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# Beyond the transatlantic divide: the multiple authorities of standards in the global political economy of services

**Abstract:** This paper explores the plurality of institutional environments in which standards for the service sector are expected to support the rise of a global knowledge-based economy. A wide range of international bodies is able to define standards affecting the internationalization of services. Relying on global political economy approaches, the analysis uncovers the power relations underpinning the various forms of standards supporting a deeper integration of the market for services. Service standards are conceived as heterogeneous forms of transnational hybrid authority. The empirical study focuses on recent developments in the International Organization for Standardization (ISO), the European Union, and the US. In contrast to conventional views opposing the American system to the ISO/European framework, the paper argues that institutional developments of service standards are likely to face trade-offs and compromises reflecting contrasting models of standardization, not only between, but also across, those systems. While this undermines the conventional analysis of a transatlantic divide in standardization, it also shows that the variance between product and service standards is much greater in the European context and the ISO system than in the US, where it is hardly debated.

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## 1 Introduction

This paper explores the variety of institutional environments in which standards for the service sector are expected to support the rise of a global knowledge-based economy. It analyzes, on a cross-institutional basis, multiple patterns of authority setting standards in the context of the International Organization for Standardization (ISO), the European Union and the US. The establishment of the World Trade Organization (WTO) in 1995 gave international standards a major role in harmonizing technical specifications of goods and services in the global market. While standards supposedly lead to greater rationality and coherence in distinct

industries and services, all of them give rise to on-going struggles in complex configurations of power involving multiple actors including multinational corporations, organized interests, and state regulators. In other words, standards benefit from massive transfers of authority to bodies situated between the political and the economic spheres, serving as alternatives to conventional state regulation.

An initial question, then, is: who is in charge of defining such standards, and more specifically, how do distinct institutional environments affect the development of standards likely to support the internationalization of services? A second question is: how distinct are the multiple authorities of standards in the domain of services? Many services are generally described as intrinsically resisting relocation because of their intangibility and their involvement in activities supposing a co-production between producers and customers.<sup>1</sup> Service standards would, therefore, be considered a special case of standardization. The few studies specifically focused on the role of international standards in the service sector share the assumption that, although they appeared only very recently, they are expected to surge in parallel with the importance of services in the economy and society at large, with growing reliance on standards in a context of regulatory reform and a more intense internationalization of the sector.<sup>2</sup> As emphasized by high-ranking officials of standardization bodies “one of [the] biggest challenges is precisely how to address the service sector.”<sup>3</sup>

Studies on standardization regularly stress the fundamental differences between, on the one hand, the ISO and the European environment and, on the other hand, the American institutional framework for setting standards. Institutional analyses present the two systems as a case of “regulatory competition” where domestic institutional complementarities play a key role.<sup>4</sup> While shared commitments towards openness, transparency, voluntary participation and consensus building maintain institutional isomorphism in standards-setting organizations,<sup>5</sup> comparative perspectives highlight the tension between the ISO/European and American systems as reflecting the dichotomy between coordinated and liberal market economies. The former favors a coordinated standardization system with greater reliance on territorially-based legitimacy and state oversight; the latter gives preference to competing sources of standards and relies on market mechanisms to ensure their definition and adoption. From this standpoint, future developments of service standards are more likely to depend on

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1 Dossani and Kenney (2007); du Tertre (2013).

2 Blind (2003); ISO (2006); Graz and Niang (2013).

3 Authors' interview with Alan Bryden, Secretary General of the ISO, Geneva, 8 June 2007.

4 Czaya and Hesser (2001); Tate (2001); Werle (2001); Mattli and Büthe (2003); Winn (2009).

5 DiMaggio and Powell (1983); Schmidt and Werle (1998: p. 58).

divergent national institutional frameworks than service sector specificity. Institutional analyses on framework conditions differentiating the ISO/European and American setting entail implicit or explicit normative claims about a good standardization system; they also tend to reify differences between the models. As Egyedi emphasized, conventional approaches are inclined to underestimate the opening of most industry consortia setting standards outside formal institutional environments and overestimate the practical implications of democratic procedures within formal organizations.<sup>6</sup> A more historical perspective underlines the complementarities between regulation and free trade and the role of standardization in the construction of the US and EU internal markets.<sup>7</sup> This prompts us to analyze the connections specific to the service sector between the freedom of private actors to set technical specifications within a market economy and the political environment of the institutional framework required to ensure some order to these multiple practices on a transnational basis.

Understanding how institutional settings affect the development of service standards requires us to bring together more systematically the plurality of actors defining the standards, the distinctiveness of services concerned by standardization, and the transnational space in which such standards are likely to be recognized and implemented. To this end, the paper relies on global political economy approaches that uncover the power relations underpinning various forms of standards supporting a deeper integration of the market for services. From this standpoint, the process of globalization does not oppose states and markets: it is a joint expression, and includes new patterns and agents of structural change through formal and informal power and regulatory practices. Service standards are thus viewed as heterogeneous and reflecting distinct forms of transnational hybrid authority. They blur the distinction between private and public actors in charge of setting rules; their scope spans a continuum bringing together physical measures and societal values; moreover, they reinforce the deterritorialization of regulatory practices in contemporary capitalism. In contrast to conventional views opposing the American system to the ISO/European framework, the paper argues that institutional developments of service standards are likely to face trade-offs and compromises reflecting contrasting models of standardization, not only between, but also across, those systems. While this undermines the conventional analysis of a transatlantic divide in standardization, it also shows that the variance between product and service standards is much greater in the European context and the ISO system than in the US, where it is hardly debated.

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6 Egyedi (2005).

7 Egan (2001).

Critical discourse analysis of a wide range of data collected from interviews with high-ranking officials and published documents allows us to characterize the multiple authorities of service standards along the analytical dimensions underlying transnational hybrid authority. This paper is arranged as follows. The first section provides background on the internationalization of services, the institutional environment of standardization, and methodology. The second section reviews the literature on international standards with a distinct focus on the transatlantic divide and the case of services. The third section presents our theoretical framework. Sections 4, 5 and 6 present our findings, which are discussed in Section 7. We conclude by summarizing our results and raising some limitations and future research questions.

## 2 Some background

### 2.1 Services

The dominance of services is one of the most striking aspects of changes in the world economy over recent decades. Today, services account for around 75% of all jobs and GDP in OECD economies – and over 50% in developing countries and emerging economies.<sup>8</sup> The significance of services goes beyond their growing share in the economy and close connection to technology and knowledge. It is also intimately related to an expected surge in their internationalization resulting from durable regulatory reforms. An institutional environment enabling the internationalization of services has gradually emerged with the application of the General Agreement on Trade in Services (GATS) in 1995, negotiations underway at the World Trade Organization (WTO) and the adoption in 2006 of a new EU directive (2006/123/EC) on services in the internal market. Yet, total trade in services has remained somewhat unaffected for the last two decades, as it continues to represent around 25% of world trade. The only significant shift relates to the distribution between developed and developing countries. During the same period, developing countries have almost doubled their share in the world trade in services to reach more than 30% in 2010.<sup>9</sup> While the level of non-tariff measures can explain the stability of trade in services for developed countries to some extent, the increased market access for developing countries and recent revisions in statistics based

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<sup>8</sup> Statistics, available from <http://unctadstat.unctad.org/>. Accessed 26 November 2013.

<sup>9</sup> *Ibid.*

on value added trade indicating much larger figures for trade in services, calls for further explanation.

Existing studies lend support to the contention that the service sector is distinctive. While acknowledging a great diversity of activities between and within sectors, the relational and immaterial dimension of services and considerable regulatory diversity across countries are seen as major hindrances to the internationalization and standardization of services.<sup>10</sup> In a context where manufacturing can no longer be envisaged independently of all the supporting services at either end of the production chain, it is important, however, to mitigate the argument of a so-called service distinctiveness. As Bodes and Miles emphasize, “the service economy is not merely an economy in which service sectors are quantitatively dominant. It is one where ‘service’ is becoming a guiding principle throughout the economy.”<sup>11</sup> This supposes that a solution to the lack of face-to-face contact between providers and users of services can be found. It is in this respect that the rise of a service economy has created a demand for standardization involving the gradual breaking down of a complex service provision into a set of clearly and distinctly identifiable procedures. As the delivery of services becomes increasingly integrated *and* fragmented, the need to codify the various production processes and expectations of beneficiaries on the basis of formal criteria also intensifies. According to Blind, it is precisely “because of the intangible nature of services and the information asymmetries thus caused between management and service provider, [that] the need to introduce quality standards for each stage of the service production is especially high.”<sup>12</sup> In contrast to a micro-economic view of standards seen as a means of lessening the uncertainty in quality and security, standards dedicated to the provision of services on a transborder basis respond to conflicting understandings of quality and security uncertainties. They can promote minimal market rules, but they can also include provisions with the aim of reinforcing socially- or environmentally-based specifications in the delivery and usage of services. As Callon and his co-authors point out, qualifying products in a service economy is likely to provoke “a profound transformation of the rules governing the workings of markets...Market organization becomes a collective issue, and the economy (once again) acquires a political dimension.”<sup>13</sup> This prompts us to briefly outline the institutional environment of standardization.

