



Regulatory Commitment to Negotiated Agreements: Evidence from the United States, Germany, The Netherlands, and France

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Abstract

Negotiated Agreements (NAs) are arrangements between firms and regulators in which firms voluntarily agree to reduce their pollution. This article analyzes the institutional features that facilitate or hamper the implementation of NAs. We illustrate the analysis with case studies on the implementation of NAs in the United States, Germany, the Netherlands, and France. We find that NAs are implemented when regulators are able to commit credibly to the objectives of NAs. Institutional environments marked by fragmentation of power and open access in policymaking reduce regulatory credibility and thus hamper the implementation of NAs.

Introduction

Since the 1990s, regulators in Europe and the United States have increasingly implemented environmental voluntary agreements to improve industry environmental performance. Environmental voluntary agreements (VAs) are “agreements between government and industry to facilitate voluntary action with a desirable social outcome, which is encouraged by the government, to be undertaken by the participant based on the participant’s self interest” (Storey et al., 1997, p. 3). The collaborative mechanisms of VAs can be conducive to the development of innovative solutions, which regulators or firms would have been unlikely to develop alone. From a business perspective, participation in VAs can reduce the burden of regulation, facilitate the communication of environmental improvements, and allow firms to be ahead of competition for environmental products (Delmas and Terlaak, 2001). In this article, we will focus on Negotiated Agreements (NAs) in which firms and regulators bargain over

the frame and the pollution-reduction targets set forth in the agreement. NAs may further be differentiated into two types. The first type is implemented as an alternative to regulation. For example, a number of countries have refrained from the implementation of an energy tax and have instead implemented NAs in which firms have committed to reducing their CO₂ emissions (EEA, 1997). The second type supplements preexisting regulations. Firms that participate in this type of NA reduce pollution beyond what is required by law and in return receive regulatory flexibility in the form, for example, of facilitated permit procedures.

In this article, we attempt to explain how different institutional structures might account for the type of NA implemented. A recent report observes that the type of NA implemented varies by country (OECD, 2000). The Netherlands has implemented over 100 NAs that both replace and supplement regulations, while the United States has difficulties implementing either type. In Germany, NAs that replace regulations are prevalent (OECD, 1998). In France, NAs are implemented to supplement regulations.

We argue that the ability of regulators to commit to the objectives of NAs, and to be credible in their commitment, is a key factor explaining the national differences in the use of the agreements. By *credible regulatory commitment*, we refer to the ability of the regulator to negotiate and implement NAs and to subsequently guarantee that the rules of the game will not be changed once the parties have reached and implemented the agreement.

Scholars of institutional theory have shown that a country's regulatory options are conditioned by its institutional structures, which shape the agents' ability to commit credibly to regulatory schemes (Delmas and Heiman, 2001; Levy and Spiller, 1994; Weingast, 1995; Williamson, 1984). Most of these studies argue that constrained regulatory discretion is an important precondition for credible and stable regulatory schemes. Our analysis builds on this research; however, contrary to previous research, we argue that regulatory discretion is necessary for credible regulatory commitment to NAs. Most NAs constitute a form of gentleman's agreement between regulators and firms without much parliamentary (or congressional) oversight (OECD, 2000). To conclude such agreements, regulators require discretion.¹ The credible commitment of the regulator is important, since firms may have adjusted technologies and/or management structures to meet the targets of an NA, and ex post changes of the rules of the game can be costly. A credible commitment is all the more important since NAs—unlike command and control regulation—attempt to reduce pollution through voluntary action. Firms are unlikely to undertake such action if they believe that future changes in rules could potentially destroy the benefits of their efforts.

To illustrate our analysis, we discuss the implementation of NAs in the United States, Germany, the Netherlands, and France. All four countries use voluntary agreements to reduce pollution, but they rely on different types of NAs. We analyze the relation between different institutional structures (and thus regulatory commitment to NAs) and the type of NA implemented.

The body of literature on voluntary agreements, while small, is growing fast. Most studies assess environmental effectiveness of the agreements (Krarup and Ramesohl, 2000), evaluate their efficiency (e.g., Carraro and Siniscalco, 1996; Glachant, 1999; Stranlund, 1995), or focus on the rationale of firms to participate in such agreements (Amacher and Malik, 1996; Arora and Cason, 1995; Hansen, 1999; Segerson and Miceli, 1998). Little research has been devoted to a systematic explanation of national differences in the use of the agreements.

The present article is organized as follows. The next section describes NAs and identifies some prerequisites for their implementation. We then draw on institutional theory to describe how institutional structures shape the ability of regulators to be credible in their commitment to NAs. Subsequently, we describe the use of NAs in the United States, Germany, the Netherlands, and France. We then outline the countries' institutional structures to examine whether they facilitate the implementation of NAs. Concluding remarks follow.

