

Civil society organisations participating in ISO TC 228 and ISO TC 229: the INTERNORM project and its future.

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Abstract:

This paper presents the first results of the INTERNORM pilot project funded by the University of Lausanne (2010 – 2014) to support the involvement of civil society organisations (CSO) in two ISO technical committees (TC), the ISO TC 228 on “tourism and related services” and the ISO TC 229 on “nanotechnologies”. It analyses how a distinct participatory mechanism can influence the institutional environment of technical diplomacy in which standards are shaped. The project is an attempt to respond to the democratic deficit attested in the field of international standardisation, formally open to civil society participation, but still largely dominated by expert knowledge and market players. Many international standards have direct implications on society as a whole, but CSOs (consumers and environmental associations, trade unions) are largely under-represented in negotiation arenas. The paper draws upon international relations literature on new institutional forms in global governance and studies of participation in science and technology to address three questions: to which extent do CSOs identify participation in standardisation as worth of their mobilisation? How is the pluralisation of knowledge and expertise supporting CSO position during the deliberation? To which extent can CSO access and influence standardisation beyond their consultative role? It argues that there are significant limitations to the rise of civil society participation in such global governance mechanisms. Despite high entry costs into technical diplomacy, participation is not so much a matter of upstream engagement, or of procedure and resources only, than of opportunistic CSOs mobilization, of distinct thematic incentives and concrete outcomes to be expected in standardisation arenas or in the broader use of international standards.

1. Introduction

This paper presents the first results of a current pilot project funded by the University of Lausanne, the INTERNORM research-action, designed to support the participation of civil society organisations (CSO) in international standardisation. INTERNORM brings together on a common platform scientific expertise with the concrete knowledge and experience of CSO, namely the largest Swiss consumers’ association, three environmental protection associations, two workers trade unions as well as an association for people with disabilities. The Swiss CSO belonging to the INTERNORM platform can intervene in the process of international standardisation in the domains of nanotechnology (ISO TC 229) and tourism (ISO TC 228). The aim of the INTERNORM project is to analyse incentives and obstacles to participation in standardisation and the extent to which an innovative participatory mechanisms may support the inclusion of CSO in the shaping of international standards like those elaborated by the International organisation for standardisation (ISO).

International standards refer to voluntary technical specifications explicitly documented, published and sold as tools in the organisation of production and exchange of goods and services. However, whereas international standardisation is increasingly promoted as a form of regulation in contemporary capitalism, civil society is largely under-represented within the standardisation process. Even though the field of standardisation is formally open to CSO,

these are largely absent of the many technical committees drafting standards (van Elk & van der Horst, 2009). This raises the question of the legitimacy of standardisation, knowing that standards are ubiquitous and their scope affects a wide range of issues such as security of products, interoperability, environmental management, tourism services, open source software or nanotechnologies. Moreover, the entry into force of the World Trade Organisation (WTO) in 1995 gave international standards a major role in harmonising the technical specifications of goods and services traded on the global markets. As such, states and intergovernmental organisations have established a formal devolution of power to standard-setting organisations. The growing importance of international standardisation has thus reinforced enduring questions on the legitimacy of standards. In other words, who participates in standard-writing activities matters for the recognition of their greater use in society.

Studies on the world of standardisation never fail to stress the under-representation of CSO, such as consumers' associations, environmental NGOs and trade unions. The participation of CSO in standardisation faces several challenges. Commonly mentioned obstacles are the lack of awareness, limited financial resources, and the barrier of technical expertise (Schmidt and Werle, 1998; Tamm-Hallström, 2004). While participation is formally open to all interested parties and voluntary (i.e. not remunerated), market actors and expert knowledge largely dominate standardisation committees. Faced with this democratic deficit, several standardisation organisations have set up dedicated policy committee to enhance CSO participation, most notably with regard to consumers. The importance of consumer representation was recognised long ago by the creation in 1978 of the ISO Committee on consumer policy (COPOLCO), but the input of this consultative body does not equate direct participation in technical committees writing standards where it has no voting rights. Within the European context, the democratic deficit has been acknowledged and dealt with by the Parliament and European Commission. For instance, the publicly funded ANEC, 'the European consumer voice in standardisation', was created in 1995 to represent the interest of the "European" consumers. The recent adoption of the regulation 1025/2012 on European standardisation has strengthened the financial support to European stakeholders' organisations that represent consumers, SMEs, environmental and societal concerns within the European standardisation organisation. Nevertheless, here again, the scheme of participation is limited to consultation. At the national level, several standardisation bodies have also set up dedicated committee, like the Consumer Council of the German Institute for Standardisation in 1974. In Switzerland, there is no such body even though a COPOLCO mirror committee exists. The INTERNORM project is intended to address this shortcoming.