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<sup>10</sup> Bryson and Daniels (2007); World Trade Organization (2012); du Tertre (2013).

<sup>11</sup> Boden and Miles (2000: p. 258).

<sup>12</sup> Blind (2004: p. 167).

<sup>13</sup> Callon, Méadel, and Rabeharisoa (2002: pp. 197–207).

## 2.2 Standardization

In the past, technical specifications were largely the preserve of the regulatory framework of law, company standards set by managers and, to a marginal degree, national standards institutions. Today, the regulatory framework of law has yielded ground to voluntary standards drafted by a raft of international or regional public and private sector bodies. The creation of the WTO in 1995 was a crucial threshold. Unlike the GATT, whose provisions in terms of technical regulations were not very restrictive, the Agreement on Technical Barriers to Trade (TBT), the Agreement on Government Procurement (GPA), the review of the Agreement on Sanitary and Phytosanitary Measures (SPS) and the General Agreement on Trade in Services (GATS) 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.” With regard to goods, such concerns are related to health, safety and environmental issues. In contrast, as we have seen, conflicting understandings of market uncertainties about quality and security are the major issues in the sphere of services; they encompass a wide range of expectations regarding, in particular, competence and professional skills, the capacity to deliver and business continuity, data protection and privacy, and consumer protection and information, as well as larger societal and environmental concerns. As the WTO is not a standard-setting body, its promotion of regulatory convergence is made by prompting its members to use international standards. GATS article VI:4 thus assigns to the Council for Trade and Services (through its Working Party on Domestic Regulation) the largely market-inspired task of developing “any necessary discipline” to ensure that regulation by states is not “more burdensome than necessary to ensure the quality of the services.” Article VI: 5b specifies that in this respect, “account shall be taken of international standards of relevant international organizations.” The WTO considers in this regard that cooperation in regulation affecting trade in services would have much to gain from improving “regulators’ understanding of, and confidence in, standards and requirements with which they may not be familiar.”<sup>14</sup> Yet, existing provisions still grant a wide range of international bodies the ability to define standards affecting the internationalization of services. The study of the ISO, European and American institutional settings for service standards is closely related to the plurality of international standards in this context and thus to the ability of different models to promote their standards at an international level.

In the US, standardization is usually presented as fragmented and organized on a sectoral basis. A variety of competing standards organizations (formal

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<sup>14</sup> World Trade Organization (2012: p. 186).

and informal) set market driven standards exempt from state intervention. The system follows a so-called model of direct participation, where companies have direct access to standard-setting activities with international claims. In contrast, the European standardization system is coordinated and centralized, and operates under a higher degree of government control. The European standardization bodies<sup>15</sup> and the ISO all follow a so-called model of national participation where a national body holds the voting rights within the international or regional standardization bodies such as the ISO, the International Electrotechnical Commission (IEC) and the CEN. In spite of their differences, the European and American standardization systems have common characteristics. Both rely on private organizations to shape standards on a voluntary basis. They follow a due process open to all interested parties and their deliberations are based on the “state of the art.” The draft standards are subject to public consultation and the general interest is supposed to prevail over particular interests. Finally, their standard-setting bodies recognize the primacy of international standards, even though the understanding of what “international” means remains controversial.

Despite these similarities, several conflicts remain between ISO/European and American standards developing organizations (SDOs).<sup>16</sup> From the American point of view, the national participation model in the European standardization bodies gives them a substantial advantage at the international level.<sup>17</sup> The Vienna and Dresden agreements between the ISO and CEN, respectively between the International Electrotechnical Commission (IEC) and the European Committee for Electrotechnical Standardization (CENELEC), can indeed be seen as benefiting European actors, as they grant provisions for the adoption of European standards as international ones and have ensured a coordination of the standardization work between those organizations. Moreover, the European New Approach sets up technical barriers to American firms through the distinct role it grants to the European standardization bodies. From a European point of view, the decentralized and fragmented standard setting procedures in the US represent a barrier to the US market. Moreover, American SDOs’ claims to serve the public interest often hinder strong commercial interests and contending regulatory competition. Finally, the international reach of standards developed in the US tends to

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<sup>15</sup> The three European standardization bodies are: the CEN, the Comité Européen de Normalisation Electrotechnique (CENELEC) and the European Telecommunications Standards Institute (ETSI). The ETSI differs significantly from the CEN and CENELEC in that it accepts corporate as well as national members. For further analysis of the European context, see: Egan (2001); Schoechele (2009: p. 24).

<sup>16</sup> See for instance: Egan (2001); Schepel (2005); Bütthe and Mattli (2011).

<sup>17</sup> Zuckerman (1999: p. 40); Czaya and Hesser (2001: p. 32).

undermine the authority of formal standardization arenas such as the ISO and CEN. Unsurprisingly, scholars have discussed such transatlantic divergences on the most appropriate institutional foundation of international standards at great length.<sup>18</sup>

### 2.3 Methods

In order to study the multiple authorities of service standards, sources were collected on a non-random and purposive basis, thus allowing for the inclusion of major standard-setting organizations and actors active in international standardization but limiting out-of-sample generalization.<sup>19</sup> Sources include interviews with international experts and high-ranking officials,<sup>20</sup> policy documents, reports and official data related to American, European and ISO standardization system.

The sources were analyzed according to the three dimensions underlying transnational hybrid authority: the actors defining standards; the objects concerned by technical specifications likely to emphasize the distinctiveness of service standards; and the space in which international standards for the service sector can be applied and recognized by various actors. In order to study the public-private relationships underpinning standardization activities, high-ranking officials of major international, European and American standard-setting organizations were interviewed to understand their own representation and relations with other standardization organizations and governmental agencies. In addition, the main regulatory policies on either side of the Atlantic were analyzed to identify the role attributed to various agents involved in the field. Interviewees were also asked about the activities they conduct in the field of services standardization, and their opinion and strategies regarding hindrances and opportunities for developing service standards. While their answers provided rich and various perceptions of the distinctiveness of service standards, the analysis also reviews what can be standardized by examining policy developments related to

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**18** Tate (2001); Mattli and Büthe (2003); Winn (2009).

**19** Small (2009).

**20** High-ranking officials interviewed belong to all the major bodies concerned in the international, American and European context of standardization: the American National Standard Institute (ANSI); the American Society of Mechanical Engineers (ASME), the American Society for Testing and Materials (ASTM international), the National Institute of Standards and Technology (NIST), the Consumer Electronics Association (CEA), the Consumer Specialty Products Association (CPSA), the International Organization for Standardization (ISO), the Comité Européen de Normalisation (CEN), the Association Française de Normalisation (AFNOR), the British Standards Institution (BSI), and the Deutsches Institut für Normung (DIN).

service standards, such as the ISO procedures and decisions related to the service sector, the European Commission mandates in the field of services standardization, as well as the recent reform of the European standardization system. Finally, the space in which service standards are likely to be recognized is pinpointed by paying closer attention to the existing features of the European and American internal markets, their respective reliance on an exogenous process of market mechanisms and on an endogenous logic of territorial sovereignty and the potential trade-off within and across standardization systems.

Critical discourse analysis of our interviews and collected documents reveals that both are situated within and constrained by particular social and cultural contexts.<sup>21</sup> They induce constitutive effects by creating what they refer to, and by legitimizing specific understandings of the most appropriate institutionalization of international standards. As such, discourses and documents reflect emerging patterns of authority for standard-setting practices as well as justifications for extending such patterns to the development of service standards.

### 3 Review of the literature

Scholarship on standards is largely dominated by business, economic, and applied science studies with a focus on industrial choices, market failures, and technological innovation and competition.<sup>22</sup> Econometric studies have now spread to assessing standards as a public good to be measured according to defined social and economic benefits.<sup>23</sup> With regard to services, standardization is generally viewed as a strategic innovation behavior of firms abandoning a more tailored customer-based approach, depending on their size, sector, and position in the life cycle of the services sold.<sup>24</sup> While this scholarship overlooks standardization processes beyond the environment of the firm, the literature in history, sociology and organization studies emphasizes how standards themselves constitute a significant social institution. Their strategic use by powerful actors can influence many aspects of modern life, including sexuality, scientific discoveries, animal welfare, and music downloads, as well as labor and democratic processes. In shedding light on the broad scope of standards in contemporary democratic soci-

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<sup>21</sup> Taylor (2001: pp. 8–9); Van Dijk (2001); Chiapello and Fairclough (2002).

<sup>22</sup> Toth (1984); Cargill (1989); Drèze (1989); OECD (1999); Vries (1999); Swann (2000); Blind (2004).

<sup>23</sup> Temple and Williams (2002); Blind and Jungmittag (2005); ISO (2010); Prakash and Potoski (2010).