The characteristics of negotiated agreements

Negotiated agreements are part of the family of voluntary agreements that also includes unilateral agreements and public voluntary programs (OECD, 2000). Unilateral agreements are commitments by industry to reduce pollution. These commitments do not involve regulators. The Responsible Care Program is an example of such an agreement in the chemical industry (Howard et al., 2000). Public voluntary programs are devised by regulators who establish the frame for the programs and define basic requirements for participation. These programs usually provide technical assistance and positive public recognition to participating firms. The Climate Wise Program of the U.S. Environmental Protection Agency (EPA) is an example of a public voluntary program. NAs differ from unilateral agreements and public voluntary programs because they require negotiations between firms and regulators.² Thus, they are the most interesting cases to consider in any analysis of regulators' ability to negotiate and commit to such agreements. We differentiate between two types of NAs according to their function. The first type of NA may be implemented as an alternative to regulations. The second type is used to supplement preexisting regulations.

Negotiated agreements as an alternative to regulations

A prominent example of an NA implemented in lieu of regulation is the German agreement on Global Warming Prevention. In 1995, the major industry associations agreed to reduce 1990 CO₂ emissions by 20% by the year 2005. In return, the government signaled that it would refrain from implementing an energy tax (BDI, 1996).

Most NAs implemented in lieu of regulation are *collective agreements*. They engage regulators and an entire industry branch rather than individual firms. Such a collective effort is sensible because the entire industry is likely to benefit from a NA that takes the place of a potentially more rigid regulation. Industry collectively negotiates pollution-reduction targets and is held collectively liable for achieving these goals. If the agreement fails, public authorities may issue command-and-control regulations. Thus, firms would be sanctioned collectively, despite individual pollution abatement efforts (Boerkey and Leveque, 1998).

NAs might be either *legally binding or nonbinding*. Agreements are legally binding if compliance can be enforced through the courts. Oftentimes, governments can only sign (and therefore make legally binding) an NA if Parliament or Congress has approved the agreement. As legally binding arrangements, NAs might be considered as a form of “modern” command-and-control regulation (Gunnigham and Grabosky, 1998). The difference with traditional command-and-control regulation is that firms have the choice to participate or not.

Negotiated agreements to supplement existing regulations

NAs that supplement existing regulations are typically implemented as a means to grant firms flexibility within existing rules. Firms that meet the targets of such NAs may, for example, benefit from a greater choice in pollution-abatement technologies, from facilitated permit procedures, from extended timelines for permit applications, or from consolidated permit applications. Such NAs favor efficiency by letting individual firms decide how to reach pollution targets. An example of an NA that supplements preexisting regulations and grants flexibility is the U.S. EPA's Project XL (eXcellence and Leadership). In Project XL, firms define site-specific performance standards that are more stringent than the de facto standards implied by current regulation, but have the choice of means concerning how to meet these standards (Blackman and Mazurek, 2000).

NAs that grant flexibility within existing regulations are negotiated on a case-by-case basis (or *individual basis*), rather than through a collective agreement. The pollution reduction requirements and the regulatory flexibility apply only to these individual firms.

This type of NA may also be *legally binding or nonbinding*. In the Netherlands, where the agreements are linked to a permit system, NAs are legally binding and have the status of contracts of civil law. As in the case with NAs that replace regulation, when the agreement is legally nonbinding, the threat of regulation (and less flexible rules) should the firm fail to comply with the NA can be a strong incentive for compliance.

In the following section, we draw on institutional theory to identify the institutional structures that favor and hamper the ability of firms and regulators to commit to NAs, thereby making more or less fertile the ground for implementation of the agreements.

Institutional environment and credible commitment

“Institutions are the humanly devised constraints that structure political, economic, and social interaction” (North, 1991, p. 275). Institutions consist of both informal and formal constraints. North (1990) suggests that a country’s institutional endowment is characterized by its legislative and executive institutions, its judicial institutions, its administrative capabilities, its informal norms, and the character of the contending social interests. A number of scholars have analyzed the impact of institutional structures on the ability of government to secure economic rights credibly (e.g., Henisz, 2000; Levy and Spiller, 1994; Weingast, 1995). Levy and Spiller (1994), for example, show how a country’s institutional endowment shapes the regulator’s ability to ensure credibly property rights in the telecommunication sector.

Most of these studies point out that stable markets and credible regulation develop when governmental discretion is constrained (Henisz, 2000; Levy and Spiller, 1994; Weingast, 1995). They argue that the fewer the constraints, the greater the risk that agreements made between private actors and governments today will be repudiated tomorrow (Levy and Spiller, 1994). One factor constraining governmental behavior is the separation between legislative, executive, and judicial branches of the government (Levy and Spiller, 1994; Vogel, 1993). For example, a strong and independent judiciary can limit administrative discretion by developing laws constraining administrative action through administrative procedures. Likewise, a federal system limits central government authority by increasing the number of veto points of state and local governments (Henisz, 2000). This structure contrasts with a centralized system, in which the authority of local governments is limited. Furthermore, fragmentation of power provides multiple access points for public interests, which can restrain governmental behavior.

However, too many constraints limit a government’s ability to adapt regulations to changing circumstances (Henisz, 2000; Levy and Spiller, 1994). The elements that may provide credibility to regulation by limiting a government’s abilities to change rules arbitrarily are the same elements that, in our case, hamper implementation of NAs. To be credible in their commitment to NAs, regulators require discretion. Too many (and potentially conflicting) constraints through congressional controls, judicial review, and third-party access can therefore make difficult the implementation of the agreements.