The INTERNORM project is an attempt to address the democratic deficit of international standardisation by supporting the role of CSO in the technical committee (TC) writing standards. The project provides financial support for CSO participation in TC and expertise on standardisation activities, so that the civil society perspective can be brought into the areas of deliberation at the national and international levels. The action initiated through INTERNORM enables to shed light on three important dimensions of participatory dynamics governing international standardisation: the mobilisation of actors, the role and barrier of expertise, and the accessibility and influence of participation on the decision making process. These three dimensions capture at best only some aspects of a complex and multifaceted process. Nonetheless, they are pointing to the challenges of participation in new forms of power in our societies. Thus, the following research questions are addressed:

- To which extent do CSO identify participation in standardisation as worth of their mobilisation?
- How is the pluralisation of knowledge and expertise (developed within the INTERNORM project) supporting CSO position during the deliberation?

- To which extent can CSO access and influence standardisation beyond their consultative role?

By relying on international relations literature on new institutional forms in global governance and studies of participation in science and technology, this paper argues that there are significant limitations to the rise of civil society participation in international standardisation. These limitations arise notably from the difficulty of CSO to integrate standardisation in their repertoires of action and from the huge exploration work needed to understand and formulate concrete technical propositions. The mutual sharing of knowledge and expertise may well support their position during the deliberations, but their influence is still subordinated to the configuration of actors and the “rules of the game” which imply several barriers. That’s why the project addresses expertise not only as a strategic resource for action but also as a constructed value. Despite high entry costs into technical diplomacy, participation is not so much a matter of upstream engagement, or of procedure and resources only, than of opportunistic CSOs mobilization, of distinct thematic incentives and concrete outcomes to be expected in standardisation arenas or in the broader use of international standards.

The results presented in this paper are drawn from the INTERNORM standardisation action in the fields of nanotechnology and tourism services as well as from several internal working sessions held with the INTERNORM associative partners. Prior to the participation of INTERNORM in international TC, internal workshops were held with associative partners to review standards under development and formulate written propositions and comments to be promoted at ISO meetings. The following section explores the relevance of standards for CSO involvement. Then we review the literature on new forms of power and regulation in global governance and on participatory dynamics in expert arena. The fourth section gives a detailed presentation of the INTERNORM project and is followed by a discussion of our findings on the involvement of CSO in standardisation. We conclude the paper with the limitations of such participatory arrangement and the future of the INTERNORM project.

2. State devolution of power and the mobilisation of society – some background on international standardisation

More than a decade ago, the OECD has estimated that up to 80% of trade is affected by standards or associated technical regulations (OECD, 1999: 4). International standards matter for consumers and workers as they provide interoperable technological devices, minimum health and safety protection measures or quality guarantees with regard to goods and services. The significance of international standards not only pertains to their growing share in the economy, and to their impact upon the environment, or to the health and safety of workers and consumers. It also relates to the institutional environment that establishes a formal devolution of power to international standard-setting organisations. Formerly, technical specifications were largely the preserve of the regulatory framework of law, with company standards decided by managers and, to a marginal degree, national standards institutions. Today, the regulatory framework of law has yielded ground to the voluntary standards drafted by a raft of public and private sector bodies operating internationally or regionally.

A crucial threshold was also passed internationally with the creation of the WTO in 1995 that gave international standards a major regulatory role on global markets. The WTO Agreement on Technical Barriers to Trade, the Agreement on Government Procurement, the review of the Agreement on Sanitary and Phytosanitary Measures grant international standards a major role in the harmonization of technical specifications applicable to goods and services. State regulation in this domain must comply with “legitimate objectives” related to health, safety and environmental issues. Thus, the goal of removing “unnecessary” barriers to trade should be pursued insofar as possible by substituting domestic standards for international standards.

At the regional level, the European Union is at the forefront of international standardisation. In 1985, Council Resolution 85/C 136/01 on a 'new approach' to technical harmonisation and standardisation instigated a new regulatory technique that served as an early move toward the establishment of a single market by devising procedures to avoid turning technical specifications into a structural impediment to trade (Egan, 2001). The new approach provides a framework for the harmonisation of EU public law for the general and essential requirements of goods and services traded on the European market, particularly in the fields of health, environment, safety, and consumer protection. Depending on the sectors affected, technical specifications, performance criteria, and quality requirements are either based on mutual recognition of national standards or delegated to European standard-setting bodies. In most sectors, the procedure for monitoring standards is a matter of business self-regulation as products put on the market are granted a presumption of conformity through the sole declaration of the manufacturer (CE marking). The European parliament and the Council, aware of the growing significance of standards for the civil society, but also for the trade of services on the single market has recently extended the new approach to services and restated its support to European stakeholders organisations and SMEs.