<sup>24</sup> Tether, Hipp, and Miles (2001); Sundbo (2002); Sako (2009); Djellal and Gallouj (2010).

eties, they underline the ability of standards to constitute a distinct form of social regulation or technology of government in shaping bodies and subjectivities.<sup>25</sup> As Timmermans and Epstein observe, “somewhere between glorified globalization and dark dehumanization, each standard achieves some small transformation of an existing social order.”<sup>26</sup>

From the perspective of political science, the drive for technical specification and international standardization is understood as a distinct institutional framework with the power to ensure some order in market practices at the transnational level. Neo-institutional studies focus on the relations between private actors involved in standardization and the institutional environment in which their actions take place. Following the concept of transaction costs in institutional economics, agents’ practices are defined by their environment to a considerable extent. From this perspective, standardization provides an institutional guarantee for improving trust in transactions and curbing free riding risks among actors not willing to pay the full cost of expected benefits. Rational choice and game theories formalize systematic explanations of cooperative games and conflicts of distribution in the institutional framework of standardization.<sup>27</sup> In this view, the logic of action trumps its content, and the distinct case of services unsurprisingly gets scant attention – standardization is implicitly seen as inversely proportional to information asymmetries resulting from the intangible nature of services. Moreover, the understanding of the power relations involved in standardization is confined to quantifiable and *a priori* defined criteria based on rationalist assumptions.

Sociological and historical institutionalist studies adopt a less formal rationalist approach to the socially and historically constructed framework of standardization and its diversity across the globe. They provide accounts of the institutional complementarities that facilitate the accommodation of the authority of standards set by multiple standard-setting organizations.<sup>28</sup> In particular, such analyses shed light on the debate between the strongly institutionalized ISO and European systems, the more competitive pattern in the US, and the oligopolistic nature of consortia agreements.<sup>29</sup> Comparing the role of standards in the unification of the contemporary European market and the construction of the US market in the 19th

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<sup>25</sup> Loya and Boli (1999); Brunsson, Jacobsson, and Associates (2000); Tamm Hallström (2004); Higgins and Tamm Hallström (2007); Ruwet (2009); Loconto and Busch (2010); Timmermans and Epstein (2010); Busch (2011); Brunsson, Rasche, and Seidl (2012); Dobusch and Quack (2012).

<sup>26</sup> Timmermans and Epstein (2010: p. 83).

<sup>27</sup> Abbott and Snidal (2001); Spruyt (2001); Vogel (2009).

<sup>28</sup> Schmidt and Werle (1998); Mattli and Bütthe (2003); Bütthe and Mattli (2011).

<sup>29</sup> Egan (2001); Nicolaïdis and Egan (2001); Tate (2001).

century, Egan highlights the complementarities between regulation and free trade and the role of standardization in achieving this goal: “While European and American businesses have both used the courts to circumvent trade restrictions, they have themselves been used by the federal government, which has frequently delegated regulatory responsibilities to industry experts involved in private standards bodies, industry and trade association and professional societies.”<sup>30</sup> Moreover, as we have seen in the previous section, European and American standardization systems share what Czaya and Hesser call an “ethos” of standardization or in Werle’s words they display a strong “institutional isomorphism:”<sup>31</sup> beyond institutional differences between the US and Europe, standardization is used in both cases as a tool for the construction of the internal market.

As compared to various strands of institutional analyses of the effectiveness of convergence or divergence in standardization processes, the so-called variety of capitalism approach provides a more substantial and in-depth understanding of the political economy shaping the multiple authorities of standards. From this standpoint, American and European standardization systems differ according to the distinction between a liberal market economy and a coordinated market economy. The tension surrounding international standardization reflects the persistence of national differences related to the content of standards, their institutional environment, and perceptions by business. As noted by Tate, “corporate strategies in liberal market economies treat standards as a proprietary good or service to be traded like any other. (...) Corporate strategies in coordinated market economies, by contrast, treat standards as an infrastructure for deeper cooperation.”<sup>32</sup> As Winn further explores, viewing standards as either competitive or cooperative is likely to affect their legitimacy: “In the US, the legitimacy of the activities of SDOs, formal or informal, is generally perceived to be a function of resulting standards’ responsiveness to market conditions. Outside the US, the nature of the formal legal mandate to an SDO is generally perceived as pivotal in assessing the legitimacy of its work.”<sup>33</sup> While Winn relates these two sources of legitimacy to the divide between consortia and *de jure* ICT standards, the opposition also pertains to the distinction between the European and ISO national delegation model and the American direct participation model. In short, a standard is likely to be recognized in the US in response to market transactions, while European and ISO standards are likely to embed standards’ market requirements into broader institutional concerns.

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**30** Egan (2001: p. 37).

**31** See respectively: Czaya and Hesser (2001); Werle (2001).

**32** Tate (2001: p. 472).

**33** Winn (2009: p. 21).

Drawing upon social constructivism, Egyedi questions such a clear-cut transatlantic divide in standardization.<sup>34</sup> She stresses that this tends to underestimate the opening of most industry consortia and overestimate the democratic institutional pledge of formal organizations. While committees in both cases are formally open and work on a consensus-oriented basis, stakeholders with few resources, whether in civil society organizations or small and medium-sized enterprises, continue to take pains to participate in standard setting practices undertaken in technical committees. Thus, it is important to overcome the conventional caricatures opposing the American and ISO/European models. While different trajectories and national institutions do affect standards practices, and states do have an important role in this regard, comparative neo-institutional approaches tend to confine the practices of SDOs within the sovereign territory. Accordingly, they reify the concrete practices of SDOs, whose technical committees mostly rely on inputs from experts working for large firms with a transnational foothold. Moreover, they underestimate the involvement of US government agencies in the American system and overestimate the institutional embeddedness of formal SDOs. Making any *a priori* assumption about the role of public authorities in constructing the authority of standards is of little use overall, as it depends on institutional variation regarding the political economy of state market relations as much as on preferences regarding the issues concerned.<sup>35</sup> This is noteworthy with services, which can be highly technical, but at the same time embody contentious political interests and societal values. For instance, all sorts of standards related to information and communication technologies are used in services related to the development of smart global cities for improving transportation, energy efficiency, sustainable planning, and so on, but none of them would be of much use if left in a regulatory vacuum. More generally, the multiplicity of standards surrounding our everyday life has an influence on our health and safety, regardless of their place in regulation. Therefore, the inclusiveness of standard-setting processes remains an issue whose significance lies beyond regulatory public policies. The analysis of standardization requires moving beyond conventional dichotomies: “Standards hover between state and the market; standards largely collapse the distinction between legal and social norms; standards are very rarely either wholly public or wholly private, and can be both intensely local and irreducibly global. (...) standards can be seen as links between these spheres and institutions.”<sup>36</sup>

The distinct practices of standardization call to mind the *nébuleuse* that Cox portrayed in the mixture of official and unofficial networks, with representatives

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<sup>34</sup> Egyedi (2005).

<sup>35</sup> Dudouet, Mercier, and Vion (2006: p. 389).

<sup>36</sup> Schepel (2005: p. 4).

of business, the state and academia working towards the formulation of a consensual policy for global capitalism.<sup>37</sup> Such structural power of standardization epitomizes the new forms of non-state authority that have evolved over the past decade in the global political economy. The scope of international standards pertains not only to their potential worldwide reach, but also to the broader organization of the capitalist system.<sup>38</sup> Consequently, assessments of the relationship between multiple standard-setting agencies and society as a whole are bound to be controversial. This is all the more so with regard to services if one takes into account the deep cultural and societal values, as well as the elusive labor issues involved in activities supposing a co-production between producers and customers. Moreover, with the advancement of deregulation and liberalization and privatization, new service standards are likely to compete with previous rules governing public utilities, and more generally the social foundations of state power. The authority conferred on standard-setters by state agencies may narrow down the conventional Weberian view of state autonomy. This prompts us to elaborate further on how the co-existence of a wide range of standards reflects the rise of multiple non-state authorities in the global political economy.

## 4 The transnational hybrid authority of standards

Non-state actors lead to new forms of power in international relations. The literature on the rise of non-state actors, private authority and less conventional forms of sovereignty and governance has mushroomed over the last decade. A shared assumption of this scholarship, whatever its theoretical positions, is that at least two conditions must be met for such new forms of power to be effective: the consent of actors subject to the rules without having been involved in their making; and an explicit or implicit recognition by the state.<sup>39</sup> For instance, Internet users have not formally delegated their sovereign rights when they consent to rules set within a global institutional architecture mingling intergovernmental organizations such as the International Telecommunication Union (ITU) with private bodies such as the Internet Corporation for Assigned Names and Numbers (ICANN).<sup>40</sup> As emphasized by Graz and Nölke, “while there may be sharp dis-

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<sup>37</sup> Cox (1992).

<sup>38</sup> Murphy (1994); Murphy and Yates (2009).

<sup>39</sup> See in particular: Cutler, Haufler, and Porter (1999); Higgott, Underhill, and Bieler (1999); Hall and Bierstecker (2002); Schirm (2004); Grande and Pauly (2005); Djelic and Sahlin-Andersson (2006); Graz and Nölke (2008); Krause Hansen (2008); Büthe (2010).