On the one hand, firms will not enter a NA if the regulator cannot commit to the objectives of NAs. For NAs replacing regulations, the regulator must be credible in its commitment not to issue new regulations that would nullify the NA as long as industry complies with the agreement. Such a commitment can be credible, for example, if the government has signed the agreement and thus is legally bound to it. On the other hand, agreements will lose credibility if there are too many free riders. Therefore, it is important that the regulator is able to issue command-and-control regulations that replace the NA if firms are not

complying with it. Fragmentation of power, for example, can make it difficult for a regulator to threaten firms with more rigid regulations should the firms fail to comply with the negotiated objectives. Indeed, the regulator might lack the support of other authorities that play a role in policymaking, and a threat of stricter regulations therefore loses credibility.

Concerning the implementation of NAs that grant flexibility of existing regulation, the regulator must have the authority to change existing rules and permit procedures. The regulator must also ensure that the NA does not conflict with local or state regulations. However, constitutional law often limits a regulator's authority to loosen regulations, since "government agencies may not bargain away the ability of the state to regulate in favor of the health and safety of the public [...]" (Higley, Convey, and Leveque, 2001, p. 8). Stated differently, a law passed by Parliament or Congress is binding for the administration, and the NA may therefore not be able to avoid it (Barth and Dette, 2001). For example, the execution of EPA's Project XL is hampered by uncertainties concerning EPA's authority to relax regulatory standards enacted by Congress (Mazurek, 1998). Similar problems originally plagued the Dutch NAs when a few licensing authorities initially were unwilling to relax permit procedures for firms participating in NAs (Wallace, 1995).

Before embarking on NAs, firms need to believe in the regulator's authority and willingness to coordinate the NA with existing regulations. When firms deal with the regulator on an individual basis, their bargaining position is weaker than in NAs that involve entire industry branches. If the regulator fails to coordinate the objectives of the NA with existing regulations, a participating firm might suffer disadvantages vis-à-vis all other firms. Dispersed policymaking responsibilities that are typical of federal systems render difficult the coordination of an NA with other regulations. For example, NAs concluded at the national level must be harmonized with regional legislative and administrative regulations (Barth and Dette, 2001). This process may be difficult if there is a complex overlay of local and regional authorities. Lastly, easy access to court and strict judicial overview can compel regulators to follow inflexible procedures. This may reduce the scope for negotiations between regulators and industry (Wallace, 1995).

Third parties such as NGOs may also reduce the ability of regulators to commit to NAs, since the implementation of NAs may conflict with third party interests. If third parties have not been involved in the process, they may view the agreements as exclusive decision-making processes in which only the government and firms participate (Enevoldsen, 1998). To ensure consideration of their interest, they may initiate public campaigns against an NA or challenge the agreement in court. From the perspective of the firm, the prospect of such ex post challenges of an NA increases the uncertainty of the result of their negotiation with regulators.

In sum, formal rules that limit a regulator's discretion may reduce the risk for arbitrary changes in regulations. However, at the same time, these formal rules

reduce the regulator's ability to commit to NAs' objectives. Challenges in court or administrative orders may nullify the results of an NA.

Informal rules supplement formal rules to structure political, economic, and social interaction (North, 1991). For example, cooperation and consultation between government and NGOs might be an informal norm that ensures third parties access to policymaking processes regardless of formal rules. Thus, informal rules can work in tandem with formal rules to strengthen or weaken the ability of a regulator to commit to an NA. For example, in the Netherlands, there is a relatively cooperative culture between NGOs and government. This cooperation facilitates regulatory credibility, since third party consent is ensured.

The ability of industry to take collective action facilitates the implementation of NAs that replace regulations and as a result involve an entire industry. A loosely organized industry, for example, may not have a legitimate body to represent its interests in the negotiation and implementation of an NA. In highly organized industry associations, industry negotiators are likely to have the support of the entire industry to negotiate NAs. Implementation is easier when the industry consists of a few homogeneous players. If these have similar production processes, they might find it easier to agree on targets that satisfy all.

Some formal rules such as antitrust regulations impact the extent to which industry can self-organize. Informal rules include industry's understanding of its role in society. U.S. firms, for example, have a very individualistic ethos (Vogel, 1986) that can hamper collective commitments.

In conclusion, the formal and informal rules that guide the interaction between executive, legislative, judiciary, industry, and NGOs shape a country's institutional structure, thereby impacting both the ability of regulators to commit credibly to NAs and the ability of industry to initiate collective action.

Regulatory commitment and the implementation of NAs: collecting evidence

We illustrate the impact of the institutional environment on the implementation of NAs by analyzing the use of NAs in the United States, Germany, the Netherlands, and France. The scope of the present article limits available room for a detailed analysis of the countries' institutional settings, and we portray these only in general terms. Nonetheless, our analysis furthers the understanding of how institutional structures impact the diffusion of NAs.

Negotiated agreements in the United States

Approximately 40 voluntary agreements are in effect in the United States (Mazurek, 1998). Most of these agreements are public voluntary programs. Project XL is the only major example of an NA that supplements regulation

with the aim of providing regulatory flexibility. There are no NAs that explicitly replace regulations and involve an entire industry.³

What explains the sparse use of NAs in the United States? We next discuss how the formal and informal rules of the U.S. institutional environment might impede the implementation of NAs by hampering the ability of (1) regulators to commit credibly to the agreements and (2) industry to organize for collective action.

