reduce uncertainties about policy outcomes. Direct involvement of NSAs was also meant to generate greater trust and transparency in the decision-making process, reinforcing its legitimacy.

Despite its promises, very few studies have centred on the real effects of such new deliberative instruments. Considering the assumptions of the domestic adjustment model and its extension after the deliberative turn, I identify three research questions to investigate these effects. These questions are also inspired from the literature on current public consultation efforts in the EU.

Research Questions

Research Question 1: Are new modes of governance effective? Do NSAs participate in new instruments? Traditional channels of non-state involvement, mostly lobbying channels, have been found to favour powerful NSAs (e.g. Bunea, 2013). As Baumgartner states, taking the example of the EU, 'multi-level advocacy requiring simultaneous lobbying strategies at many levels may increase barriers to entry, excluding smaller actors' (Baumgartner, 2007: 483). The very idea of a new instruments is to lower these barriers and invite stakeholders to consult and exchange ideas. Yet several studies have shown that even open consultations are far from being inclusive, with, again, industry dominating (Quittkat, 2011; Rasmussen and Carroll 2014; Marxsen, 2015). While having enough resources to be involved, some organizations even systematically refuse to participate. This has been the case of several European civil society organizations that dismissed European consultations for being mere box-ticking exercises (Quittkat, 2011). With regard to the time period, it is undoubtedly difficult, especially for European-level associations, to discuss and formulate a common and coordinated position with their members within a period of 2 months, which is the minimum and usual period for European consultations, as guaranteed by the European Minimum Standards. While public consultations are one channel of expression, other channels are possible. Do NSAs use other channels to express their views, or do they use both? Overall, studies concentrate on these new instruments but disregard other possible channels for NSAs to express their views, failing to consider a comparative baseline (e.g. Ahteensuu and Siipi, 2009).

Research Question 2: Do public consultations enable NSAs to provide expertise and therefore fresh and new ideas on the issue of treaty ratification and implementation? Information is the currency of lobbying (Baumgartner, 2007: 185; Chalmers, 2011: 471; Corell and Betsill, 2001). Among others, NGOs are known to advocate new causes through advocacy coalition networks. Research organizations are known for disseminating new information through

epistemic communities. Business actors are known for their expertise with regards to technical environmental issues. Do consultations enable NSAs to build on their capacity to produce new information?

Research Question 3: Do non-state consultations have an impact on treaty ratification and implementation? So far, studies on consultations have shown mixed results. Consultations seem to delay ratification and implementation decisions because it takes time to analyse their results (Chalmers, 2014). Moreover, even the practice of online consultations is not transparent, and reporting on consultations is often the Achilles heel of governments (Quittkat, 2011). Yet few studies have investigated the content of public consultations (with the exception of Hiilamo and Glantz, 2015) and the potential connection between this content and the policy decisions taken.

To answer these research questions this contribution uses a best-case scenario, i.e. a case in which the researcher is very likely to find positive answers (and therefore effects) to the questions raised. The case is presented below.

The European Public Consultation on the Nagoya Protocol as Empirical Investigation

The EU and the Nagoya Protocol

The Nagoya Protocol was adopted in October 2010 during the 10th Conference of the Parties to the CBD. The agreement entered into force 4 years later in October 2014. The idea behind the Protocol is that biodiversity, and more precisely the genetic resources of plants and animals, is useful for several commercial applications, including pharmaceutical, cosmetic and agricultural products. As a result, the users who access these genetic resources should be asked to share a part of the profits they make by selling them with the providers of the resources. Sometimes, users also take inspiration from traditional knowledge (TK) to valorize genetic resources. The Protocol applies to genetic resources and to the associated TK. A quite strong North/South divide animates the access and benefit-sharing issue because countries rich in biodiversity (and therefore genetic resources) and TK are mostly developing countries, while countries skilled at using genetic resources are mostly developed countries.

The Protocol establishes requirements that ratifying states have to translate into their domestic legislations. More precisely, the Protocol asks countries to adopt access rules with prior informed consent (PIC), by which the providers have to give their consent for genetic resources to be accessed and associated TK to be used. It also establishes benefit-sharing rules with mutually agreed terms (MAT), by which the provider and the user agree on the conditions for benefit-sharing (Buck and Hamilton, 2011). Yet, the Protocol presents uncertainties on key issues, including the scope of the agreement. Is it retroactive? Does it deal with biological material? Will there be some different treatments depending on the sectors of activity? (Oberthür and Rosendal, 2013) Because of uncertainties, governments have some room for manoeuvre when implementing the treaty.