<sup>40</sup> Radu, Chenou, and Weber (2013).

agreements as to the sense attributed to state recognition, there is little disagreement concerning the overall complementary and subsidiary role taken by private actors in regard to State functions.”<sup>41</sup> A critical source of non-state authority in the global political economy is therefore what Sassen calls “denationalization,” i.e., the process which contributes to the endogenization of private and transnational agendas within the political public sphere.<sup>42</sup> Governments and intergovernmental institutions often support and fully recognize the power of non-state actors, who in turn may gain legitimate authority. The territorial basis of politics, of the state, and of the structural power of governments and markets still exists beyond various forms of transnational private governance highlighting serious obstacles on issues of substance and procedures. Standards are likely to generate insights into the analytical foundations of such new forms of transnational authority. As highlighted by Tamm Hallström and Boström, the authority of standards recognized as legitimate remains fragile and full of pitfalls.<sup>43</sup> We turn now to the core dimensions of international standards’ authorities.

The nature and implications of the rise of non-state actors as standard-setting authorities shaping the global political economy calls for aggregating three distinct categories: the actors – i.e., who has the authority to set standards; the objects – i.e., what is standardized; and the space – i.e., where and whence standards are implemented. These three categories at best only capture some aspects of a complex and multifaceted process evolving extremely rapidly. Nonetheless, they try to point towards the significance of new forms of power in our societies and to move the analysis beyond the dichotomies underpinning most conceptual frameworks opposing European and American institutional settings, as well as product and service standards. The multiple authorities of standards entail numerous agents who play or claim to play a role not only as new *actors*, but also in defining the nature of *objects* and the *spatial structure* in which they exert their power. These three categories (actors, objects, space) draw upon previous attempts to conceptualize hybrid forms of authority in the context of globalization.<sup>44</sup> International standards simultaneously relate to the private sphere of economic activities governed by market constraints and to the public sphere of political action in the general interest of society. The objects of international standardization and space of its recognition are, thus, bound to be controversial. Services can be viewed as a distinct case in this regard as expectations regarding quality, security and capacity to deliver are deeply imbedded in societal values and face regulatory diversity

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<sup>41</sup> Graz and Nölke (2008: p. 12).

<sup>42</sup> Sassen (2003); Sassen (2006).

<sup>43</sup> Tamm Hallström and Boström (2010).

<sup>44</sup> Graz (2006a,b).

across countries. Together, these three dimensions have some resemblance to the tripartite standards regime conceptualized by Loconto and Busch.<sup>45</sup> They provide a comprehensive yet differentiated picture of the wide range of actors involved in setting standards, the width of issues concerned and the deterritorialization of sovereignty conveyed by the multiple systems of certification and accreditation worldwide. In the context of our analysis, this can be understood as the transnational hybrid authority of standards. We examine those three dimensions in more detail hereafter.

The first dimension concerns the actors involved in defining standards and the distinction between the private and public spheres in which they operate. Market mechanisms and policy choices both affect the agents involved in the field, but in various ways, which can be seen as located on an *institutional continuum* defining who can standardize. Technical specifications belong to the private sphere of economic activities governed by market constraints and affect social and technological change from that angle. Nevertheless they remain related to the public sphere of political action directed to the general interest of society – for instance by determining a certain level of risk or by setting principles of liability. Hence, even in the circumscribed field of technical specification, norms relate as much to capital accumulation and technical progress as to social improvement or various instruments of the welfare state. When mandatory, enforceable and general, technical specifications become part of public law and enjoy the status of government regulation. While some environmental, health and safety performances are defined under such procedures, these are often established on a voluntary basis and are more specific in scope. In such cases, technical specifications involve standard-setting bodies, whose private or public statutes vary considerably from one country to another. The wide range of actors and standardization bodies able to set international standards are likely to address the distinctive aspects of the service sector in various ways. This is precisely what is at stake in understanding what can be standardized.

The second dimension shaping international standardization relates to the objects concerned by technical specifications. Whereas the private/public nexus of the actors involved in setting standards can be located on an institutional continuum, this second dimension maps out a *material continuum* delineating what can be standardized. In aggregating the relationship between human beings and nature, technical specifications range from natural and invariable

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<sup>45</sup> The regime includes standards-setting, accreditation, and certification – three processes that “traverse and integrate public and private spheres both within and across nations” (Loconto and Busch 2010; p. 508).

physical measures to constructed and historically bound societal values. This dimension highlights the extension of the scope of international standardization. If standards were initially confined to “physical” standards like screw threads, they are now covering more “societal” topics. Corporate social responsibility standards, quality and environmental management system standards are emblematic in this regard. Applied to the standardization of services, this aspect raises questions about what is a service standard. The internationalization of the service sector depends on standards for the development of technical interfaces to industrialize the provision of services, as well as for the promotion of shared cultural values involved in the relationship of co-production between producers and consumers. Service standards can follow various paths in addressing such relationships, whether on a sectoral basis, taking deep cultural and societal values into account, or on a generic and horizontal basis, reflecting stereotyped behaviors that deny cultural and elusive labor issues involved in co-production activities. In other words, do service standards concern the material support enabling the delivery of services (protective equipment used in leisure sector, IT interface of call center, etc.)? Do they concern mere procedural and generic aspects of services irrespective of the cultural context of their provision (e.g., billing, complaint redress, information provision, security requirements in the domain of business processes continuity)? Are they able to take into account more substantial expectations related to cultural and societal values, as well as labor processes including implicit skills embedded in the co-production of intangible and relational services (special needs for disabled people, elderly and children, or customer-oriented behavior specifications for employees in tourism)? While those specifications can be defined on a voluntary or mandatory basis on a national plane, if included in international standards, they need recognition beyond state borders.

Our third dimension is the space on which technical specifications can be defined, diffused and recognized among sovereign states. While international standardization is driven by the attempt to homogenize specifications across national jurisdictions, processes of standards recognition allow for the acceptance of a plurality of standards or means of assessing conformity with them. Standardization thus occupies the cracks between the principle of exclusiveness of territorial sovereignty and the inclusiveness of rules governing the global economy. In order to understand this issue, we need to distinguish between exogenous and endogenous principles of standards recognition. The endogenous principle is related to a process of standard diffusion that is linked to the principle of territorial sovereignty (i.e., what makes an international standard is that its development process is based on territorial sovereignty principle). Conversely, the exogenous principle is related to the diffusion of standards through market

mechanisms (i.e., what makes an international standard is its use by market actors across the globe).

To sum up, a prominent feature of globalization is the growing significance of services in the rise of a worldwide knowledge-based economy. This shift involves new patterns and agents of change through formal and informal regulatory practices of a wide range of non-state actors. Among them, service standards are likely to play a crucial role as they reflect a form of transnational hybrid authority whose scope extends from physical measures to societal values, blurs the distinction between private and public actors, and reinforces the deterritorialization of regulatory practices in contemporary capitalism. It is within this analytical framework that the remainder of the paper will provide an overview of developments in the field of service standardization in the activities of formal SDOs within the ISO environment, the European Union, and the US.

## 5 The ISO setting

The ISO is a major arena for assessing current developments of service standardization. As the world's largest developer and publisher of international standards with a membership of 164 mixed private and public national standardization bodies, the ISO represents the wide range of public and private actors involved in services standardization. The move into standardization of services began in 1995 with a Consumer Policy Committee (COPOLCO) workshop in Beijing. Lawrence D. Eicher, then ISO Secretary General, emphasized that manufacturing industry was already changing with the move into generic management system standards and, from there on, "the emphasis could change even more to take into account the needs of the burgeoning service industries."<sup>46</sup> Six workshops were held in the following years with various foci, such as tourism, exhibition management, banking and insurance, and engineering consultancy, as well as multi-sectoral methodological issues for developing service standards. In 2001, a new working group was established to draft a guide on the use and development of service standards from a consumers' perspective (ISO/IEC Guide 76:2008, *Development of Service Standards – Recommendations for Addressing Consumer Issues*). Since then, service standards appear each year as a key priority area of the work program of the COPOLCO.