The ability of regulators to commit credibly to NAs. (1) *Executive and legislative.* In the United States, environmental policymaking is marked by fragmentation. Executive powers regarding environmental policy are granted to several players. The Environmental Protection Agency (EPA), which is responsible for putting into effect most of the environmental statutes, shares responsibility for environmental protection with the Departments of Energy, Agriculture, State, and the Interior (Fiorino, 1995; Andrews, 1997).

Fragmentation also results from dispersion of power in Congress. The House and Senate both have several committees that are responsible for environmental policy issues (Kraft, 1996). The presidential system additionally fuels fragmentation of policymaking processes because the separation of powers often produces divided governments, with the President and the majority of Congress being from a different party. As a result, the President and Congress are often at odds on a particular policy issue (Rose-Ackerman, 1995; Kraft, 1999).

The dispersion of responsibilities provides numerous access points for diffuse interests to influence policymaking (Vogel, 1993; Kern and Bratzel, 1996; Andrews, 1997). This situation may reduce regulatory discretion to a point where the regulator can no longer ensure that there will be no ex post changes in the rules of the game once NAs are implemented.

We mentioned earlier that a threat of stricter regulation facilitates implementation of NAs that replace regulations. In the United States, the separation of power limits the credibility of such a threat, since the President and the majority of Congress often belong to different parties and therefore may disagree on environmental issues. Because stricter regulations would require congressional approval, the government's bargaining position vis-à-vis industry is limited.

Strict congressional oversight over executive policymaking makes especially difficult the implementation of NAs that provide flexibility within existing regulations. If Congress prescribes in detail how environmental protection is to be implemented, the executive may lack room and authority to implement more flexible arrangements. For example, with Project XL, the EPA is inhibited in its ability to provide firms with relief from the status quo because Congress has not granted such authority to the EPA (Davies and Mazurek, 1996). This situation causes uncertainties for firms, since it puts into question the EPA's authority to provide flexibility within the existing regulatory system (Boyd, Krupnik, and Mazurek, 1998; Ginsberg and Cummis, 1996).

U.S. regulations are marked by a complex overlay of federal and state regulations (Anderson and Kagan, 2000). This situation additionally hinders regulatory commitment to NAs, since they run the risk of conflicting with local or regional laws, which would void the agreement.

(2) *Judiciary*. In the U.S., the drafting and implementation of environmental policy is subject to judicial review. Most environmental laws enable any citizen to file suits against administrators for taking unauthorized action or for failing to perform duties (Melnick, 1983). The American system of paying court and legal fees additionally encourages citizens' participation in the judicial review of environmental policymaking (Rose-Ackerman, 1995).

Strong judicial review thus supplements the direct congressional oversight of environmental policymaking and furthermore reduces the possibilities for a regulator to commit credibly to NAs. Easy court standing makes the arrangements between regulator and firms prone to challenges in courts. For example, third parties might file suit against regulators for failing to perform duties if regulators grant regulatory flexibility.

(3) *Nongovernmental organizations*. The substantial staff capabilities and financial resources of American environmental groups make them far more influential in policy advocacy than their counterparts in other countries (Andrews, 1997; Rose-Ackerman, 1995). Beside financial resources, a number of legal aspects such as access to information and formal rights for involvement in government decision processes are key elements determining the groups' influence in policymaking.⁴ Overall, the weight of the judiciary, the transparency of the policymaking process, and direct accountability to citizens of all turn environmental groups into an important player in environmental policymaking.

The considerable involvement of third parties in policymaking processes can make regulatory commitments to NAs difficult. If third parties are excluded from the implementation of NAs, they are likely to challenge and overturn the agreements in courts. If, however, third parties are included in the negotiations of NAs, transaction costs may be excessive. Difficulties with Project XL illustrate this problem. Citizens can easily object to the regulatory flexibility granted by Project XL through lawsuits. To avoid such opposition, third parties are involved in the negotiation of the agreement. However, experience with Project XL suggests that third party involvement can entail lengthy negotiations to a point where costs outweigh benefits for firms (Blackman and Mazurek, 2000).

Industry's ability to take collective action. American trade associations are mainly service associations, with lobbying as their primary activity (Galambos, 1996). These associations thus service, rather than coordinate, their members (Nash, 1999). Overall, the notion of free capitalism and the individualistic ethos of the American business culture have severely limited the role of trade associations as a vehicle for industry selfregulation (Vogel, 1986). Strict antitrust laws further hold back industry efforts for collective action (Kappas, 1997). These

features hamper the implementation of NAs that are used as an alternative to regulation, because such NAs require high industry coverage that can best be achieved through the involvement of industry associations.

The paint industry provides an example of how lack of unity among industry members resulted in the failure of an NA. In 1994, the EPA and the paint industry began negotiations on an agreement to control volatile organic compound emissions from coatings. They failed to reach consensus, since paint manufacturers were too heterogeneous to agree on a common target (Piasecki, Fletcher, and Mendelson, 1999).

Finally, U.S. businesses often adopt adversarial attitudes toward both labor and government. This situation contrasts with the corporatist cooperative cultures more typical of Western Europe and Japan (Andrews, 1997; Kagan, 2000; Vogel, 1986). In such an adversarial setting, many companies are reluctant to engage in collaborative actions with the government.