Studying the deliberative mechanisms developed by the EU before its ratification of the Nagoya Protocol is a best-case empirical investigation for at least three reasons. Firstly, since 2000, the EU has been willing to implement principles, norms and rules of good governance and pays specific attention to 'civil society involvement' as well as to openness, transparency and inclusiveness (Commission of the European Communities, 2001). As a result, the EU organized a public consultation in 2011 before its ratification of the Nagoya Protocol in 2014. Secondly, many European stakeholders are involved in the access and benefit sharing (ABS) issue and are therefore likely to participate actively in the consultation. The Nagoya Protocol is considered to be a mixed agreement under EU law, with exclusive and shared competence [both the EU and the EU member states (EUMS) will ratify] (Schally, 2012), meaning that both national and European interest groups will be concerned. Moreover, the ABS issue is technical and several NSAs, including botanical gardens, biotechnology companies, environmental NGOs and representatives of indigenous communities, will be affected by the adopted policies. Thirdly, the EU played a key role in the international negotiations of the Protocol, with its influence benefiting from a heterogeneous but lively domestic constellation of interests (Oberthür and Rabitz, 2014). If these interests were active on the international scene for negotiations, they are likely to mobilize for a public consultation on the ratification and implementation of the agreement by the EU.

Because the investigated case is a best-case scenario, our results will have to be interpreted as follows: if deliberative mechanisms are found to produce effects then it means that these effects are visible in at least some particular situations; if deliberative mechanisms are found to produce no or few effects then it is likely that they produce no or few effects in general.

The Public Consultation Process

Table 1 presents the chronology of the European policy process leading to the adoption of the Nagoya Protocol. The EU legislation, and thereafter the ratification of the Protocol, was decided upon in an ordinary legislative procedure whereby the Commission has the legislative initiative, including technical drafting of the legislative proposal. The Parliament may then express consent or rebuke or amend the proposal, in dialogue with the Council of Ministers. The ordinary legislative procedure usually takes between 18 and 30 months.

The Commission, and more precisely the Environment Directorate-General, launched a 2-month public online consultation on the issue of the Nagoya Protocol implementation in October–December 2011. The consultation was announced on the Internet and allowed for answers through a questionnaire of semi-open questions online to be filled in by any interested stakeholder. The results of the public consultation were first presented during a technical workshop in January 2012 and then annexed to the Commission legislative proposal of October 2012, together with an impact assessment of the possible options for implementation, also based on the consultation results.

For scientific quality and to complement former studies, there is a need to compare the public consultation process with other channels of expression for NSAs. To introduce such a comparison, and keep things comparable, one has to look at other channels for written submissions. Online activism is a recent challenge for European institutions (Albrecht, 2012; Badouard & Monnoyer-Smith 2013). Moreover, most ABS stakeholders are transnational by

Date	Institutions involved	Corresponding initiatives
29/10/2010	CBD Parties	Adoption – Nagoya Protocol
23/6/2011	EU	Signature – Nagoya Protocol
24/10/2011 to 30/12/2011	Commission, environment division	Public consultation*
26/1/2012	Commission	Technical workshop – results of the consultation*
4/10/2012	Commission	Regulation proposal transmitted to Council and of the Parliament
5/11/2012	Commission	Presentation – EU working Party on the Environment
19/3/2013	European Parliament	Workshop - Commission’s proposal discussion*
18–21/3/2013	Council, environment division	Debate
20/3/2013	Economic and Social Committee †	Opinion*
18/6/2013	Council, environment division	Debate
16/7/2013	European Parliament	Answer to the Commission’s proposal
11–12/9/2013	European Parliament	Debate and opinion
11/3/2014	European Parliament	Debate and revised opinion
14/4/2014	Council	Decision approving revised regulation proposal
16/4/2014	European Parliament and Council	EU Regulation (No. 511/2014) adopted
16/5/2014	EU	Ratification – Nagoya Protocol
9/6/2014	EU	EU Regulation – entry into force
12/10/2014	CBD Parties and EU	Nagoya Protocol – entry into force EU Regulation - application

Table 1. The European policy process for the adoption of the Nagoya Protocol

*Initiatives involving NSAs.

†Consultative body of the EU made up of employers’ groups, workers’ groups, and social, occupational, economic and cultural organizations.

Characteristic	Public consultation (total no. = 36 [*])		Web positions (total no. = 12 [†])			
	No.	%	No.	%		
Origin	EUMS	18	50	EUMS	1	5.3
	Europe	8	22.2	Europe	3	15.8
	Outside Europe	1	2.8	Outside Europe	2	10.5
	International	8	22.2	International	8	42.1
	Unknown	1	2.8	Switzerland [‡]	5	26.3
Types	Business	19	52.8	Business	5	27.8
	Environmental NGO	4	11.1	Environmental NGO	6	33.3
	NGO representing indigenous communities	1	2.8	NGO representing indigenous communities	5	27.8
	Agriculture	2	5.6	Development NGO	2	11.1
	Research	3	8.3			
	Collection	6	16.7			
	Unknown	1	2.8			
Co-authorship	0		7			
Nagoya Protocol negotiations	1		4			

Table 2. Characteristics of the NSAs included in the study

*The Commission received 43 answers (http://ec.europa.eu/environment/consultations/abs_results_en.htm) but seven of them came from governmental actors.