So far, according to the international classification system of the UN, 27 technical committees have been set up to develop service standards at ISO,

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<sup>46</sup> *ISO Bulletin*, January 1995.

with 348 international standards published and 193 under negotiation by the end of 2011.<sup>47</sup> These are still few compared to the 220 or so technical committees and more than 19,000 international standards of the ISO. Moreover, standards labeled as belonging to services include domains far removed from what is usually understood as services, such as transport infrastructures, lab techniques and construction engines. The broad inclusiveness of the UN classification system shows the uncertainties in defining and classifying service standards, which can never be taken for granted. Yet some developments have taken place in domains epitomizing core intangible and relational features of services. This is particularly the case for professionals providing personal financial planning such as in pensions per capitalization (ISO 22'222:2005), in the vocabulary and service requirements for market, opinion and social research (ISO 20'252:2006), and in safety requirements for scuba diving (ISO 24'801-1:2007), as well as a first attempt to develop a common terminology for defining hotels and other types of tourism accommodation (ISO 18'513:2003). Those distinct sectoral standards remain marginal in terms of the global service economy. Obviously, large parts of this economy, such as finance and insurance, use instruments developed within their own sector, even if their ability to legitimately claim a large authority in self-regulation has been seriously challenged in the context of the global economic crisis. Cross-border service providers also rely on more generic standards, which may indifferently be applied in the production and exchange of goods and services. Among the most widely used are the quality, environmental, and information security management system standards ISO 9000, 14000 and 27000 series, as well as the guidance

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**47** In 2011, the 25 ISO technical committees setting standards considered to belong to the service classification were extremely diverse as the following list indicates: TC 17 Steel; TC 28 Petroleum products and lubricants; TC 43 Food products; TC 68 Financial services; TC 69 Applications of statistical methods; TC 96 Cranes; TC 108 Mechanical vibration, shock and condition monitoring; TC 127 Earth-moving machinery; TC 135 Non-destructive testing; TC 138 Plastics pipes, fittings and valves for the transport of fluids; TC 176 Quality management and quality assurance; TC 182 Geotechnics; TC 204 Intelligent transport system; TC 210 Quality management and corresponding general aspects for medical devices; TC 212 Clinical laboratory testing and in vitro diagnostic test systems; TC 214 Elevating work platforms; TC 222 Personal Financial Planning; TC 223 Societal Security; TC 224 Service activities relating to drinking water supply system and wastewater systems; TC 225 Market, opinion and social research; TC 228 Tourism and related services; TC 232 Educational Services. There are also some so-called “project committees” with a mandate to establish only one document; see for instance: TC 235 Project Committee: Rating services; TC 236 Project Committee: Project Management; TC 237 Project committee: Exhibition terminology; TC 239 Project committee: Network services billing; TC 250 Project committee: Sustainability in event management.

on conformity assessment provided by the ISO 17000 series or the ISO 31000 guidelines and principles of risk management.<sup>48</sup>

Within the ISO setting, the development of service standards raises challenges pertaining to their content and the distinctiveness of services as compared to generic management standards. The relational and immaterial features of services prompt the development of standards that encroach simultaneously upon the intended quality of a service and the business operating procedures to deliver such a service. In the ISO, the latter is understood as a management system standard (MSS) and is kept separate from the former with dedicated procedures.<sup>49</sup> MSS represents a highly sensitive field of standardization that requires a so-called justification study (formerly known as ISO/IEC Guide 72) and the adoption of a common document structure and terminology.<sup>50</sup> Nonetheless, the distinctiveness of services and the desire of small and medium enterprises to refer to one single standard as a reference has led the ISO technical committee on tourism to send several requests to the ISO governing body (the Technical Management Board-TMB) asking them to reconsider these rules. In 2012, these requests were unequivocally refused by the TMB, leading to substantial modification and adding to the existing delays in the development of service standards in the tourism sector.<sup>51</sup> Such requirements have impeded the development of service standards in many domains. Overcoming this difficulty will only be possible by setting standards according to a very narrow understanding of the procedural and generic aspects of services. This will make it difficult to include more substantial issues related to societal values and cultural contexts affecting the co-production of services.

Almost 10 years after the 2005 ISO workshop, “Global Trade in Services – New Challenges for International Standardization,” and two decades after the launch of the institutional process, progress within the ISO has been meager. Whereas some developments, such as those in risk management (ISO 31000) or energy management systems (ISO 51000), may come to have a major impact

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**48** Prakash and Potoski (2006); Guler, Guillén, and Macpherson (2002); Lalonde and Boiral (2012).

**49** See ISO/TMB Resolution 18/2012, available from: <[http://isotc.iso.org/livelink/livelink/fetch/-15620806/15620808/15623592/15788626/TMB\\_Communiqé\\_Issue\\_Nr.\\_40\\_%28March\\_2012%29.pdf?nodeid=15787295&vernum=-2](http://isotc.iso.org/livelink/livelink/fetch/-15620806/15620808/15623592/15788626/TMB_Communiqé_Issue_Nr._40_%28March_2012%29.pdf?nodeid=15787295&vernum=-2)>. Accessed 18 October 2013.

**50** The recent revision of the «ISO/IEC Directives, Part 1, Consolidated ISO Supplement – Procedures specific to ISO» was precisely intended to rule and harmonize the development of management system standards with the introduction in the annex SL of a “High level structure, identical core text and common terms and core definitions for use in Management Systems Standards.”

**51** See ISO/TMB Resolution 17/2012, “Management Systems Standards in tourism and related services” available from: <[http://www.iso.org/iso/copolco\\_priority-programme\\_annual-report\\_2012.pdf](http://www.iso.org/iso/copolco_priority-programme_annual-report_2012.pdf)>. Accessed 18 October 2013.

on the service sector, so far, maturity in service standardization remains weak within the ISO environment. For instance, since the creation of the ISO committee on tourism service standards in 2005, only one out of its ten working groups has published standards (in the recreational diving sector; in contrast, adventure tourism, and natural protected areas or health tourism have hardly progressed).

## 6 The European setting

More developments take place at the regional level, especially in Europe with the European Union in the forefront of both service integration and international standardization.<sup>52</sup> In 1985, Council Resolution 85/C 136/01 on a “New Approach” to technical harmonization and standardization instigated a completely new regulatory technique and strategy.<sup>53</sup> The resolution was a response to the growing role of the European Court of Justice in resolving conflicts on regulatory policies in the internal European market, especially since the 1979 *Cassis de Dijon* case securing the principle of mutual recognition in the absence of harmonized legislation or technical standards. It was also an early move towards the completion of the Single Market by devising procedures to avoid turning technical specifications into structural impediments to trade. Although member states were suspicious about seeing regulation in this domain transferred to the European authorities, they did perceive the threat of a race to the bottom in public purpose standards as market integration progressed. The New Approach provides a framework for the harmonization of EU public law only on the general and essential requirements of goods traded on the European market, in particular 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, since products put on the market are granted a presumption of conformity, solely based on the declaration of the manufacturer (CE marking). Thus, the European New Approach has done

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<sup>52</sup> There are regional standardization bodies, most notably in the Americas (Pan American Standards Commission, COPANT and Asociación Mercosur de Normalización, AMN) and in Asia-Pacific (Pacific Area Standards Congress, PASC) and in Africa (African Regional Organization for Standardization, ARSO). As compared to the European system, however, their influence is still weak.

<sup>53</sup> For a discussion of the increasing reliance on standardization in European law making and public policy from a legal pluralism approach, see: Joerges, Ladeur, and Ellen (1999).

more than strengthen the importance of voluntary standards in the Single Market. By avoiding costly third party testing and certification, and providing the procedural means for a simultaneous adoption of European standards as international ones (through the so-called Dresden and Vienna Agreements), the EU has also included third countries in its standardization system. The (largely unintended) outcome has been a powerful strategic positioning of European standards in the global market.<sup>54</sup>

The European Commission was well aware that the emergence of an increasingly dense and extensive European standardization complex with global reach could also support the 2000 Lisbon Agenda. Services were a core feature of the plan “to become the most competitive and dynamic knowledge-based economy in the world.” New emphasis on service standards occurred after the 2005 mid-term review of the Lisbon Agenda and adoption of Directive 2006/123/EC on services in the Internal Market, the so-called Bolkestein Directive eventually agreed to on second reading in December 2006 and fully implemented since the end of 2009. A horizontal approach to regulatory harmonization supposedly valid for any kind of service provision at the European level lies at the center of the directive. The controversial “country of origin” principle has been substituted for the formula “freedom to provide services” in order to ensure conformity with regulations of the place of delivery. Yet, the Directive emphasizes that the promotion of quality is a crucial issue for the unification of the internal market for services. To this end, it explicitly encourages professional independent associations and standard-development and certification bodies (like the CEN, CENELEC, or ETSI) to develop voluntary quality marks and labels (preamble 102 and article 26).

Actually, DG Enterprise and Industry of the European Commission already addressed in 2003 a first programming mandate (M 340) to CEN, CENELEC and ETSI in the field of services to identify priority sectors of intra-community trade in services. Issues could include horizontal cross-sectoral generic standards and vertical sector-specific standards, as well as service providers or end-users. A second programming mandate (M 371) was addressed to CEN in the field of services in 2005 following the transfer of responsibility for business related services to DG Internal Market and Services. Half a dozen European standardization bodies developed eleven projects accordingly.

The CEN Horizontal European Service Standardization Strategy (CHESSS) is the largest project responding to EU Mandate M/371. It includes a consortium of national standards bodies led by the British Standards Institution (BSI), with those from Spain (AENOR), Germany (DIN), Denmark (DS), Estonia (EVS) and the

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54 Vogel (1995); Egan (2001).