In summary, the formal and informal rules of the American institutional environment make it difficult for regulators to commit credibly to NAs, and for industry to undertake collective action. The fragmentation of the executive branch, the power of the judiciary, the ability of third parties to enter the game *ex post*, and the adversarial tradition in environmental policymaking all limit the discretion that the EPA would need for the implementation of NAs. The EPA can neither issue a credible threat of regulation nor credibly promise regulatory flexibility to motivate firms to go beyond compliance. It is therefore not surprising to find only one NA in the U.S.

Negotiated agreements in Germany

Germany has implemented about 90 environmental voluntary agreements (OECD, 1998). The majority of these agreements are NAs that replace or preempt regulation and engage the whole industry. The most prominent example is the agreement on Global Warming Prevention mentioned earlier. Other examples include an NA with the automobile industry to reduce vehicle gasoline consumption and an NA with the aluminum industry to reduce CF₄ and C₂F₆ emissions (BDI, 1999).

Most German NAs engage industry association(s) and hold industry collectively responsible. They are negotiated against a threat of stricter regulation and are legally nonbinding. We next examine the German institutional environment to explain the current use of NAs.

The ability of regulators to commit credibly to NAs. (1) *Executive and legislative.* Unlike in the U.S., where the presidential system results in a clear separation of power, Germany has a parliamentary system with the same party coalition controlling both the upper and lower houses. This system results in a closer connection between the executive and legislative branches (Rose-Ackerman, 1995; Watts, 1991).

The responsibilities for environmental policy are distributed among the federal government, the States, and local authorities. Most of the time, the federal government issues a framework legislation, which is then implemented and enforced by the States and local agencies. Unlike the situation in the U.S., the German federal government cannot resume oversight of the implementation of regulations if a State fails to meet its enforcement obligations (Rose-Ackerman, 1995). As a result, the States receive ample consideration in environmental policymaking (Weale, 1992).

The close connection between the executive and legislative branches allows regulators credibly to threaten industry with stricter regulation if an NA fails. Indeed, the executive branch is likely to receive the parliamentary support that is required for issuing regulations. Close cooperation with the States ensures support and compatibility of NAs with the state legislature, thereby enhancing the ability of the regulator to commit credibly to the agreements.

(2) *Judiciary.* German and American environmental regulations bear similarities to each other, since they share a legalistic approach in protecting the environment. However, the legalism of German regulation does not result in a judicial activism comparable to that in the U.S. (Jänicke and Weidner, 1997). Two main reasons might account for these different outcomes. First, in Germany, along with a tendency to codify social relationships in legal forms, there is a respect for the norm of objectivity and technical argument (Dyson, 1992). Second, citizen standing in courts is restricted in Germany in comparison with the U.S. Citizens cannot challenge draft regulation. Only on the implementation side of regulations can third parties use the legal review process to impact the implementation of rules (Rose-Ackermann, 1995; Weale, 1992). Furthermore, unlike the situation in the United States, citizens can only challenge regulation if their individual rights have been violated (Jänicke and Weidner, 1997).

Overall, the courts have played a comparably minor role in shaping environmental policy (Jänicke and Weidner, 1997). Challenges in court are less likely, which strengthens the regulator's ability to commit credibly to NAs once they are implemented.

(3) *Nongovernmental organizations.* In Germany, public interest groups are less involved in policymaking than in the U.S. Although numerous, German NGOs have less financial resources than the major American groups to intervene actively in administrative processes (Rose-Ackerman, 1995).

Furthermore, limited access to policymaking processes makes it difficult for environmental groups to gain leverage. While the German Administrative Procedure Act requires that planning and permitting processes involve the public, no third party participation is legally required for issuing regulations or administrative guidelines. The executive might invite third parties to participate in the policy drafting process, but the environmental groups have no legal rights to challenge the outcome in court (Rose-Ackerman, 1995). Another aspect limiting third party abilities to shape environmental policy is the lack of information about the drafting of potential rules. In Germany, the executive has to

publish legally binding regulations but is not required to publish administrative guidelines.

Compared with the U.S. case, third parties thus have fewer access points to the policymaking process—a situation that secures the regulator's discretion to implement NAs and to ensure that there will be no ex post changes in the rules of the game.

Industry's ability to take collective action. German industry is marked by a high degree of self-organization and a considerable potential for collective action. The roots for this structure date back to the nineteenth century, when business created chambers of commerce. As a national system of public law institution, the chambers served to self-regulate industry. Self-regulation was viewed as technically superior to that which government might have imposed (Dyson, 1992; Streeck, 1983).

An adversarial relationship between regulators and industry marked the beginnings of German environmental regulation, but technical expertise and industrial consensus provided a receptive context in which the notion of ecological modernization could develop. In the early 1980s, when regulations fostered the development of pollution-control technologies and industry saw the growth potentials inherent in this market, the antagonism between environmental regulation and competitiveness broke down (Weale, 1992; Weidner and Jänicke, 1998). In general, government often consults with industry behind closed doors when issuing regulations, which has resulted in German policymaking being described as consensual and secretive (Rose-Ackerman, 1995). Overall, the informal and formal rules of the German institutional environment facilitate industry's ability to take collective action. Furthermore, they facilitate cooperation with government, which eases the implementation of NAs.