[†]From ten different NSAs. The Appendix presents the full list of web positions included in the study.

[‡]When two NSAs co-signed a position, I coded both origins. I followed the same rule for types.

nature and likely to mobilize on the web. Therefore, I also archived, as of November 2013, all the documents available on the web (twelve submissions) that had been communicated by NSAs on the issue of the Nagoya Protocol implementation in Europe.

Table 2 presents the characteristics of the NSAs that participated in the consultation and/or produced web positions. These characteristics were coded using the information provided by the NSAs themselves on the online questionnaire, and by searching on their websites. Table 2 gives information on co-submissions, counting the number of submissions that were co-signed by at least two NSAs. All submissions to the consultation were made individually. However, the Austrian Botanic Gardens Working Group, the European Botanic Gardens Consortium and the International Plant Exchange Network (IPEN) Task Force gave identical answers to the consultation. The IPEN answer most probably served as an example for the other two organizations, as the IPEN is the worldwide network for botanical gardens. Web positions indicate a greater number of co-submissions, in particular between Natural Justice and Berne Declaration (two NGOs that focus on indigenous and development issues) that also diffused their submissions through the Third World Network website (another NGO that works on development issues). Taken separately, both organizations are central to other advocacy coalitions. In particular Natural Justice works with indigenous organizations, and Berne Declaration works with the Bread for the World-Church Development Service Organization (a development NGO). For business groups, the European Federation of Pharmaceutical Industries and Associations (EFPIA) and the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) wrote common web statements.

Table 2 also indicates how many NSAs analysed in this study actively participated in the international negotiations of the Protocol.¹ If one considers participation to international negotiations as a proxy of the overall expertise of NSAs on the ABS issue, such expertise is quite low, especially for the NSAs that participated in the public consultation.

¹Based on Orsini (2013).

Methodology to Study NSA Submissions

Methodologically, the core of the study relies on content analysis of all NSA submissions, being submissions to the public consultation or web positions. It mobilizes lexicometry, a quantitative method based on qualitative indicators, more precisely text words and segments. In particular, the software Lexico 3 is used to analyse and compare the content, in terms of words or segments of words, of different corpuses of texts. Among others, it proposes two important lexicometry measures. Firstly, Lexico 3 calculates the frequency of words and word segments in texts submitted to the software, producing a scale of the top most used words. Secondly, Lexico 3 compares the content of different corpuses of texts submitted to the software, giving precise indications on the words and segments that are more or less frequent in one corpus of texts compared with another corpus of texts. Secondly, Lexico 3 realizes a synthesis of the calculated distances between two different corpuses of texts and draws abstract representations of such a distance. These representations give an idea of the overall level of similarities or differences between different groups of texts. Because including the abstract figures generated by Lexico 3 in the core of the article did not present any added value, I chose instead to describe them in the text.²

While useful, Lexico 3 is incomplete per se and needs to be informed of a series of qualitative choices before performing its analysis. Firstly, Lexico 3 is a descriptive tool that does not follow any predetermined analytical framework. The researcher therefore must first identify relevant research questions, and gather the relevant texts to investigate these questions. Secondly, Lexico 3 does not autonomously assemble the texts into corpuses. Such regrouping has to be performed by the researcher. In the context of this study, the corpuses of texts were assembled according to the origins of the submissions (public consultation or web) and according to the origin and type of the NSAs that produced them. Consequently, several characteristics were coded for the same text. Thirdly, the results presented by Lexico 3 have to be interpreted by the researcher. Because negative formulations can lead to incorrect interpretations, I also looked at the identified words in their context (going back to the whole text as often as needed). Moreover, before performing the ranking, I cleaned the results by eliminating all articles, particles and general words, such as 'Nagoya Protocol', 'ABS' or 'genetic resources'. Finally, I evaluated the meaning of the different words or segments. As a result, the analysis presented here also rests on a strong qualitative component.

More precisely, research question 1 is investigated largely through a qualitative analysis of how the consultations were conducted. It also presents an analysis of the quantity and origin of the submissions thanks to statistics on the characteristics of the actors that produced them. It also uses lexicometry (comparative frequency measures) to question a potential bias in the way the online consultation was framed. Research question 2 is investigated thanks to Lexico 3 descriptive frequency measures. Research question 3 is investigated thanks to Lexico 3 comparative frequency measures. In both cases, interpretation of these frequencies and of the meaning of the corresponding words and word segments in the context of ABS policies is performed by the researcher based on her expertise in the domain and via the screening of relevant references.

Presentation of the Results

The Expression Channels of NSAs

To understand the extent to which NSAs used the public consultation channel compared with other means and in particular web submissions to express their views, I compare both channels on three grounds: their process, participation and format.