Despite a commitment to openness and due process of the European standardisation system, as well as of the ISO, the paradox of the "huge minorities" is observed in standardisation: "the two largest affected groups (370 million consumers, including 165 million employees, within the EU) are minorities within the standards committees, if indeed they are represented at all" (Bamberg, 2004:13). Taking part to standardisation meeting that are held all over the world and several times a year imply time and money. The highly technical nature of the deliberations in committees is an obstacle to greater involvement and effective participation of civil society associations: whether to understand or make suggestions, expertise is at the basis of the arguments mobilized in the committee deliberations. The entanglement of economic, legal, and social issues with the "technical" is maximal. While these associations have a unique expertise in terms of consumers, workers, or environmental protection, they experience great difficulties in translating general concerns into the technical language, which is a "compulsory figure" of the standard-setting activities (Mallard, 2000, p. 57). For example, consumer associations wish to have condoms of quality, particularly in regard to resistance. The standardisation work implies to translate the concept of resistance in a way that enables its physical measurement. In other words, a translation work must be accomplished between public health, safety or environmental concerns made in general terms and a series of tests organized and manipulated in a laboratory (Callon et al., 2001). Finally, in addition to technical expertise and lack of financial resources and time, the complexity of the formal and informal rules governing the standardisation process also emerge as a barrier to CSO participation. Standardisation organisations have dealt with the issue of CSO participation mainly in procedural terms, most notably with the institutionalisation of dedicated consultative policy committees that do not directly take part to the development of standards or don't have a voting right when doing so. Notwithstanding, the growing devolution of power to standardisation organisation endows CSO participation with a distinct repertoire of action for shaping regulatory practices. The importance of socio-technological choices in standardisation arenas may potentially drives CSO participation beyond such consultative role. A case in point is the Association for the Condom Quality Seal founded in Switzerland in 1989: "The Association (...) grew out of the working group responsible for contraceptives within the framework of the Swiss standardisation body in Zurich. (...). Despite everything, to be able to give enough "weight" to this standard, the Swiss Consumers Federation, the Consumers Protection Foundation and the Swiss Help Against AIDS created the Association for the Condom Quality Seal (CQS)." This association, still represented in the Swiss ISO mirror committee on contraceptive devices, is very significant because the CQS association is

based on standardisation, and it illustrates how distinct associations may collectively act in a way that supports CSO representation. This association's existence stems from links formed among different actors within the standardisation work, and its financing through sales of the label which signals conformity to the requirements set by the international standard on natural latex rubber condoms. This case highlights the potential impacts of mobilisation on standardisation: mobilisation enables the translation of wider societal concerns into technical specification and action (Hauert, 2012). It challenges the assumptions framing participation in standardisation arenas that consider CSO as non-experts and leave civil society out of the most relevant work. This case drove us to models of democracy with regard to technical decisions. In particular, the co-production model of sociologists of science accounts precisely for the legitimacy stemming from the mobilisation of actors and the substantial changes that pluralism of expertise (including counter-expertise) may bring (see next section).

3. Private authority, expertise and participatory dynamics

Various studies in organisational science and international relations have examined how voluntary technical specifications have become crucial tools in the organisation of global markets (Tamm-Hallström, 2004; Djelic & Sahlin-Andersson, 2006; Djelic & Quack, 2010; Graz & Nölke, 2008). From political science oriented perspectives, the drive for international standardisation is understood as a distinct institutional framework to ensure some order in market practices at the transnational level. In the absence of a world authority, standards provide cross-border voluntary coordination mechanisms that formally respect state sovereignty (Krewer, 2005). The concept of “private authority” has been coined by international relations scholars to define transnational non-state regulatory arrangement relying on voluntary *rather* than mandatory compliance, on private *rather* than public actors for their definition, implementation, and monitoring. Those studies agree that in order to be effective, international standards need the implicit or explicit recognition of states and have to be adopted with actors including those actually absent from their elaboration (Cutler, et al., 1999; Hall & Bierstecker, 2002). In order to meet with these two conditions, the inclusiveness of the standardisation process is crucial (Boström, 2006)¹¹. At a functional level, standards rely on the voluntary participation of experts for the technical work, i.e. the drafting of standard. Organisations may then voluntarily conform to standards because they incorporate a knowledge that is “assumed to embody what experts have found to be best (...)” (Brunsson & Jacobsson, 2000, p. 45). At a normative level, the inclusion of all stakeholders, including the weakest one, enables to display legitimate work procedures that imply the formal recognition of standards as they reflect the democratic context in which governments can refer to international standards into laws or public procurement policies (Egyedi, 2005).