In conclusion, the institutional environment in Germany is marked by a close connection between the executive and legislative branches, limited citizen standing in courts, few access possibilities for NGOs, and a highly organized industrial sector. Such an institutional environment allows German regulators to commit to NAs and to threaten credibly industry with potential new regulations if the NA fails. The close working relationship between industry and government, as well as the role of industry associations as governing bodies, allows industry associations to negotiate agreements on behalf of their members. Since firms respect the governance role of industry associations, regulators can rely on the ability of these associations' to persuade firms to accept the conditions of the NAs.

However, despite such a supportive institutional environment that grants regulators sufficient discretion to implement NAs, the agreements suffer from a number of flaws. For example, most of them are legally nonbinding and have adopted environmental targets that are not very stringent. Furthermore, third parties have been left out of the negotiation process. The case of the Netherlands differs in these dimensions, since this country adopted a

comprehensive environmental framework that integrates NAs as legally binding arrangements with ambitious long-term targets and in which third party participation is required.

Negotiated agreements in the Netherlands

With the introduction of the first National Environmental Policy Plan (NEPP) in 1989, NAs, next to permits, became the main element of the Dutch environmental policy (OECD, 1995). Today, the Netherlands has over a 100 NAs in place (EEA, 1997). NEPPs establish the long-term overall pollution-reduction targets. These targets are broken down by sectors. To reach them, the government negotiates NAs with the industry sectors. Both government (after receiving parliamentary approval) and industry sign the agreements (Zoeteman, 1998). The legal status of these NAs is the same as agreements under private law, which enables authorities to turn to civil courts for enforcement (OECD, 1995).

An example of a Dutch NA is the Declaration on the Implementation of Environmental Policy in the chemical industry. Every four years, participating firms must provide Company Environmental Plans outlining the tasks to meet the NEPP targets for the chemical industry (EEA, 1997). Firms producing acceptable plans are granted flexibility in permitting procedures (Börkey and Leveque, 1998; Wallace, 1995).

The Dutch agreements combine features of NAs that replace regulations and that grant flexibility within existing regulations. Policymakers use NAs (rather than command-and-control regulation) to pursue the pollution-reduction targets set forth in NEPPs, and the agreements may therefore be characterized as NAs replacing regulation. Because most Dutch NAs also work in tandem with permit systems, the agreements embody traits of NAs that supplement regulations and provide regulatory flexibility. We next examine the Dutch institutional environment to identify the features that enable the Netherlands to successfully rely on such agreements.

The ability of regulators to commit credibly to NAs. (1) *Executive and legislative.* In the Netherlands, the national government generally plays a more significant role than in the U.S. (Shetter, 1987). More specifically, the Netherlands may be characterized as consensual-unitary, as opposed to the U.S. and Germany, which may both be described as majoritarian-federal (Lijphardt, 1989).

The Dutch democracy can be described as consensual with features such as executive power sharing in broad coalitions, a balanced executive-legislative relationship, and a multiparty system. The Dutch parliament consists of two houses, and governments have historically had the support of the majority in both houses. The Dutch system can also be characterized as unitary (or centralized, if measured by the high share of taxes that the central government receives). It has a tradition of central planning, which forecasts

economic conditions and defines the most appropriate responses (Lijphart, 1989; Gladdish, 1991).

Environmental policymaking is primarily in the hands of the Ministry of Housing, Spatial Planning and Environment (OECD, 1995). However, both the Cabinet of Ministers and Parliament must approve NEPPs.

(2) *Judiciary*. As compared to the U.S. and Germany, the Dutch judiciary is more restricted in its area of competence. Generally, the judiciary does not play any role in the formation of social legislation, since it has no power to review or interpret the constitutionality of decisions of the legislative and executive branches (Shetter, 1987).

In the Netherlands, environmental law enforcement had been lax in the 1980s. Permit issuers often refrained from legal action and pursued a policy of “talk, talk, and talk again” instead (Bressers and Plettenburg, 1997, p. 116). In the beginning of 1990s, the judiciary started to play a more important enforcement role. Higher funding, improved governmental coordination, and judicial authorities that consolidated resources induced a growing number of guilty verdicts (OECD, 1995). However, compared with the U.S. and because of the court’s limited power to review the constitutionality of decisions of the legislative and executive branches, the role of courts in shaping environmental policy remains limited. As a result, firms and government can more easily implement NAs without fearing that third parties will challenge their agreements in courts.

(3) *Nongovernmental organizations*. The Dutch nature conservation movement has traditionally been marked by a culture of high expertise and formalized internal structures (Bressers and Plettenburg, 1997). Since the implementation of the first NEPP, NGOs have been respected by regulators as professional negotiators that constructively criticize public action and seek concrete solutions (Timmer, 1997; Zoeteman, 1998). NGOs are increasingly responsible for monitoring the implementation of NAs (Timmer, 1997). The Dutch government considers some of these groups as important allies whom it subsidizes, and it draws on their expertise for policymaking purposes (Bressers and Plettenburg, 1997; OECD, 1995).