The process of the public consultation did not favour a wide expression of NSA positions and the number of respondents is rather low compared with other consultation processes (see Marxsen, 2015: 264). While the public consultation was open to all interested stakeholders,³ and while the ABS issue is supposed to mobilize NSAs, the

²They are available upon request.

³The target groups identified were: (1) industries; (2) academic researchers; (3) public laboratories and gene banks; (4) indigenous and local communities; (5) NGOs; (6) others with interest in the field of genetic resources and associated traditional knowledge. There is not geographical prerequisite and so non-European NSAs are invited to participate as well.

consultation lasted 2 months, the minimum required time, and as a result probably favoured NSAs that already had a clear view of their interests. Another weakness of the consultation is that it happened early in the policy process: 2½ years before the adoption of a European regulation.

Regarding participation, although the number of submissions received by the Commission is low, the number of submissions found on the web shows that the low involvement of NSAs on the issue is a general result, and not exclusively due to the consultation process. In fact, most NSAs preferred the venue proposed by the Commission. Looking at the origin of the respondents to the public consultation (Table 1), half of them represent national stakeholders and in particular national companies, research centres or groups representing agricultural interests. By contrast, those NSAs that chose to express themselves on the web have a rather international or non-European scope. These elements give indications that the consultation process has given a voice to less powerful European groups.

Yet participation by types of NSAs is unbalanced for the consultation, with a majority of participants representing business interests (52.8%). The Commission itself minimizes the over-representation of business interests within the respondents, by choosing to refer to the general category of 'associations of stakeholders' instead of mentioning that most of the organizations that are counted under this category have commercial interests.⁴ The Commission also announced that most responses were 'provided by European or global federations and associations that each represent hundreds or even thousands of members' (European Commission, 2013: 000), which is not the case according to my categorization. NGOs, on their side, preferred to express themselves on the web.

The format of the consultation could explain why certain types of NSAs chose not to participate in it. To see if the format of the consultation influences the answers, I compare the content of the answers to the consultation with the content of the web positions. If there is a correspondence between the elements that are predominant in the content of the consultation and the questions that were asked, then the format of the consultation influenced the answers. The abstract representation produced by Lexico 3 indicates that the positions of NSAs expressed in the framework of the consultation process are different from those expressed on the web. Yet such a difference has not been triggered by the way the questionnaire of the Commission was elaborated (first column of Figs. 1 and 2).⁵ Differences of words are linked to the timing: the web documents mention the draft regulation, which was proposed after the consultation process was conducted. Differences also appear for words such as 'ITPGRFA' (International Treaty on Plant Genetic Resources for Food and Agriculture), 'breeding', 'botanic gardens', 'costs' and 'administrative burden', which are more present in the consultation corpus. No question was directly related to the first three expressions but several mentioned 'costs' and 'administrative burden'. On this last point, a difference in submission content is likely to be related to the way the questionnaire was conceived. This might have prevented some NSAs from expressing their views neutrally, and three of them chose to express themselves both through the public consultation and through the web. Finally, one weakness of the consultation format is that it does not enable NSAs to co-sign submissions.

The Fresh Ideas of NSAs?

To investigate if NSAs produced new expertise and ideas on the implementation of the Nagoya Protocol in Europe, Figure 3 presents the list of the 40 most-used words present in NSA submissions, with their respective frequency. We can group these words and word segments according to key defining characteristics for the future EU ABS legislation and more precisely its format, compliance mechanisms and scope.

Regarding format, the adoption of a legal framework for ABS ('legal', 'rules', 'regulation', 'obligations', 'requirements', 'checkpoints') is an important topic for NSAs, especially to ensure compliance (most frequent word). The

⁴According to the Commission, the breakdown of the respondents is as follows (out of 43 answers): 17 associations of stakeholders (41% of the total); 17 universities, collections and research institutions (40%); four individual industries (10%); two EU Working Groups on genetic resources (5%); one NGO (2%); one indigenous and local community (2%) (Commission, 2013). Interestingly, the categories used to describe the respondents are different from those used for the target groups (see footnote 7).

⁵On Figs. 1 and 2, the size of the spots is proportional to the rank of the corresponding words, with the most frequent words appearing larger. The y-axis lists all the words or segments that are relevant to compare the corpuses, regrouped according to broader themes such as access issues, providers' concerns, level of intervention or sectors of activity.



Figure 1. Top 20 words and segments more used in each specified corpus in comparison with another selected corpus of submissions.



Figure 2. Top 20 words and segments less used in each specified corpus in comparison with another selected corpus of submissions.