Netherlands (NEN), as well as CapGemini, one of the world leaders in IT services consulting and management. Its final report published in 2009 examined the feasibility of a generic approach to European service standardization across multiple service sectors, as opposed to following a sector-specific approach.<sup>55</sup> The CHESSE project has raised crucial issues on the distinctiveness of service standards, anticipating the ISO TMB decision specifying the content of service standards and what can be standardized in the service sector. The importance of quality in services has inevitably led to questioning their specificity with regard to quality management standards (i.e., ISO 9000 series). One module of the project claims that service standards are not about the “how” but about the “what,” i.e., a service standard is not about how to achieve a goal, as with management standards, but specifies the goal to be achieved and the means for assessing its achievement.<sup>56</sup> In this regard, the proposal to develop a customer satisfaction index is undoubtedly as crucial in framing conformity assessment procedures in services as weights and measures underpinning similar procedures for products. The distinctiveness of service standards is that they extend beyond procedural issues to cover such issues as common writing models and the terminology employed across the entire service sector. The CHESSE project clearly aims at ensuring that service standards establish their distinctiveness in the realm of standardization, as management or performance standards did previously.

What can be standardized is closely related to the institutional environment in which standards for the service sector are developed. Unsurprisingly, the CHESSE report points out the difficulty of involving stakeholders in the development of generic standards when most of them lack the necessary awareness and resources. Throughout the modules, significant differences exist regarding the approach to what can be standardized: some favor multiple horizontal standards as opposed to a single horizontal one; others prefer horizontal standards completed by vertical standards, while still others remain skeptical about the capacity of any generic standards to deal with the distinctiveness and diversity of the service economy. The difficulty of stakeholders’ involvement has cast doubts on the institutional structures for setting service standards. For some, the current system is as appropriate for services as for products. In contrast, B2B services are seen as a good case for a new system based on a dual representation with stakeholders besides conventional national bodies, such as European organizations representing industry, SMEs and consumers: “This double representation system ensures a balanced representation of sectors on the one hand and of national

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<sup>55</sup> CHESSE (2009a).

<sup>56</sup> CHESSE (2009b: p. 109).

interest on the other hand.”<sup>57</sup> It remains unclear whether the CHESSE strategy will be successful; while only one recommendation of the CHESSE project has currently been implemented,<sup>58</sup> the interest in a single horizontal generic standard with a certification scheme is clearly an attempt to promote service standards on a par with the worldwide achievement of the ISO 9000 series. Thus, the important role of the European Commission in supporting standardization for the service sector may not only reinforce endogenous recognition of service standards. It could also pave the way for the deterritorialization of regulatory practices through greater reliance on market mechanisms for the diffusion of such standards.

In contrast, the ten other projects responding to EU Mandate M/371 address the specificity of distinct service markets. Afnor, the French national standardization body, a pioneer in setting national standards in well-defined service sectors, initiated those projects in consultation with some European partners, in particular from the Netherlands and Denmark. The recommendations identify a number of service activities likely to be standardized at various levels, whether European Standards per se, or at a lower level, guidance materials and so-called workshop agreements.<sup>59</sup> The advantage of a vertical and sectoral approach is largely seen in the quality of the deliberation process, which is likely to better address the distinctiveness of services in sectors of highly relational and immaterial activities. According to Pascal Gautier, in charge of the Management and Services Unit at Afnor, generic standards in services would soon become burdensome and unrealistic as “they require phenomenal efforts which would eventually generate opposition;” in his view, “it is much better to favor a niche approach in service standards so as to keep a sector-specific proximity, i.e., to choose a so-called Swiss army knife effect where each blade has its distinct use.”<sup>60</sup> However, the ambiguous mixture of private and public actors involved in standardization processes favored by this approach remains important. Similarly, the issues concerned do not clearly distinguish between societal or more strictly technical

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57 CHESSE (2009c: p. 223).

58 A guidance document for drafting service standards was published by CEN in 2012, “CEN Guide 15, guidance document for the development of service standards.” Available from: <ftp://ftp.cen.eu/BOSS/Reference\_Documents/Guides/CEN/CEN\_15.pdf>. Accessed 16 October 2013.

59 CEN/CEN Management Centre, *Summary, Background and Proposals related to European Commission Programming Mandate M/371 in the Field of Services* n.d. April 2009. According to the report, standardization work should be initiated in the following areas: accessibility of transport and tourist services, project management services in the field of engineering consultancy, services for residential homes and older persons, reception services, IT- and non-IT service outsourcing, and smart house services.

60 Author’s interview with Pascal Gautier, Head of the Management and Services Unit, Afnor, Paris, 18 April 2007.

objects of reference. A proper differentiation of actors among stakeholders and issues spanning physical measure to societal values, as well as clear-cut incentives to mitigate representation biases, would be necessary to ensure a fair, substantial and thorough representation in standardization processes.

Faced with the faster development of service standards at the national rather than at the European level,<sup>61</sup> and the potential creation of barriers to intra-EU trade in services, the Commission initiated a reform of the European standardization system, known as the “standardization package.”<sup>62</sup> One of its key objectives was to establish a better inclusion of service standards in the regulatory framework. Despite opposing views of what can be standardized in services, the consultation organized in 2010–2011 led to strong support for including service standards and keeping the principle of national delegation in this domain.<sup>63</sup> As such, the entry came into force in 2013 of the new regulation on European standardization (1025/2012), which extends the New Approach to services and constrains European National Standards Boards (NSBs) to notify services standardization activities, permits the takeover of their further development at the European level. Moreover, the new regulation reinforces the support granted to European stakeholders and SMEs. Nonetheless, the new regulatory framework has not necessarily diminished the divide opposing supporters of vertical sector-specific standards such as Afnor and horizontal cross-sectoral generic standards such as those promoted by the British Standards Institution (BSI). This probably explains the mid-range strategy pursued by the European Commission in addressing Mandate M/517 in January 2013 to the CEN, CENELEC and ETSI for the development of “horizontal service standards.” While fostering the standardization of the generic attributes of services, the mandate emphasizes the development of “‘narrower’ horizontal service standards for particular aspects/parts of a full service provision” as opposed to a single, all-inclusive horizontal service standard.

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**61** See for instance COM 2011(311) Final: “Progress in the development of European standards for services has, however, been slow and recent years have seen the rapid growth in service standards at the national rather than the European level, (453 new national standards in 2005–2009, as opposed to only 24 European).”

**62** In particular, the standardization package integrates Directive 98/34/CE of the European Parliament and of the Council regarding the “procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services” (22 June 1998) and the Decision 1673/2006/CE of the European Parliament and of the Council on the financing of European standardization (24 October 2006).

**63** See: <[http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-review/results-public-consultation\\_en.htm](http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-review/results-public-consultation_en.htm)>. Accessed 12 April 2012. Documents adopted in June 2011 by the European Commission are the following: Communication on a strategic vision for European standards – COM (2011) 311; Proposal for a Regulation on European Standardization – COM(2011)315.

## 7 The American setting

With European standardization processes usually seen as driven by a coherent and centralized institutional framework in opposition to the fragmented and decentralized American system, the overall design of international standardization remains unsurprisingly disputed. In Mattli's words, "the disagreement between Europeans and Americans is about whether an international standard is simply one that benefits from *de facto* or *de jure* international acceptance and use by an industry, or whether it must come from an organization that is truly international in the sense that it has an international representation of national members and an international voting structure based on those national members. A resolution of this disagreement is not in sight; it will require, among other things, a clearer understanding of the relationship between national, regional and international standardization organizations."<sup>64</sup> Despite a number of noticeable differences between the American and European system, several features do contribute to bridging the conventional gap of such a transatlantic divide.

First, the American National Standards Institute (ANSI), a strictly not-for-profit private organization, plays a significant role in centralizing standardization processes. Its mandate explicitly places ANSI in charge of the coordination and representation of US interests at the ISO and IEC. ANSI also plays a crucial role in enhancing the coherence of standard-setting processes both within the US and amongst US participants in international arenas. Without developing standards, it coordinates and accredits US-based SDOs, which in turn must comply with the ANSI essential requirements for standards development processes. In fact, the Vice President of International Policy of ANSI contests the depiction of the American standardization processes as fragmented and decentralized as, instead, they take place in an "organized distributed system."<sup>65</sup> This particular account of the American setting presents ANSI's coordination role in a positive light, but also reflects the delineated environment in which US standardization takes place. While ANSI is responsible for the coordination of over 200 accredited SDOs, the National Institute of Standards and Technology (NIST) is the federal agency that fulfills a similar role at the level of governmental agencies. Over the last decade, the 1996 National Technology Transfer and Advancement Act and the 1998 revision of the Circular A-119 of the Office of Management and Budget have played a significant role in enhancing NIST's profile; those pieces of legislation and regulation entrust NIST with promoting the use of voluntary standards in lieu of

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<sup>64</sup> Mattli (2001: p. 330).