Such a culture of expertise facilitates the involvement of NGOs in NAs. Regulators can be credible in their commitment to NAs, since consideration of third party interest does not overturn the agreement and increase transaction cost. Instead, it adds expertise and increases public acceptance of the agreements. In such a case, third party involvement in the negotiations of an NA can increase the ability of the regulator to be credible in its commitment to NAs, since third parties are less likely to challenge the agreements once they are implemented.

Industry’s ability to take collective action. Dutch industry is highly organized. Two national organizations represent all sectors. These organizations address environmental concerns through a joint administrative committee, which establishes the position of the associations on environmental issues (de Graeff, 1994).

While the Netherlands has a strong culture of accommodation and consultation between government and industry (Daalder, 1989), industry originally opposed environmental policy. This position changed to a more cooperative attitude at the end of the 1980s, when, against the backdrop of rising political pressure and public environmental concerns, industry agreed to the first NEPP and cooperated on its implementation through NAs (Bressers and Plettenburg, 1997; Henselmans, 1998). Overall, in the Netherlands, a culture of consent and cooperation among all parties contrasts with the often hostile relationship between regulators, business, and NGOs in the U.S. (Timmer, 1997).

In sum, expertise, a tradition in central long-term planning, and a consensual approach to policymaking are a few of the central themes that characterize the institutional environment in the Netherlands and that facilitate the implementation of NAs. The consensual approach to policymaking requires that all parties that could reduce the ability of the regulator to commit to the NA be brought into the agreements. The executive is backed by the majority in both houses, court activities are limited, and all ministers are integrated, thereby minimizing the likelihood that they will take counterproductive action. Furthermore, the executive has enough authority to negotiate and coordinate the agreements with existing regulations. The system is centralized, and NGOs are involved through consultation, rather than judicial activism. The good working relationship between the executive and industry additionally facilitates implementation processes. Overall, this situation facilitates a credible regulatory commitment to NAs.

Negotiated agreements in France

The French Ministry of the Environment has signed about 20 NAs (OECD, 1998, p. 32). The first NAs were signed in the 1970s and were intended to underline the authority of the new Ministry of the Environment. A well-known NA relates to end-of-life vehicles (ELV), in which the French Ministry of the Environment, the Ministry of Industry, car manufacturers, and trade associations agreed on specific objectives for reducing ELV disposal (Whitson and Glachant, 1996). With increased interest from policymakers at the Member State and EU level regarding the environmental impacts of ELV, the consequences of potential legislation on the sector became an increasingly important issue. The agreement is expected to be a pilot project in which innovative solutions should be found (Den Hond, 1998) that can later be translated into standard regulations. In the domain of air pollution, a series of agreements on the reduction of CO₂ emissions was signed in the 1990s. Four energy-intensive sectors are covered: aluminum, steel, plasters, and the glass industry. These agreements are signed by the Ministry of the Environment and a branch association or a large company, which represents the major part of industrial pollution of the sector (Krarup and Ramesohl, 2000). The agreements are legally nonbinding and do not provide for

sanctions in case of noncompliance, although a background threat of regulation is generally associated with them (Chidiak, 2000).

French NAs specifically serve as a basis for developing national legislation and standards that later replace the agreements. We next discuss how the close interweaving of government and industry interests and a tradition of technocratic influence over industry have, to a large extent, dictated the implementation of such NAs.

The ability of regulators to commit credibly to NAs. (1) *Executive and legislative.* The Ministry of the Environment drafts legislation on all aspects of the environment. Once environmental policies have been approved by Parliament, various directorates within the Ministry of the Environment are formally responsible for implementing the legislation. NA implementation in France follows the usual policymaking procedure in which laws set general policy guidelines that are implemented by the Ministry of the Environment using considerable discretion with regard to the specific instruments and goals (Chidiak, 2000).

Generally, in parliamentary systems such as the one in France, the executive branch plays an important role in the formulation of new legislation. In this system, the government has the majority of seats in the parliament. This lack of division of power suggests that the Parliament and Prime Minister may be treated as a unitary actor (Hatch, 1986). Similar to the situation in Germany, such unity increases the executive's ability to commit credibly to NAs and threaten to issue stricter regulations should the agreements fail.

(2) *Judiciary.* The French system is known for not allowing individual access to constitutional justice, since laws can be referred for review only by official bodies and only before promulgation (Vroom, 1988). In France's unitary national legal system, without the problem of divergent state and local laws, a priori control offers a more effective system of constitutional adjudication that reduces litigation and creates a cohesive judicial order (Favoreu, 1984). French administrative judges recognize the ability of nonprofit organizations to challenge environmental decisions. However, nonprofit organization must meet very sophisticated criteria in order to demonstrate a real interest in action (i.e., an adequate relationship between the objective of the nonprofit association and the claim). This requirement limits the number of claims. Overall, the French judiciary plays a minor role in environmental issues.⁵

(3) *Nongovernmental organizations.* In France, NGOs have not been very powerful in shaping the environmental policy landscape. Most officials central to environmental policy come from the administrative elite made up exclusively of members from the *Grands Corps*—an elite unified by a common educational background and corporate interests. The higher civil servants see themselves as representing third party interests because they act for the State and the State acts for the general interest. If their conception of what the general interest demands happens to clash with the views of some other groups, their job is to act, if need be, over the objection of those groups (Hatch, 1986).