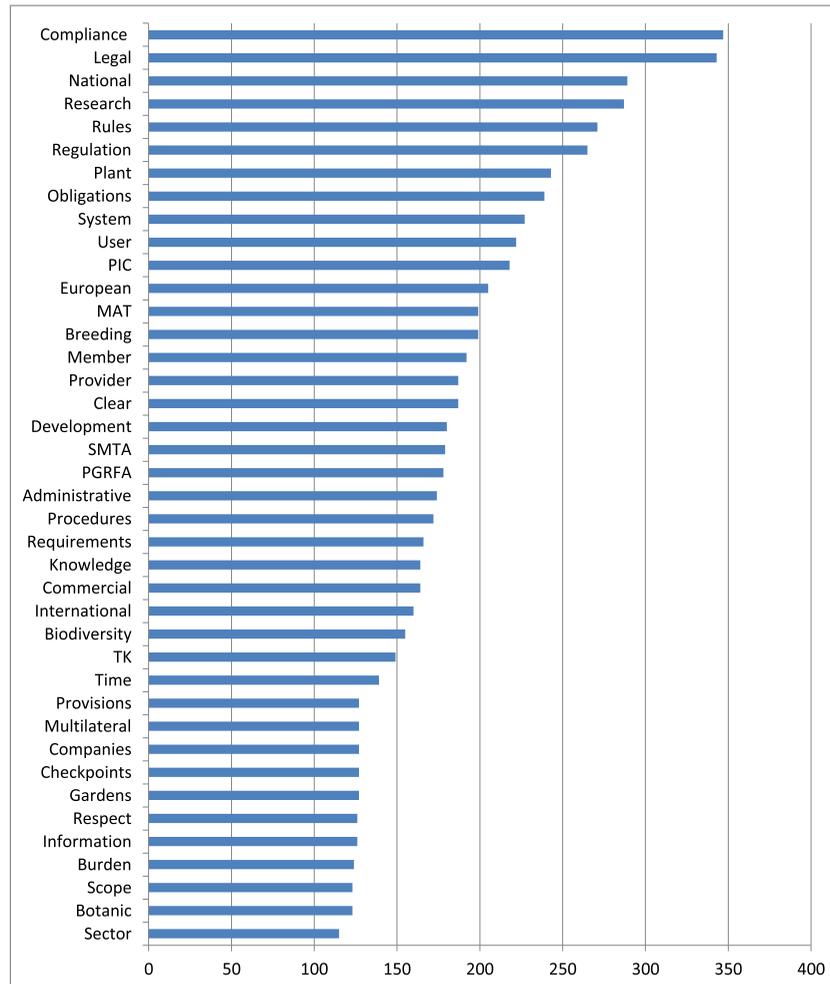


Figure 3. Top 40 words quoted in all NSA submissions and their frequency.

national level of policy-making, most probably to host this legal framework, is considered a key level ('national', 'member'), followed by the European level and, to a lesser extent, the international level.

NSAs propose two main mechanisms of compliance. The first consists in following the PIC and MAT provisions of the Nagoya Protocol. The second is to build on the ITPGRFA system that proposes free access for a list of plant genetic resources for agriculture; and proposes that any other resources be exchanged according to standardized material transfer agreements, which are two-by-two contracts. Key issues for compliance include use and exchange of information, in respect of all parties, without high administrative costs. In Figure 3, users are placed in greater priority than providers, meaning that compliance will have to be users' friendly. However, the interests of providers are also mentioned. The EUMS are indeed likely to embrace both roles. Compliance will have to be performed by different sectors clearly present in Figure 3, being the plant sector ('plant', 'breeding'), the research and development sector, botanical gardens and companies ('commercial'). NSAs seem to advocate differentiated legal approaches depending on the sectors of activity concerned.

Finally, regarding the scope of the future agreement, two themes are clear from Figure 3, namely the issue of traditional knowledge ('TK', 'knowledge') and of biodiversity conservation. Most of these observations are reinforced in Figure 4, which presents the top 40 most-used segments in all submissions.

Figure 4 provides refinements on the importance and nature of compliance requirements. Compliance as a key issue is reinforced by the references to Articles 15 and 17 of the Nagoya Protocol. The emphasis is made on the rights of provider countries that appear earlier on the list, as well as countries of origin of genetic resources and the idea of