<sup>65</sup> Author's interview with Gary Kushnier, Vice-President for international policy, ANSI, Washington D.C., 7 August 2009.

government unique standards within federal agencies. In 2009 alone, over 3300 employees in 25 federal agencies contributed to the development of voluntary standards in nearly 500 formal and informal SDOs.<sup>66</sup> At the same time, over 400 NIST employees have taken part in standards development processes in about 1400 technical committees of formal and informal SDOs.<sup>67</sup> The direct involvement of governmental agencies is only part of the relationship between public authorities and standardization. More than 8600 standards are referred to in US law, and over 10,500 in public procurement procedures. It is also worth noting that ANSI Steering Committee not only includes representatives of industry and civil society, but also a number of government agencies.<sup>68</sup> In this sense, the American setting relies on a mix of public and private actors.

While the American institutional setting is not as dissimilar to the European and ISO framework as conventionally understood, current developments in the distinct domain of service standards remain sharply dissimilar across the Atlantic. Services are for the most part non-existent on the agenda of American SDOs. Even the largest standard-setters pay scant attention to how services may challenge the future of standardization. In 2009, the strategic plans of the Board of Directors of the American Society of Mechanical Engineers (ASME) focused on nuclear and renewable energies, the development of the engineering workforce and globalization.<sup>69</sup> As Bernard Hrubala, Vice-President of ASME and Division Manager at TÜV Rheinland put it, “our ultimate goal at the end of the day is, don’t matter what the standard is in every country, we want their standards to be consistent with the ASME standards.”<sup>70</sup> Yet none of these activities specifically focuses on services. While ASTM International (originally known as the American Society for Testing and Materials) shares this claim to play a leadership role at the global level with an active policy of memoranda of understanding signed with over sixty national SDOs, it ignores the issue of service standards and prefers

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**66** NIST (2010).

**67** NIST (2009).

**68** Represented governmental agencies include among others: Environmental Protection Agency, Food and Drug Administration, Department of Defense; industry members include among others: Motorola, IBM, Rockwell Automation, and Boeing; SDOs include among others: Institute of Electrical and Electronics Engineers, ASTM International, ASME, Underwriters Laboratories; civil society representatives include among others the National Consumer League and Consumers Union.

**69** Authors’ interview with William Berger, Managing Director, ASME, and Bernard E. Hrubala, Sr. Vice President, ASME, and Division Manager of the Industrial Services Unit, TÜV Rheinland, New-York, 18 August 2009.

**70** Authors’ interview with Bernard E. Hrubala, Sr. Vice President, ASME, and Division Manager of unit ‘Industrial Services’, TÜV Rheinland, New-York, 18 August 2009.

to give prime importance to sustainability. It is from this standpoint that ASTM International plans to revise most existing standards and chart new activities such as carbon footprint and alternative fuels. Katharine E. Morgan, ASTM Vice-President of the Technical Committee Operations, goes to great lengths to explain this strategic shift: “We are seeing green, from roofing to isolation to degradable plastics, we are seeing that across a lot of our committees.”<sup>71</sup> For its part, NIST sees its role in service standardization closely related to strategic issues set by the Obama administration in domains such as smart grid standards, healthcare IT standards and security standards (including “preparedness” and “business continuity”) initiated by the Department of Homeland Security.<sup>72</sup> Finally, ANSI considers that abiding by its coordination mandate is at odds with setting any priority at all as long as its members have not done so – this *de facto* excludes service standards among potential hot topics.<sup>73</sup>

Officials in charge of standardization strategy in the major bodies of the American institutional setting invariably explain the lack of concern over service standards by a lack of demand. All our interviewees confirmed that service standards are not part of their strategic standardization activities. Interestingly, the few service standards dealt with among American SDOs are confined to domestic issues. For instance, the development of a standard for site assessments merely responds to a requirement set by the US Environmental Protection Agency.<sup>74</sup> Overall, standardization in services does not lie at the heart of our interviewees’ preoccupations: “ASTM doesn’t take a position with evaluating those... we would let those industries just go and do their participation in ISO on that.”<sup>75</sup> Or in ASME words: “Our scope is essentially mechanical engineering. Those services type things don’t really fall within our area.”<sup>76</sup> ANSI claims more support, but also calls to mind the warning given to ISO against a premature venture into all sorts of service areas, most notably because of the lack of industry support.<sup>77</sup>

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**71** Authors’ interview with Katharine E. Morgan, Vice President, Technical Committee Operations, ASTM International, West Conshohocken, 19 August 2009.

**72** Authors’ interview with Belinda Lowenhaupt Collins, Director for Technology Services, NIST, Gaithersburg, 3 August 2009.

**73** Authors’ interview with Gary Kushnier, Vice-President for International Policy, ANSI, interview with the authors, Washington D.C., 7 August 2009.

**74** Authors’ interview with Katharine E. Morgan, Vice President, Technical Committee Operations, ASTM International, West Conshohocken, 19 August 2009.

**75** *Idem*.

**76** Authors’ interview with William Berger, Managing Director, Asme, and Bernard E. Hrubala, Sr. Vice President, ASME, and Division Manager of the Industrial Services Unit, TÜV Rheinland, New-York, 18 August 2009.

**77** Authors’ interview with Gary Kushnier, Vice-President for International Policy, ANSI, Washington D.C., 7 August 2009.

Accordingly, supporting either horizontal cross-sectoral generic standards or vertical sector-specific standards is seen as merely of pragmatic concerns and disconnected from a supposedly service distinctiveness. In ANSI's words: "We don't prefer one over the other, it's what is needed."<sup>78</sup> Yet, more broadly, generic standards raise the issue of certification. American SDOs remain highly critical of standards likely to be used for certification purposes. Taking the example of the ISO 9000, ANSI emphasizes the lack of added value brought by certification: "It didn't add value if you are a large company and you already have an excellent quality management system. What does it bring to spend a few more millions of dollars or euros to get certified to something you do better already?"<sup>79</sup>

## 8 Service standards and institutional ambivalences

What kind of transnational authority can be assumed with regard to the ongoing processes taking place in the domain of service standardization in the ISO, European, and American contexts? How do these multiple authorities of standards reflect a special case concerning the domain of services? Our discussion focuses on how the above-mentioned developments matter in assessing the authority of international standards in the service sector along the three core dimensions of the agents involved, the issues concerned, and the space in which such standardization processes are likely to be recognized.

Regarding actors involved in the standardization of services, this paper provides strong evidence of the significance of public support, in particular within European institutions. However, the difficulties of the CHESSE project shed light on a common feature on both sides of the Atlantic as well as within the ISO context: the support and expertise of private actors is crucial in the development of standards. The low level of involvement in the field of service standards in the US mirrors the difficulty of European and ISO projects in convincing stakeholders from the private sector. This suggests that behind labels of "direct participation" in the US and "national delegation" for the European and ISO setting, actors setting standards are the same: large firms dominate technical committees, with government agencies attempting in some cases to take part in drafting standards, and not-for-profit associations from civil society remain largely under-represented. In contrast to the direct political influence of the European setting, the American

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<sup>78</sup> *Idem.*

<sup>79</sup> *Idem.*

system relies on the indirect influence of the legal and regulatory environment supporting and legitimizing the output of formal and informal SDOs. Thus, far from mere fragmentation, the US system hinges upon double coordination mechanisms, ensured by ANSI at the level of formal SDOs and by NIST with regard to governmental agencies. The distinction between national delegation and direct participation therefore appears to be more relevant for describing the space of standards recognition outside the US than the type of actors involved within the US. Finally, the difficulties experienced by the European CHESSE project sheds light on the importance of enrolling private actors for support and expertise on both sides of the Atlantic. The lack of distinct service standardization processes in the US here echoes the difficulty in encouraging stakeholder involvement in European projects to develop standards in conjunction with the unification of the market for services. Apparently European officials have greater influence on the issues put on the agenda than do private actors likely to shore up the processes of setting new service standards.

Regarding the objects concerned, the potential scope of international standardization in the domain of services differs greatly across the Atlantic. The antagonism between horizontal and vertical standards reflects the struggles at stake in defining what should be standardized in services: should it be the generic attributes of technical interfaces supporting the interaction between providers and customers on a horizontal basis for the widest range of services (information requirements, billing, complaint handling, etc.)? Or should technical specifications be more substantial on a narrower sectoral basis, defining how services can be co-produced and used on a reliable basis with shared expectations regarding their quality? Services' distinctiveness is clearly at stake here, with an assumption that the more intangible and relational the service is, the more difficult to measure and standardize. Yet this does not mean it is impossible. In spite of all its flaws, the European CHESSE project has provided a significant step in building a coherent framework for the standardization of services. The development of a customer satisfaction index tailored for services may eventually overcome the controversy between vertical and horizontal service standards. Devised to gauge the quality of services, the index could provide evidence of a positive impact of a standard on customer satisfaction, be it horizontal or vertical. Finally, it is worth noting that the case of energy and smart metering suggests that societal issues are likely to be greater in Europe than in the US, where the focus is on narrower technical and market-driven aspects. While both sides demonstrate interest on the issue, American stakeholders narrow it down to technical issues associated with the physical characteristics of the resources delivered by such services. In contrast, the CHESSE project explicitly pointed out broader concerns of sustainable development.