Distinct theoretical approaches have shed light on the participatory dynamics governing CSO representation in the realm of private authority. The institutional supply and demand model developed by rational institutionalism largely focuses on resources to explain participatory dynamics governing standardisation (Austin & Milner, 2001; Mattli & Woods, 2009). While open and fair process on the institutional supply side are a prerequisite for participation, “The price of ‘activating’ institutional due process mechanisms (where they exist) is often too high to generate wide societal demand, because of asymmetries in the distribution of information about regulatory proposals, technical expertise, and financial as well as organisational resources” (Mattli & Woods, 2009, p. 21). The demand-sided (non) participation of CSO is predicted by a priori defined criteria and the logic of action trumps its content. Other studies

¹¹ The creation of the American Engineering Standards Committee (today ANSI) confirms the importance of inclusiveness: one of the first decision of the committee has been to invite the US Departments of War, Marine and Commerce as founding member of the AESC. The first chairman of the committee thus underlines: “From the beginning, therefore, the AESC had a quasi-governmental status” (Adams, 1956, p. 24).

adopt a more normative approach and convey insights from the theory of democracy in public regulation studies to the field of private regulation (). CSO in private regulation implicitly take on the role of citizens in public regulation and their legitimacy is taken for granted (Gehring & Kerler, 2008; Wilcock & Colina, 2007). Improving the effectiveness of their representation becomes central and CSO limited resources foster standardisation bodies to build on output rather than input legitimacy. While the lack of technical expertise is held to severely restrict the participation of CSO, which are supposed to be far remote from the production process and its underlying expertise, the need for legitimacy paves the way for specific CSO modes of involvement. A frequent statement on the role of CSO in standardisation is that due to their limited technical expertise, their primary role is to specify general requirements rather than to directly participate to the technical work. Consultative committee and guidance documents on how to address societal stakes in standards intended to committees' experts should ensure that "...non-industry interests and values are considered. They are not directly represented in the standardisation committees but may be 'invoked' by the members" (Werle & Iverson, 2006, p. 36). More critical perspectives unveil the power relationship that such participatory arrangements entail. The involvement of CSO can contribute to legitimize regulatory practices that tend to keep markets free from state intervention. (C. de Gramont and Lara Flores, 2010; Lipschutz, 2004). On the other hand, CSO are a potential countervailing power and their involvement may lead to emancipatory action (Hauert and Graz, 2011). In this view, the important issue is not whether CSO primary role is to specify general requirements or to directly contribute to TC's work but rather to question who defines where and how they have to get involved.

These approaches usually reflect one the three different types of arguments that are formulated to support participation of citizens or civil society stakeholders in decision making (Fiorino, 1990). The first argument is said *instrumental*, and it refers to the lack, or loss, of legitimacy; participation is designed to recover legitimacy, and decision making is also considered more effective with participation (Fung, 2006). The second type of arguments is *normative*: civil society must have a say in matters which affect end users, consumers, or other social groups. Decision making processes which acknowledge this normative argument tend to be seen as more democratic. Finally, there is a *substantive* or epistemic argument which holds that laypeople may produce knowledge and identify solutions to problems complementing experts' work. Here, the expertise is not narrowly considered ("confined expertise" of Callon et al. 2001), and a *plurality* of expertise is seen as making substantial differences. It is worth to note here, that our literature analysis suggests that participatory dynamics are constrained by technical expertise in terms of resources and procedure, but expertise itself remains a black box. Most approaches fail to question the identity of civil society actors as non-specialists, i.e. as outsiders, which is usually taken for granted. They often hold simplistic notions of expertise, as a given, neutral, while a few studies have demonstrate that experts are also actors representing particular interests and having distinct strategies, roles and ideas (Isaak, 2006; Jakobs and al., 2010). In other words, the usual absence of problematisation of expertise limits most classical approaches in literature. Further exceptions exist, especially when some sociology of expertise is called into play, like Demortain (2011) who unveils the inclusion and exclusion power of the expertise developed by a coherent and multi-positioned small group of scientists that successfully shaped food hazards control practices through standards. This prompts us to further elaborate on studies of participation in science and technology.

Science and technology studies have abundantly shown that institutional framing of actors and expertise directly affects participatory dynamics (Audétat, 2007; Bijker et al., 2012). They shed a critical light on the extent to which expertise and participation are usually dealt

with in our contemporary societies that apply to international standardisation. What matters as legitimate forms of expertise is a field of ongoing struggle that has usually been dominated by archetypes of science – society relations. Based on studies in many different domains involving scientific and technical expertise in decision making, sociologists of science have come to a modelling of “technical democracy” that identifies distinct and potentially conflicting sources of legitimacy on which expertise relies (Callon et al., 2001; Lash and Wynne, 1996; Jasanoff, 2006). In particular, following Callon (1999), three models (or archetypes of science – society relations) are in play which help the analysis of participation in standardisation. In the “public understanding of science” and “public debate” models, expertise is usually conceived as science applied to decision, and its legitimacy stems from the relative autonomy of science from society. Participatory dynamics are non-existent in the first model, since the public only needs information for a good understanding of expert decisions. The second model acknowledges that particular values or interests may be embedded in expertise, and that societal concerns and implications have to be taken into account, so consultative mechanisms are designed; inclusion is possible, although limited, and expertise often remains a barrier to participation. On the contrary, the “co-production” model emphasizes that hybrid work between specialists and laymen (or say between experts of various spheres) leads to substantial differences which can not be achieved by decision making processes enrooted in the two previous dominating models. In this view, controversies surrounding socio-technological choices tend to favour the entry of new actors in the public space (Callon et al., 2001). Not only their knowledge does selectively enrich the technical work, but also and foremost influences the framing of problems at stake and shapes potential solutions. In such case, the formal possibility for civil society participation opens way for public recognition of the specific expertise and identity of involved organisations. Taking back this characterization of participation into the sphere of international standardisation, CSO’s involvement in standards setting can be related to the two first models: implications for civil society are taken into account by consultation mechanisms of particular groups such as consumers, and information is provided to the public through various ISO publications. It is rare that socio-technical choices in standardisation lead to the mobilisation of CSO, as exemplified by the emergence of new groups like the Swiss association for the condom quality seal. As a matter of consequences, the INTERNORM platform has been developed in order to promote the “coproduction model” within the standardisation sphere.