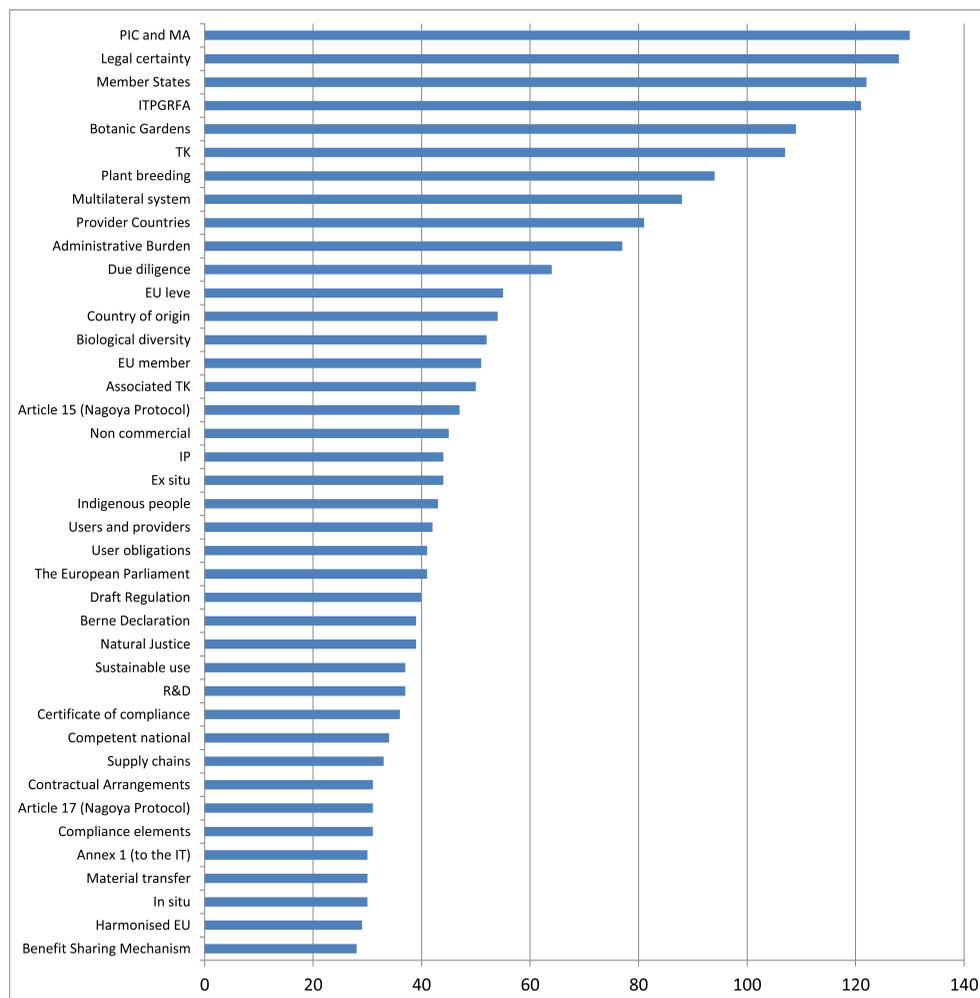


Figure 4. Top 40 segments quoted in all NSA submissions and their frequency

user obligations. In Figure 4 compliance seems to be linked to soft obligations such as a due diligence system or contractual arrangements. The European Parliament appears as a key actor of the process, and botanical gardens (there is an emphasis on *ex-situ* genetic resources) as well as the plant breeding sectors are the most well represented in Figure 4, with an emphasis on the non-commercial side of their activities and on the importance to consider the specificities of the supply chain. Two NSAs appear to be central to the discussions: Natural Justice and Berne Declaration. These two NSAs did not take part in the European consultation. Finally, regarding scope, biological diversity appears earlier, demonstrating a greater concern for the environment but it is ranked 14, a result that is surprising given that the Nagoya Protocol is a protocol to the biodiversity convention.

Figs. 3 and 4 do not contain any new ideas on the ABS issue: all the words and segments used were already mentioned during the international negotiations of the issue (e.g. Oberthür and Rosendal, 2013) or are well-known elements in the literature on ABS governance (Rhodes, 2013; Orsini *et al.*, 2014). Rather than innovating (referring to new data, reports, statistics, etc.), NSAs build on the example of other existing legislations such as the ITPGRFA. Interestingly, protestation frames (biopiracy, misappropriation, etc.) that were present during the negotiations of the Nagoya Protocol (Oberthür and Rosendal, 2013) are absent here. The participating NSAs are in line with the adoption of an ABS legislation.

Do Non-State Submissions Matter?

Assessing the influence of NSAs on a policy outcome is a difficult task (Corell and Betsill, 2001). One indication of such influence can be obtained by comparing the content of the answers to the consultation with the text of the results of the consultation, as interpreted by the Commission. The abstract representation given by Lexico 3 shows that the two corpuses of texts are different. Explaining this difference is difficult because NSAs themselves have defended very diverse positions. To test differences between NSAs, I compare submissions according to the origin and type of NSAs.⁶

Regarding origin, the abstract figure generated by Lexico 3 shows that there exist three clusters of submissions: the submissions by NSAs from the EUMS and from Europe (European/EUMS); the submissions by NSAs from Switzerland and from international NSAs (Switzerland/international); and the submissions by NSAs from outside Europe. The European/EUMS group and the outside Europe submissions are diametrically opposed. The submissions by the Switzerland/international group are somehow in the middle.

