## The Political Economy of Standards and Standard-Setting Processes

**Abstract:** Standard-setting is not (only) concerned with the solution of technical problems. Under the guise of technical problem solving, standard-setting processes often deal with redistributive and normative issues. In standard-setting there tend to be clearly identifiable winners and losers. This makes it inherently political in nature. Democratic political systems generally foresee legislative processes to deal with such issues. Delegating these issues to standard-setters is in itself a political choice.

### 1 Introduction

Standards can be seen as solutions to a range of interaction problems, such as information asymmetries or compatibility problems, between various actors, companies, producers or consumers.

Through standards, these solutions are generally implemented in technology. They provide a technical solution to these interaction problems. In the case of compatibility problems, for instance, standards stipulate by which technical means interoperability is to be achieved.

It would be naïve to assume, however, that standards are thus purely technical or that standard-setting processes are purely technical problem-solving exercises.

Instead, the development of standards are often deeply political. For pragmatic reasons, this paper distinguishes between markets and political hierarchies and thus defines political as the quest for power and influence through political hierarchies outside the realm of markets.

Standards and standard-setting is argued to be political for two reasons. First, the development of standards often concerns matters of public interest, which, if it was not for standard-setting, are usually dealt with by elected representatives in the political realm. Secondly, the question whether such matters are dealt with through standard-setting processes or public policy-making processes is generally determined by political power struggles.

This paper is meant to clear the mist that usually covers the political realities of standard-setting processes. It is neither meant to serve as a guidebook on how to play standard-setting processes, nor does this paper sanction the processes described in this paper. Where necessary, however, it raises questions about the fairness and democratic legitimacy of the processes described, but leaves it to other—and wiser—commentators to propose improvements. The paper is not meant to sow cynicism and asks the reader to remember that, in line with Churchill's

remark that "democracy is the worst system of government, apart from all the others", we do live in a second-best world.

### 2 Standards and public interest

Standards are important. Similar to conventional laws, standards affect almost every aspect of our life. Unlike conventional laws, however, they are developed by private actors—i.e. companies—rather than the elected representatives generally involved in conventional, legislative processes.

The stakes are high, both for the individual consumer, who literally depend on standards with life and limb, as in the case of food safety standards, for instance. Also for companies the stakes could not be higher. "New standards can be the source of enormous wealth, or the death of corporate empires," The Economist already noted in 1993 [1].

Without standards many markets would break down. In fact, they would not even exist. Take food safety standards, for instance. Without quality standards and certificates we would not be able to trust profit-oriented food producers to sell foods that are safe for consumption. And food producers, in turn, probably would not be able to invest in the production of safe foods because they know that consumers do not trust them anyway and would not pay an adequate price. As a result there would not be a market for food and everyone would have to go back to making their own food

The same goes for information and communication technology (ICT) standards. Without the compatibility standard for main frame computers, for instance, today's hardware and software markets would not exist. Even without de facto standards such as Microsoft Windows, whether you like it or not, today's markets for personal computers and third party software are unlikely to have flourished as much.

Without such standards many markets would not exist, something that also the European Union, then European Community, came to realize in the 1980s. The EU member states and the European Commission noticed that the removal of legal barriers to trade was not enough. In order to create a common European market and intra-European competition national standards would have to be harmonized. Therefore, standardization has become an important issue in the European (market) integration process, a point that shall be elaborated in greater detail below.

Standards, however, are not only market building. Standards are also market shaping or 'regulating,' as most scholars dealing with such questions would say. Standards have a direct impact on who has access to the given market and who holds power in the given market. In the case for digital pay TV, for instance, standards determine who has access to the market and is able to offer their TV productions through existing pay TV systems. If there is an open conditional access standard more producers of TV programs can get access to the market, leading to tougher competition for producers but lower prices and more choice, and thus media plurality, for consumers. If one company controls a single de facto standard for conditional access, this company can refuse market access to competitors and will gain monopolistic powers, leading to higher prices, less choice, and thus less media plurality [2]. Monopolistic pay TV providers maximize profits by super-serving a median audience of middle class adults rather than addressing the full range of cultural, ethnic and religious niche market demands. As a result TV becomes "[..] dominated by the TV culture of quiz shows featuring stripping housewives, squeezing out educational and public interest programmes," as suggested by Arlene McCarthy, Member of the European Parliament [3].

Even standards dealing with issues as arcane as the dimensions of shipping containers, have a critical impact on market access and competition. The access to transport markets and market share of comparatively energy efficient modes of transport, such as rail and canal transport, depends on the size specified for shipping containers by the relevant standards. If the standard defines container dimensions that are too wide they will neither fit on rail cars and barges nor through tunnels or underneath bridges. If the standard defines containers that are too small or do not allow for an effective loading of these containers with European shipping pallets, the user of these containers loses cost-competitiveness and thus market shares.