4. Internorm, a participatory research-action

INTERNORM is a pilot project aimed at supporting and strengthening the participation of civil society organisations in standard-setting activities. It is part of an original research programme of the University of Lausanne called “Living together under uncertainty” (Vivre ensemble dans l’incertain -VEI) that is funding a series of projects in which academic knowledge supports the mobilization of civil society actors. INTERNORM aims to create an interactive knowledge centre based on the sharing of academic skills and experiences accumulated by CSO around specific issues of international standardisation. With the help of the INTERNORM research team –the steering committee – CSO partners define a series of standardisation topics of interest for civil society and thereby justifying their participation. On the basis of subsequent deliberations about the selected standards, the position and arguments of CSO partners are promoted in the TCs at the national and international levels.

Preliminary stage

An interdisciplinary research team of the University of Lausanne steered the project. In a preliminary stage, a broad call for participation was made to CSO active in various areas, inviting them to join the project and take part to international standardisation processes. This stage required a significant effort of the steering committee in order to associate a wide range

of partners. CSO often face a lack of resources even though they are widely solicited to advance the interests of civil society. Many are not aware of the potential effect international standardisation could have on their matters of concerns, and very few are aware of the issues and mechanisms of international standardisation. Many contacted CSO were thus struggling to articulate the INTERNORM standardisation action to their strategy and usual repertoire of actions. During this stage, the steering committee has also established a pool of academic partners that could support and assist CSO partners during their deliberations on selected standards. Thus, the project provides academic resources in law, environmental, social and economic sciences, and biology and medicine. Last but not least, the steering committee has negotiated the membership of INTERNORM to the Swiss Standardisation Association (SNV), the Swiss ISO member body channelling participation in international technical committees. Here, the main issue was the recognition of INTERNORM as a single contributing member for the calculation of the membership fees while involving several partners.

During the preliminary stage of the project, the steering committee has conducted an analysis of standardisation areas and TCs of potential interest for associative partners and identified four themes with relevance to civil society: nanotechnology, tourism services, non-formal education and quality insurance. This selection was also justified by the (early) development stage of draft standards related to these themes, thus enabling an effective participation. In early 2011, on the basis of this work associative partners have expressed their willingness to take part to the international standardisation on the two very distinct topics of nanotechnology (ISO TC 229) and tourism services (ISO TC 228).

First steps in the world of standards...

An important part of the work of the steering committee is related to the identification and synthesis of the issues surrounding international standardisation activities. In 2010, no less than 214 TCs were active at the ISO, discussing more than 3'880 standardisation projects. In the field of nanotechnology, around 30 standards are currently under development in the corresponding ISO TC and about 15 in the field of tourism. From April 2011 (INTERNORM membership to SNV) to March 2013, the steering committee received more than 900 emails related to the work of the two selected TCs, more than a half with one or more attachments. These standards affect civil society in various ways, are at different development stage and are the subject of distinct negotiations, deadlocks or controversies. It is therefore up to the steering committee to highlight the most relevant standards for associative partners and to stress the key issues surrounding draft standards likely to be deliberated and commented.

Two INTERNORM working groups, each one dealing with one TC, were established in spring 2011. Each group has selected a number of standards under development with important stakes for the civil society. While the associative partners are actively involved in the development of some standards², for others, they assume a monitoring function.

From the beginning of the project, associative partners have faced the controversies underlying some draft standards. In the field of tourism, the resistance of the tourism sector through its professional and umbrella organisations to any form of international standards is a real challenge. In this context, INTERNORM associative partners are not only involved in interests bargaining around specific standards proposal, but also and foremost in setting the agenda of international standardisation on specific subjects (for instance in the definition of environmental practices for hotels). In other words, the inclusion of associations representing

² In the field of nanotechnologies, such standards include among others : occupational risk management applied to engineered nanomaterials or guidance on the labelling of manufactured nano-objects. In the field of tourism, such standards include among others: tourist services for public use provided by natural protected areas authorities or guidance on developing environmental standards for accommodation establishments.

civil society in the arena of technical diplomacy enables - at least formally - to shape the setting of some topics at the standardisation agenda. But controversies can also take place away from the international standardisation arenas. In this regard, the voluntary labelling of nano-objects is emblematic: expert talks on the type of products to be labelled or the nature of a voluntary labelling scheme and its articulation with regulatory frameworks hide diametrically opposed conceptions deeply influenced by national or regional contexts. In such context, the grip of the associations over the negotiations is severely limited because issues are hidden and informally debated outside standardisation arenas.