Europeanization is not a relevant factor of divide as European NSAs and EUMS NSAs share similar submissions. Regarding format and scope, the European/EUMS proposal comprises national legislations harmonized at the EU level. The European/EUMS group is less concerned than the Switzerland/international group by indigenous peoples or TK or by the importance of triggering the ABS issue to foster the entry into force of the Nagoya Protocol (Figs. 1 and 2). Regarding compliance, it is less concerned by provider issues or by user obligations. By contrast, the European/EUMS group is more concerned than the Switzerland/international group about the plant sector, the ITPGRFA A multilateral system and about the recognition that different sectors are active in ABS. The European/EUMS group develops notions of rules, checkpoints and clear procedures but does not mention obligations. Similar conclusions appear when one compares the Europe/EUMS group with the outside Europe group. Yet interpretation is difficult, as the outside Europe group uses both words and segments from the providers' side ('TK', 'indigenous', 'providers') and from the users' side ('industry', 'supply chain', 'finished goods', 'products'). This is probably linked to the heterogeneity of this group in terms of types.

Regarding types, the abstract representation generated by Lexico 3 shows, again, the existence of three clusters: the submissions by indigenous/environmental/development NSAs; the submissions by business/agriculture/research NSAs; and the submissions by collections. The indigenous/environmental/development group and the collections group are diametrically opposed. The submissions by the business/agriculture/research group are somehow in the middle.

Compared with the business/agriculture/research group, the indigenous/environmental/development insists on a broad scope for ABS rules, covering resources that were accessed before the entry into force of the Protocol. It insists on cooperation between providers and users of genetic resources with trusted collections proposed as a way to reconcile the two, and it expresses environmental concerns. It also asks for the recognition of indigenous peoples and TK and insists on an equitable system. It uses a South African example (the Hoodia case) as an illustration of misappropriation of genetic resources and lack of benefit sharing. Natural Justice and Berne Declaration are key actors within this group. On compliance, the indigenous/environmental/development group insists, compared with the business/agriculture/research group, on the rights of providers and in particular on the importance to consider the country of origin of the resources, while asking for user obligations. Compared with the business/agriculture/research group, the indigenous/environment/development group is less centred on PGRS, less inclined to adopt voluntary solutions such as codes of conduct, and less concerned about a possible administrative burden associated with the future legislation.

With respect to the business/agriculture/research group, the collections group insists, for compliance, on its organization in terms of a broad network (IPEN) and advocates for special provisions for its precise sector of activity, a non-commercial and service-orientated sector. Collections are particularly concerned by potential administrative costs, because of their limited staff. Compared with the business/agriculture/research group, they are less interested in PGRS and in economic issues ('products', 'industry'). They are less inclined than the business/agriculture/research group to do something at the national level regarding the format of the legislation. They also do not refer to the laws of the provider country while the business/agriculture/research group does.

⁶In the following, I consider the characteristics of each NSA (origin and type) separately. Both characteristics are combined for each NSA, meaning that the analysis of one component will also depend on the distribution of NSAs according to the other. Yet, it is hard to understand which dimension (origin or type) influences the other. Overall, the sample of NSAs is quite balanced (with no clear domination of combinations of origin and type).

Compared with the indigenous/environmental/development group, the collections group wants to be recognized as a key and different ABS sector, whereas the indigenous/environmental/development group insists on TK, indigenous peoples, scope or benefit sharing. Regarding scope, collections tend to frame the ABS issue more as an environmental one (references to protection or conservation) than the indigenous/environmental/development group. Collections want to claim that their sector is a key one for biodiversity conservation.

Overall, NSA submissions depend on the utilization of genetic resources NSAs make, or, in other words, on their place in the genetic resources supply chain. The groups go beyond types, with, for instance, research in the same group as business showing no relevance of a 'for commercial/not for commercial use' cleavage.

Considering this diversity of submissions, the adopted European legislation and decision to ratify the Protocol cannot correspond to all NSA interests. Tracing the influence of different categories of NSAs on European policy-making would have required more space and detailed undertakings. Yet some preliminary remarks can be made. First, EU Regulation 511/2014 aims at harmonizing future national legislations on ABS and does not propose a European ABS system (a European checkpoint, a European regulatory authority, etc.). Moreover, users' provisions will only become applicable 1 year after the entry into force of the Regulation, because additional measures need to be put in place before they can be applied. Finally, EU Regulation 511/2014 proposes the establishment of registered collections to facilitate the exchange of genetic resources coming from these collections. These developments show that the European legislation is more in line with the positions of collections and of the business/agriculture/research group.

Conclusions

This research investigated the role of NSAs for international environmental treaty ratification and implementation. It used the example of the public consultation on the implementation of the Nagoya Protocol in the European Union. According to the 'domestic adjustment model' and its extension after the 'deliberative turn', NSA consultation is supposed to be effective, to lead to new ideas and to inform policy decisions.

On the effective dimension of the consultation, overall, the process matters more for legitimacy 'de façade' rather than for a real input of non-state perspectives. Certainly, the Commission played a role in proposing a new expression channel, in particular for national and less powerful groups. However, the consultation process was too short, proposed too early in the process and was still dominated by business interests. Key actors, in particular NGOs, have favoured the web to publicize their positions.