Thus, what can be standardized in the domain of services relates to a wider set of issues in Europe than in the US. While the intangible and relational nature of a number of services is often viewed as a major hindrance to standardization, standards can be instrumental in the development of technical interfaces to industrialize the provision of services and the promotion of stereotyped behaviors denying the specificity of the service relationship. Decision trees in offshore contact centers and quality and security requirements in data transfer and processing services are examples. Yet, a more progressive response in setting standardized behaviors in service deliveries across borders can also include broader societal concerns and suppose a greater involvement of service providers and beneficiaries alike in responding to increasing doubts on the misuse of services. Consequently, standards play a significant role in creating new markets, with varying emphasis on narrow market requirements or broader societal concerns. In both cases, however, strong public support represents a driving force behind SDOs' agendas. The standardization of services in Europe has its roots in mandates of the Commission and underlines a strong (inter-)governmental concern on the instrumental role of standards in building a single market for services. In contrast, a single market for services already exists for most domains in the US. As a result, the demand for new service standards is low. It is worth noting that the few activities related to service standards in the US specifically target the domestic market. Thus, despite the different position of services on the European and American standardization agendas, service standards are in both cases related to the construction and maintenance of their respective internal market. While this provides support to Egan's claim about the role of standards in the construction of American and European markets, it also sheds light on the ongoing difficulties of boosting the development of international service standards with a truly global relevance within the ISO setting.<sup>80</sup>

This brings us to the third dimension defining the transnational hybrid authority of standards: the extent of the space in which technical specifications in the domain of services are likely to be defined, distributed and recognized across sovereign states. International standards compete in terms of their different sources of legitimacy, as well as their various modes of cooperation. Market adoption is the main source of legitimacy for standards developed by American SDOs. This means that the recognition of standards beyond the sovereign space of the US primarily relies on the exogenous process of market mechanisms – a good entry point into new markets as expressed by one interviewee. The translation of standards into official languages of various countries and the organization of training workshops tailored to the distinct needs of well-chosen countries

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<sup>80</sup> Egan (2001: pp. 33–38).

are an integral part of this strategy. This does not mean, however, that American SDOs overlook the legitimacy of their standards based on direct participation. The ASTM Memoranda of Understanding signed by numerous national standards bodies strongly echoes the principle of national delegation in use at the CEN and ISO, even if they are part of a contractual and bilateral strategy. In contrast, the legitimacy of standards in Europe endorses the principle of national delegation. The diffusion and adoption of standards is consistent with the endogenous logic of territorial sovereignty. However, current plans in the domain of services may lead to a dual model, in which direct participation would complement the national delegation model. This is what would follow from the double representation system suggested by one module of the CHESSE project. It was also thoroughly discussed in the consultation process preceding the adoption of the reform of the European standardization system (Regulation 1025/2012). However, one should be aware that this would rely more upon the involvement of stakeholders within the European context than the broadening of standard recognition beyond the confine of the EU. This falls short of defining a dedicated procedure for setting future service standards.

Finally, the certification of a hypothetical European horizontal service standard is likely to become a contentious issue between the US and Europe. Americans oppose certification on grounds of a lack of added value to a company. In Europe, in contrast, certification is justified by its contribution to market transparency which is likely to foster intra-European trade in services. Here again, the opposition between Europe and the US reflects divergent market structures. Certification bodies offering conformity assessment can easily be seen as undermining shareholder value in an already unified market such as in the US. In contrast, when market creation objectives are at stake, as in the case of the Single European Market for services, certification procedures expected to enhance trust in the market can, understandably, relate more directly to the realization of this aim.

## 9 Conclusions

This paper has engaged the plurality of institutional environments in the world of standards by studying the case of service standards in the context of the ISO, European, and American standardization systems. In contrast to conventional views, the theoretical approach underlying our analysis aims at questioning the distinctiveness of the institutional embeddedness of standard-setting developments, as well as the variance between service and product standards. Our framework suggests three dimensions according to which we can examine our case:

the actors of standardization – i.e., who has the authority to set standards; the objects – i.e., what is standardized; and the space of recognition – i.e., where and from where standards can be implemented and viewed as legitimate.

Our results shed light on the extent to which public and private actors overlap in the standardization arenas on both sides of the Atlantic, as well as on the international plane of the ISO system. The level of public involvement required to engage private actors in setting standards supporting market access for new lines of services bolsters the case for service specificity. Yet, the assumption that such specificity would call for reforming existing models of representation in standardization bodies has so far only been contemplated in the European context – an observation that provides in return some support to the argument of an institutional distinctiveness along which situating the Atlantic divide. Closer attention to the object of standardization underlines the uncertainty and on-going struggles surrounding the specific features of service standards. In contrast to an American context less apprehensive of such concerns, the emphasis on service specificity in the European context is more susceptible to disputes over what can be standardized. A significant issue in this regard is the opposition between advocates of so-called horizontal generic standards, supposedly valid for any kind of service provision, and those in favor of so-called vertical standards applying more narrowly defined specifications for distinct industries or processes. The American disregard for service specificity could be attuned to supporters of horizontal generic standards and therefore contribute to undermining the so-called transatlantic divide. Finally, regarding the space of standards' recognition, future developments in service standards are likely to reinforce the deterritorialization of regulatory practices. Our results provide evidence for a nuanced understanding of this buzzword used in many studies of globalization. Whilst the wider spatial recognition of US based standards primarily relies on market mechanisms involving global market forces to some extent, the American setting also includes territorially-based legitimacy processes, such as the involvement of non-US SDOs in standard development processes. Similarly, opposing views on the range of recognition for future service standards developed within the European and ISO settings are likely to generate various compromises around complex models, where market- and territorially-based systems would considerably overlap. While these findings tend to blur the conventional image of a transatlantic divide in standardization, the support granted to European stakeholders and SMEs within the new European standardization regulatory framework arguably lends support to the service specificity thesis. More generally, the picture emerging from the on-going institutional developments at the European, American, and worldwide ISO levels suggests that the transnational hybrid authority of international standards in the service sector will have a growing, yet differentiated influence on the

regulatory environment of the economy and society at large. Nevertheless, over the last few years, such developments have been weaker than expected.

A first lesson to be drawn from our findings is that multiple authorities of service standards seem to follow competing models that do not strictly reproduce the conventional understanding of standardization systems. The two sets of competing profiles among states and non-state actors conferring authority on service standards are the following. The first favors horizontal standards for generic specifications that would cut across distinct sectors and reinforce the power of transnational markets thanks to narrow definitions of requirements such as transparency and quality. In contrast, the second supports vertical standards according to which the internationalization of the service economy would remain rooted in concrete market practices, labor processes, and, arguably, society at large. From this perspective, services can only be standardized according to the specificity of the configuration in which they are provided and the context of their usage. While the motto of the first view is what Ziva Patir, former Vice President of the ISO, calls the 1-1-1-dream of “one market, one standard, one test, globally accepted,”<sup>81</sup> the second is more inclined to restrict such a motto to “one sector, one standard, one test, accepted wherever relevant.” These conflicting claims reflect opposing types of relationships between standards and society at large. International standards can be used either as driving forces for broadening the domain of market self-regulation, or as alternate instruments for embedding markets within society. The direction on which the balance will tilt depends on the degree to which society is fairly, substantially and thoroughly included in standardization processes; it is also subject to the differentiation of issues likely to be appropriate for such alternate tools of market organization. Accordingly, the institutional developments of service standards are likely to face trade-offs between promoters of further socialization of international standards applied to distinct and well-chosen service sectors and the advocates of a commodification of technical standards. The former will be content with a transfer of the universal scope of law into a catalog of sectoral service standards developed by official standard-setting bodies backed by WTO/GATS provisions. In contrast, the latter will struggle for a worldwide recognition of minimal generic market-based standards, such as quality management and security standards provided by consultancy firms and consortia fiercely competing on the lucrative market of management methodologies and certification of business processes.

The second lesson is that such a more nuanced view on the conventional distinction between the so-called European and American standardization systems can be explained by the special case of services. It is on the definition of what

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<sup>81</sup> Authors' interview with Ziva Patir, former ISO Vice President, Geneva, 8 June 2007.

exactly a service standard is that the two systems differ most widely. American practitioners tend to deny the distinctiveness of service standards, in sharp contrast to the European context where on-going struggles take place to define what exactly this category may mean. In this regard, how should we explain the weaker than expected development of service standards in Europe? Is it further evidence of hindrances resulting from service specificity? Or are we subject to a fallacy of composition in inferring a weak development of service standards, when many international standards are developed elsewhere, whether or not tagged “service-related” as we observed in the US? As we saw, smart metering could be a fruitful area for future research on this issue. A further implication of our study is how the object of standardization affects, in turn, the institutional environment in which it is likely to take place. This is particularly the case within the European context which is so eager to build a coherent framework for the standardization of services. This sets the agenda for examining other ambiguous and neglected aspects of the transnational hybrid authority of standards.

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