These few examples show that beyond the formal participatory mechanism established by the INTERNORM project, the participation of associations in international standardisation processes and, more broadly, in the regulation of globalisation, can take various forms and faces controversies surrounding the topic and actors at stake. These controversies can never be explored regardless of the particular ethos of standardisation that involves highly complex procedures and therefore requests skills that are specific to this form of technical diplomacy.

5. Mobilisation, expertise and influence

We now turn to the three dimensions of participatory dynamics shaping international standardisation: the mobilisation of actors, the role of the pluralisation of expertise, and the accessibility of the decision-making process and influence of participation. The first meetings with the associative partners have highlighted the strengths and weaknesses of the INTERNORM participatory mechanism and, more broadly, the challenges of CSO participation in international standardisation procedures. The steering committee has done an important work to reduce the entry costs into Swiss and international standardisation processes, as well as to raise the interest of academic referees and associative partners on issues at stake. Prior to the project, only one associative partner had already participated in standardisation activities within various technical committees as well as in the Swiss mirror committee of the COPOLCO. The search for new partners and associations in order to broaden the participatory basis of the project has highlighted some of the dynamics that affect participation in standard setting activities.

Our first observations refer to the extent to which CSOs identify participation in standardisation as worth of their mobilisation. Since the start of the project, about twenty associations with local, national or international scope have been invited. The numerous exchanges with these associations have provided initial responses to the (non-) participation of civil society organisations in international standardisation - formally open to their participation. In order to explain the potential mobilisation of CSOs in standard-setting activities, the following features seem to be decisive:

- The awareness of the scope and importance of standardisation issues that are related to products as well as business processes. For instance, one trade union partner has mentioned as rationale for its participation the importance of nanotechnology standards for workers in the chemical industry and of standardisation mechanisms in general. Standards affect the workplace in various ways and impact upon working conditions, organisation and management of work procedures, and more broadly, upon business localisation; it is therefore essential to have a better understanding of the world of standardisation.
- The association relevant scope of action; some of the contacted CSOs declined our invitation to participate arguing that a standardisation action was not relevant given their local or regional sphere of activities; on the contrary, the articulation of the national and international regulatory framework is considered as essential by other associations which joined the platform. The involvement in tourism standard was a result of the entanglement

of national and international considerations, arguing for the promotion of the Swiss know-how in tourism as well as for the protection of consumers travelling abroad.

- The strategic objectives of the associations; an umbrella organisation of patients mainly oriented towards the provision of advices to its members has declined our invitation because standardisation activities are difficult to integrate to their objectives. Inversely, the issue of labelling of products containing nano-materials (ISO TC 229) is a central issue for consumers' associations providing incentives for an involvement at the international level.
- The personal commitment; for instance, an association which had initially turned down our invitation due to its regional scope of action, finally took part to the project due to the interest of one of its members addressing standardisation in other professional activities.
- The risk of 'instrumentalisation' of their participation; this risk is even bigger when decisions are consensus-based and working papers confidential. During the kick-off meeting of the project, one of the partners has explicitly raised the issue of CSO's payoff for a resource-intensive participation that contributes to legitimize standards that in turn provide substantial revenue for standardisation organisations and certification businesses.

These five features provide an operational incentive that both positively and negatively affects the involvement of CSO. Obstacles that hinder the mobilisation of associations include the work needed to understand the wide range of issues at stake in the standardisation arenas, and the complexity of the space in which technical specifications are defined and recognised among sovereign states. This also implies significant barriers for CSO to integrate standardisation in their repertoires of action. The presumed voluntary adoption of international standards and their potentially limited influence, refrain the involvement of CSO as they want to act where they have the biggest impact. These difficulties can sometimes be removed thanks to the relevance of a thematic in the agenda of CSO, to contacts, personal interests of associative members or by chance. While the risk of instrumentalisation may have demobilising effects, it may also trigger greater vigilance of CSO once they are aware of the unsuspected influence of international standardisation. And it is here that the pluralisation and mutualisation of knowledge and expertise comes in.