Regarding the content of the submissions, NSAs have not produced new ideas on the issue of the Nagoya Protocol implementation in Europe. NSAs have been reactive rather than proactive on the issue. They have built on pre-existing models to indicate their favoured options. The positions expressed are in line with the idea to have a legislation and no NSA used the consultation as a way to protest. In that sense the selection of views is biased.

The real contribution of the public consultation to the final policy outcome is hard to assess. The positions defended by NSAs were very diverse, depending more on the supply chain they were part of than on their type. For instance, business, agriculture groups and research centres share similar positions, while not being part of the same types of NSA. As a result, because NSAs are diverse, a certain 'democracy-civil society paradox' (Bernauer *et al.*, 2013) appears, whereby the diversity of non-state positions does not help decision-makers to progress on one environmental issue. In that sense, as other studies tend to suggest, diversity is an interesting factor limiting business influence on the final outcome (Dür *et al.*, 2015).

Because the case investigated is a best-case scenario, where one was expecting to find effects, the conclusions offer a very mixed picture of the relevancy of both the 'domestic adjustment model' and the 'deliberative turn'. On the first aspect, decisions are still mostly in the hand of governmental actors. On the second aspect, there is a risk that other players see the Commission as demanding 'approval for its policies without offering enough space and time to give elaborated input' (Quittkat, 2011: 000). Clearly, deliberative democracy is an ideal that remains aspirational (Eckersley, 2000). But the Commission could organize longer consultations or several consultations over time. It could also use new technologies or social media to open up the consultation process (Albrecht, 2012). This would require more material and administrative resources for policy-makers (Chalmers, 2014). But the cost might be

worth paying, especially when one considers that the participation of NSAs from other parts of the world to the discussion on the Nagoya Protocol implementation in the EU is a sign confirming the international importance of the EU as a leader on the ABS issue (Oberthür and Rabitz, 2014).

There are several ways to complement this study. The development of other empirical investigations would be helpful. It would also be interesting to study how the submissions were received and not just how they were communicated. Process tracing, including fieldwork, archive search and interviews with NSAs and policy-makers would be needed to more precisely grasp the reasons of the lack of effects found here. Moreover, it would be possible to take a more critical stance with regard to the domestic adjustment and deliberative turn models, investigating the relevance of more NSA participation, with regard for instance to their real representativeness of the public affected.

Appendix. list of web submissions included in the study

Berne Declaration and Bread for the World-Church Development Service. 2013. Letter to Ms Rosbach, 11/06/2013.

EFPIA–IFPMA. 2013. Joint Position Paper on the European Commission Proposal for a Regulation on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union, COM (2012) 576 final, 20 March 2013.

EFPIA. n.d. Implementation in the EU: EFPIA position on the Draft Regulation on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising from their Utilization.

European Seed Association. 2013. Euractiv article, EU Lawmakers back ‘intellectual property rights’ over biodiversity, with a final comment by Garlich von Essen, ESA Secretary General, published on 13 September 2013 on Euractiv website.

ICC (International Chamber of Commerce task force on CBD/Access and Benefit Sharing). 2012. Nagoya Protocol Implementation in the EU: Comments on a possible due diligence system and the EU Timber Regulation, developed by the Task force on the Convention on Biological Diversity/Access and Benefit Sharing, 18 June 2012, Document No. 450/1075.

ICC (International Chamber of Commerce task force on CBD/Access and Benefit Sharing). 2013. Comments on the Proposal for a Regulation of the European Parliament and of the Council on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits from their Utilization in the Union (as amended by the European Parliament), 29 October 2013.

International Indigenous Forum on Biodiversity (IIFB), Indigenous Information Network (IIN) and Natural Justice. 2013. Letter to Matthias Groote and to the Members of the Committee on the Environment, Public Health and Food Safety, 2 July 2013.

Natural Justice and Berne Declaration. 2013a. Letter of Concern from the Undersigned Organizations Regarding the Proposed Regulation of the European Commission on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization in the Union, 26 February 2013.

Natural Justice and Berne Declaration. 2013b. Letter to the members of the European Parliament, 6 September 2013.

Natural Justice and Berne Declaration. 2013c. Access or Utilisation – What Triggers User Obligations? A Comment on the Draft Proposal of the European Commission on the Implementation of the Nagoya Protocol on Access and Benefit Sharing.

Natural Justice and Berne Declaration. n.d. Short version adapted from a longer opinion piece entitled ‘Access vs. Utilisation – What Triggers User Obligations? A Comment on the Draft Proposal of the European Commission on the Implementation of the Nagoya Protocol on Access and Benefit Sharing’.

Third World Network. 2013. Will the European Union legalise biopiracy? Media release, 18 June 2013.

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