If standard-setters fail to agree to a common standard for shipping containers, the resulting heterogeneity of containers has devastating consequences for the transport industry, the economy and the environment alike. The lack of a common container standards often requires the reloading of freight from one container to another whenever modal boundaries are crossed, thus defeating the purpose of containerization. The lack of standardization also significantly increased the number of empty back-hauls und leads to an underutilization of non-road modes of transport. This increased transport costs, exacerbated the problem of traffic congestion, and increased the number of accidents and environmental pollution [4].

Thus far the paper has focused on the economic impact of standards for markets. However, it should also have become clear that they also can have critical implications for society more generally, especially, when it comes to issues such as safety, environmental sustainability and media pluralism. Standards often tend to have direct redistributive and normative consequences. There tend to be clearly identifiable winners and losers. All of these issues—whether economic or societal or both—are commonly dealt with by

elected representatives in parliaments or various other venues of the political arena.

Needless to say, standard-setters are rarely concerned with these issues, nor are they deliberately trying to create the above described normative or redistributive effects. In the case of container standardization, for instance, the representatives of the road transport industry, which dominated the standardization processes, did not deliberately seek to hurt the canal shipping sector. In the case of pay TV, for instance, the actors involved in the standardization of conditional access systems did not intend to increase or decrease media pluralism. They were purely concerned with the competitive implications that these standards have for their position in the market for pay TV. Also the standard-setters involved in the standardization of shipping containers did not mean to impact on road safety and environmental sustainability. However, it does not matter whether standards are intended to have the outlined societal and economic effects. What is important is that they do. This is the first reason that makes standard-setting a political process. Standard-setters deal with deeply political

## 3 Standard-setting vs. conventional policy-making

The second reason why it is argued in this paper that the setting of standards is inherently political is that the choice, whether the described issues are addressed through standards rather than conventional law making processes, is a political choice. It is the result of power struggles that do not directly take place in the market but outside of it, namely in the political realm. Spruyt has shown that the struggle over who gets to set standards is quite an old struggle, which goes back to Roman times [5].

The underlying argument is that there is a choice. Conventional law-making is always an alternative. In the case of container standards, for instance, the outer and inner dimensions of shipping containers could simply be decided by law-makers and incorporated into conventional laws. And in fact, the European Commission threatened standard-setters to do so. Also the design of conditional access in the case of pay TV could have been addressed through laws rather than standards.

Of course, legitimate questions can be raised about the effectiveness of conventional law-making processes compared to standard-setting processes. The literature points at important information problems that may constrain conventional law-making processes. Given their lack of technical expertise and market information public actors are thus often, marginalized as 'blind giants' [6]. Even where law-makers had the necessary information and expertise, it is argued, they would only have a 'narrow time window' to intervene before markets were locked in and their technological knowledge became obsolete [7,8]. Standard-setting processes, by contrast, are expected to provide more informed and flexible governance, especially in the face of internationalization and technological change [9,10,11].

At the same time, however, it is possible to raise questions about the democratic legitimacy of standardization processes. Given the intrusive impact that standards tend to have on our lives, it can be questioned whether these issues can be entrusted to the exclusive circles of actors that are usually involved in standard-setting processes. As already Adam Smith pointed out:

"People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices." [12]

As mentioned above technical standards tend to have direct normative and redistributive consequences. In standard-setting there generally are clearly identifiable winners and losers. Especially in the case of the ICT sector, standard-setting can have a critical impact on the survival or death of businesses. Therefore, it can be asked whether this should not be left to more democratic processes, such conventional law-making processes that ensure adequate representation of all concerned actors.

In reality, however, neither concerns about the effectiveness nor concerns about the legitimacy tend to play a role. And if these concerns are cited by the actors involved, they are cited for strategic reasons. What actually drives the choice between standard-setting processes and conventional law-making processes are the strategic interests of the actors involved. Actors that expect to have more influence in standard-setting processes rather than law-making processes try to push issues into the former rather than the latter and vice versa.

Companies need to be self-interested to survive. To prevail in the market they need to do anything that is in their power to outcompete their competitors. Therefore, they can also be expected to do the same outside markets, as for instance, in standard-setting processes or the political arena. Also political actors, such as elected representatives, ministers, bureaucrats or regulators, cannot necessarily be expected to be exclusively problem- or efficiency-oriented either [13]. As argued by Schneider, Dang-Nguyen, and Werle public actors, such as the European Commission, should rather be understood as institutionally self-interested 'corporate actors' whose primary goal is to expand the scope of their competences [14]. As argued by Cram, however, this does not necessarily mean that the European Commission was opposed to solving problems [15]. Its quest to expand the scope of its competences, however, has a decisive influence on public actors' choice of issues to address. Assuming that there is an unlimited number of policy-problems to solve, political actors are likely to choose those issues that will allow them to strengthen their

The following subsections discuss what interests tend to push for the former and what interests push for the latter. Also the strategies employed by these interests will be described.