Our second set of observations address the ability of the INTERNORM project to strengthen the participatory dimension of international standardisation by the constitution of a mutual expertise through exchanges of knowledge between academic and associative partners. The INTERNORM working groups meetings have foremost acknowledged the importance of entry costs faced by academic and associative partners, rather than the interdisciplinary challenge of knowledge exchanges. These costs relate mainly to the huge exploration work needed to identify the issues surrounding standards under development. These issues are often hidden in a complex and voluminous documentation that requires a good knowledge of standardisation procedures to cope with. For instance, the technical committee on tourism services has produced several hundreds working papers since its creation, and more than a thousand have circulated in the field of nanotechnology. The highly specialized nature of standardisation debates considerably reduces the ability of the project to rely on the sole academic knowledge. This clearly fosters the steering committee to look for knowledge resources on an ad hoc basis. In order to have a better understanding of the issues related to standardisation activities in the field of tourism and nanotechnology, experts from various background have been invited to the INTERNORM working sessions, such as a toxicologist of occupational health and safety specialised in nanotechnology or the chief officer of a Swiss label for sustainable tourism. These specialists have provided fruitful insights on the major issues at stakes but their knowledge of standardisation procedure was often limited. More detailed presentation of standardisation procedures that determine the formal modes and

channels of intervention according to the different standards development stages thus complement the important work of exploration and synthesis done by the steering committee.

While the (ever increasing) expertise of the steering committee in standardisation procedure is important to sustain the involvement of CSO, the development of a plural and ad hoc expertise on standards selected by partners provide a thematic incentive. The involvement of CSOs in ISO TCs has largely demonstrated the importance of the development of a plural and ad hoc expertise. The definition of the necessary expertise for a particular standard is crucial. The challenge is not to invite any researcher on the topic, but to identify the type of expertise needed to help organizations understand the specific issues surrounding standards and, on this basis, to find someone with this knowledge. In order to fully recognize the significance of distinct international standard, the wider regulatory environment in which it apply or its impact on production practices and public policy need to be explored and discussed. In the field of nanotechnologies, this knowledge ranges from the regulatory environment of nanotechnologies to better grasp the potential legislative impact of international standards to the toxicology of nanomaterials production processes. In the field of tourism, one public official or a foundation in charge of a labelling scheme have been involved to explore the significance of international tourism standards in the Swiss legislative environment and get insights from local practices and solutions. In each case, the required expertise was defined on an ad hoc basis and integrated to the written comments on a deliberative basis.

Finally, the INTERNORM standardisation action enables to observe the accessibility of deliberative practices and test the formal openness of standardisation arenas and its practical implication for deliberation. At this stage of the project, we can note:

- The ease of access to expert groups in charge of drafting international standards at the national and international level. We have also to note the support of the SNV during initial stages of the project and its significant effort to reduce the INTERNORM membership fees.
- The weak mediation role of the Swiss mirror committees. While no such active committee exists in the field of tourism (INTERNORM comments being directly transferred at the international level), in the case of nanotechnologies, the work of the mirror committee consists of exchange of general information rather than “technical” deliberation.
- The informal propositions that have been addressed to INTERNORM by standardisation actors. These proposals were related to the convenorship of the Swiss mirror committee on tourism services (SNV NK 189), or at the European level, of the CEN working group on the labelling of products containing nano-materials prior to its transfer to ISO TC 229.
- The acceptance of INTERNORM comments on standards by the Swiss mirror committee, further transmitted at the international level without any change, and their substantial impact. In the case of nanomaterial safety datasheet (SDS), the expertise of CSOs and the toxicologist lead to a common acknowledgment of uncertainties surrounding nanotechnologies and to the elaboration of a successfully adopted comment on a table for cut-off values above which SDS have to be established. In the case of tourism services, an entire section has been added to deal with complain handling and generally more comments were accepted than in the ISO TC 229.
- The importance of the formulation of written alternative proposals in the comments on draft standards. This is the usual way to influence the drafting of standards and it requires time, good writing skills and terminological knowledge. General remarks without specific written proposals have been rejected. Most of INTERNORM written comments on a draft standard in the field of natural protected area, as well as on draft standards in risk management of nanotechnology have been accepted. Other comments, for example about on how to deal with uncertainty, or about sensible issues which do not fit with the majority, were rejected, although discussed.

- The salience of consultative mechanisms for CSOs in the TCs structure. A case in point is a task group dedicated to Consumer and societal dimensions of nanotechnologies.
- The frequent subordination of substantial issue to procedural ones. For instance in the case of adventure tourism, the development of the three distinct standard to deal with security management, leader competence, and information to clients (and their potential separate adoption) was a non sense for most consumers' association as the three topics are closely related. But this argument has been rejected because the mandate of the TC was to develop three distinct standards.