# 4 Conventional law-making processes

Law-making processes in pluralist political systems provide a number of checks and balances. They are meant to be transparent and inclusive and offer the concerned actor various avenues of appeal to make their voices heard. Concerned actors could for instance appeal to individual elected representatives, parties or use the court system to make sure that their views, interests and rights are adequately taken into account. And if all this fails they can choose to use the mass media and public opinion as an additional channel of appeal.

Therefore, the losers of standard-setting processes, such as companies expecting a newly developed standard to have an adverse effect on their business, often tend to use the avenues of appeal provided by conventional law-making processes [16].

In contrast to standard-setting processes, it is not the actors' technical expertise and the sheer size of their pockets that determines their influence. In law-making processes, an actor's influence is rather determined by the ability to invoke democratic rhetoric and symbols [17] and to hide their interests behind ideas that can be linked to widely accepted core political objectives that can be easily communicated such as technological progress, productivity, growth, competitiveness, employment, security—i.e. ideas that are hard to contest.

Therefore, also companies and actors that do not have access to standard-setting processes, either because they do not have the expertise or the financial resources, may prefer conventional law making processes.

In the above mentioned case of container standardization, for instance, the inland waterway operators would neither have had the time and resources nor the expertise to participate in the standardization process. In the political debate, however, the canal transport association was able to play an active and influential role, simply by appealing to normative arguments and emphasizing the redistributive consequences of the proposed standards.

At the same time, those companies that are able to play a strong role in standard-setting processes may call upon law-makers to include the adopted standards in conventional laws in order to force other actors to comply with their standards. Where public interventions provides them with an opportunity to strengthen their standards or to weaken rival groups of standard-setters, can private standard-setters be expected to accept—or even actively seek—public actor interventions.

## 5 Standard-setting processes

Compared to conventional law-making processes, standard-setting processes tend to be rather exclusive. Participation requires a high level of expertise and financial resources. Therefore, some actors may not be able to afford participation. In order to have an influence on the outcome of these processes even more expertise and financial

resources as well as experience and personal networks are required.

Standard-setting processes therefore often tend to be preferred by market incumbents, who have the experience and expertise and can afford to participate. Moreover, companies are generally considered to do everything within their power to thwart political interventions [18,19] and thus prefer self–regulation, for instance, through standardization rather than conventional law-making, which gives them less influence. Laws also tend to provide less flexibility for them than standards.

Although the delegation of policy-issues to standard-setting processes rather than law-making processes can be expected to entail a loss of autonomy for conventional law-makers, such as parliaments and governments [20], also public actors sometimes favor standard-setting over law making. Individual political actors may use standard-setting processes to strengthen their position against rival political actors. In the European Union for instance, the European Commission has become a natural ally of European standard-setters. The Commission's legal competences are strongly limited and its actions are closely controlled by the Member States' governments and the European Parliament. Unlike the adoption of a laws, the adoption of standards does not require the consent of the Member States' governments and the EP.

This is precisely why the European Commission supported the above-mentioned development of conditional access standards through standard-setting processes, rather than to push for a legal solution of the outlined issues.

In order to keep issues out of the political arena, actors generally try to emphasize the 'technical' nature of the problems at hand, de-emphasizing the normative and redistributive implications of the given issue. They also emphasize the possibility of technological progress that the process may provide to justify the limited stakeholder participation [21,22]. This discourages the involvement of political or legislative institutions and thus potential veto points. If everybody wins and nobody loses from the standardization process, it may seem unnecessary to legislative institutions to subject it to democratic scrutiny. Mansell and Hawkins suggest that there is usually a conscious strategy involved in presenting standardization as a technical process [22]. Technical decisions "tend to acquire a measure of detachment" from rival interests and political contestation [22]. While most standardization issues-no matter how 'technical' they may be-tend to have some normative and (re)distributive implications, they can be strategically framed otherwise. In contrast to normative and redistributive issues, technical issues cannot make anyone worse off. This may be used to justify the limitation of broader stakeholder participation [21].

### 6 Conclusion

This paper has shown that standards and standard-setting processes are deeply political for two reasons. First, standards are very intrusive. They often tend to have strong normative and redistributive implications. The development

often concerns matters of public interest that are usually dealt with by elected representatives in the political arena.

Secondly, the question whether such matters are dealt with through standard-setting processes or public policy-making processes is generally determined by political power struggles. Those actors that consider standard-setting to be more favourable to them than conventional law-making processes employ a range of strategies to make sure that issues are addressed through standards rather than laws. One of these strategies is to de-emphasize the mentioned normative and redistributive consequences and to emphasize the 'technical' nature of the given issue.

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