While the first observations are related to procedural issues, the INTERNORM project has also some substantial influence on the drafting of international standards. With regard to the distinct impacts of CSO participation in the field of tourism and nanotechnology, their influence seems not to be related to the level of required expertise but rather to configurations of actors and interests at stakes. In this view, their influence has a rhetorical dimension. For instance in the tourism sector, existing standards, classification schemes and labels already exists, and as such, the ISO appears as a new competitor for professional associations or consortium in charge of existing initiatives. The opposition strategy of most of the hotel industry with regard to international standardisation activities forbid steps (for example in environmental good practices), but the involvement of CSO is crucial as they may act as to counter-balance tourism industry's interests and sustain standardisation activities. The situation is very different in the field of nanotechnologies, since a wide range of public and private actors has an interest in developing international standards, such as for terminology, test methods, or risks management. In this field, international standards are presumed to have deeper implications for various national, regional and international regulatory frameworks, and debates on standard-setting are in some cases crossed by controversies.

Whatever the acceptance or refusal of the project's comments during the international deliberations, the INTERNORM standardisation action provides others valuable insights on the accessibility of deliberative practices and influence of CSO. On one hand, written comments are easily submitted to the Swiss and international TC and deliberative practices may appear accessible. But on the other, to get fully taken into account, the so-called comments require justification and the formulation of written alternative proposals. While the use of the "standardisation" terminology is an advantage, presence at the international meeting is a must in order to promote the comments and understand reasons for refusal or acceptance: feedback and minutes of such deliberations are mainly limited to results such as "accepted", "noted", "refused". To sum up, who participates get power, but also have to accept the rule of the game and associated constraints. And this applies to businesses (Hurd & Isaak, 2009) as well as to civil society actors.

5. Analytical conclusions and future of the INTERNORM project

International standardisation is a typical form of subpolitics as defined by Beck (2001) and which characteristic is to be largely unknown by most actors of the civil society. Participation can therefore play a significant role in re-politicising and democratising standard-setting activities. Although the development and adoption of international standards is voluntary, standards nevertheless remain "black boxes" that can become very constraining and acquire legislative status. When a standard has been negotiated and defined, and depending on its importance and representativeness in terms of market share, it is almost impossible to change its trajectory. Hence the importance of participation, even when it is limited to monitor international standardisation works of interest for CSO. The democratic deficit mentioned in this paper is a particularly difficult challenge to face, since standardisation is part of the process of globalisation and involves regulatory practices taking place at local and global

scales. Participation is rarely addressed at the international scale. Participatory mechanisms are already struggling to produce their effects at the regional or national level, and one can easily imagine the obstacles to enhance participation at a global scale. While the project has reduced entry costs for all partners, such costs remain important and further impede the expansion and deepening of the participatory dimension of international standardisation.

Observations at the midterm of the INTERNORM project highlight three distinct dimensions of the involvement of CSO in international standardisation: the mobilisation of actors, the role of the mutualisation of knowledge and expertise, and the accessibility of the decision-making process and influence of participation. While the INTERNORM participatory mechanism offers valuable insights on these three dimensions, it also underlines significant limitations to the rise of CSO participation in this specific form of global governance.

At a theoretical level, the INTERNORM research-action can help to overcome a number of relatively sterile debates on the impacts of participation. Regarding nanotechnology, and more generally techno-scientific innovations, science policy and governance schemes are often recommending fair procedural forms of participation, and stress upstream engagement with the public. But the impacts of participation not only relate to the early involvement of stakeholders or citizens in technological choices; they also and foremost relate to the configuration of actors and underlying balance of power as well as to technological trajectories and lockin effects (Joly and Kaufmann, 2008; Kaufmann et al., 2010). It is thus much more important to identify the issue of how, where and when CSO should participate in standardisation arenas than to apply a set of formal and procedural criteria that do not guarantee the impacts of participation.

The possibilities and limits of participation in standardisation processes also illustrate the necessity to consider simultaneously the question of the expertise and participation of civil society organisations. As Stirling (2007) and Barthe (2002) demonstrate, both questions relate to the ability to "open up" or "close down" issues and solutions rather than to correct the limits of conventional expertise with participatory mechanisms. While the INTERNORM project has positively engaged with this challenge, the future project is far from secured.

The growing importance of international standards and their extending scope beyond problems of industrial coordination to areas that affect the society as a whole and encroach upon the welfare state, urge for an effective CSO participation in European and international standardisation arenas as acknowledged by the "*strategic vision for European standards*" published by the European Commission (2011, p.13). The increasing use of technical specifications for market regulation purpose in Switzerland, Europe and in the WTO agreements confirms this analysis. Faced with the development of international standardisation by consortia, the formal inclusiveness of official standardisation bodies may reinforce and justify the support of the national delegation model to develop international and European standards. The pilot project INTERNORM demonstrates the significance of a platform to promote the involvement of civil society in the development of international standards under the aegis of official standardisation body or consortia. The associations involved in the pilot project, the SNV and the Federal consumers' affairs bureau have recognized the importance of the platform to take part in the usually unknown arenas of international standardisation. To capitalize on the achievements of the project and on the current participation of CSO, it is essential to engage with the establishment of a permanent structure in Switzerland for the representation of civil society organizations in standardisation arenas. Only such projects seems to be able to meet the challenges posed by the increasing importance of standards in contemporary societies.

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