Access of third parties to policymaking is also difficult because the parliamentary voting system does not favor the representation of small political parties. Not until June of 1997 did the Green parties access the Parliament. The very minor role of environmental groups in shaping French environmental policy is exemplified by nuclear energy policy, in which these groups literally have had no voice (Delmas and Heiman, 2001). This situation allows regulators to commit to NAs because it renders third party challenges unlikely.

Industry's ability to take collective action. Technocratic and administrative elites retain considerable influence over the direction of the French economy and exercise direct decision-making over large sectors of French industry (Mojuye, 2000). These elites often hold positions on the boards of major public and private firms, and the collective action of industry is thus facilitated. Although the degree of public sector ownership of industry has greatly diminished since the 1990s, many of the earlier attitudes and systems of control remain predominant. For example, the traditionally close relationship between the large car manufacturers in France and the Ministry of Industry was an important factor facilitating the implementation of the NA on ELV disposal.

In France there is a strong culture of collaboration between industry and government officials. Information usually flows well between Ministry and industry. In fact, because the boundary between the public and private sector was non-existent or blurred for so long, practitioners have come to see the sharing of commercial details with bureaucrats as a natural feature of French business (Mojuye, 2000).

In summary, the formal and informal rules of the French institutional environment grant substantial discretion to the executive, thereby allowing regulators to commit to NAs. Environmental pressures arising from the public are relieved with the minimum fuss possible, and the French government maintains an exceptionally close relationship with industry. Regulators employ NAs as pilot projects that will give rise to future regulations, and French industry uses these agreements to actively participate in environmental policymaking.

Discussion

Contrary to most studies that discuss how limited regulatory discretion is an important precondition for credible and stable regulation, we argue that in the case of NAs, regulators require discretion to implement and commit credibly to the agreements.

Elements such as the fragmentation of power limit regulatory discretion and make more difficult the implementation of NAs. The United States provides an example of such a case. High fragmentation and easy access via the courts for third parties wishing to enter the game limits EPA's ability to commit credibly to NAs. As a result, the very few NAs found in the U.S. are fraught with problems. The German policymaking process is less fragmented. Regulators can rely on

the Parliament to support regulatory threats if industry is not complying with the objectives of the NAs. This situation has allowed regulators to implement successfully a number of NAs. In the Netherlands, NAs are embedded in a comprehensive environmental plan that entails long-term targets and is approved by Parliament. This structure enforces regulatory credibility and enables both regulators and industry to commit to and invest in the agreements. France is the most centralized case, where the Parliament and the Prime Minister may be treated as a unitary actor. As a result, the French government can credibly commit to NAs.

In terms of the access of third parties to policymaking, multiple access points hamper credible regulatory commitment because they allow third parties to overturn the agreements. In the U.S., easy court standing and a strong judiciary offer NGOs several access points. In the Netherlands, third parties also have access to policymaking processes. However, the mode of third party involvement in the two countries differs substantially. In the U.S., third parties enter the game through the judiciary and reduce the regulator's ability to commit to NAs by making likely *ex post* changes in the rules of the game. In the Netherlands, there is a strong tradition of accommodation and consensus-based decision-making, and third parties are involved through expertise-driven consultations. This situation illustrates how the involvement of third parties in the negotiation process of a NA can increase the ability of a regulator to commit credibly to a NA. Having been involved in the negotiation process of the agreement, third parties will be less likely subsequently to challenge the agreements in courts. In Germany and France, third parties are largely excluded from the implementation of NAs. While this situation can facilitate the implementation of NAs by reducing transaction costs—and (combined with limited court standing) by increasing regulatory credibility—it might be perceived as less democratic.

Our study of four countries demonstrates that the ability of industry to undertake collective action is important for the implementation of NAs that replace regulations. In the U.S., industry is less organized than in the other countries, and this situation has hampered the implementation of such NAs. In Germany, the Netherlands, and France, agreements are negotiated at the industry level. In Germany, industry associations seem to be powerful enough to allow NAs negotiated with industry organizations to render unnecessary NAs between regulators and individual firms.

Cooperation and consensus can only flourish if the process involves trust among partners. The informal rules that guide collaboration between regulatory agencies and firms seem to be another important factor that has to be taken into account when explaining the implementation of NAs. In the U.S., an adversarial relationship between the EPA and industry hampered most efforts in the 1990s to implement NAs. In Germany, as well as in the Netherlands, the relationship between regulators and industry historically has been cooperative. In France, there is a strong integration between the administration and industry through the elite system.

Table 1. Characteristics of the institutional environment and potential for the implementation of negotiated agreements.

Elements of the institutional environment		United States	Germany	The Netherlands	France
Executive, legislative, and judiciary	Centralized vs. decentralized	Decentralized	Decentralized	Centralized	Centralized
	Access points to the system	Numerous access points	Some access points	Few access points	Few access points
Nongovernmental organization and industry's interaction with regulatory agencies	Consensual culture vs. adversarial relations	Adversarial	Consensual	Consensual	Consensual
Industry's ability to take collective action	Cultural system marked by individualistic ethos vs. cooperative culture	Individual	Cooperative	Cooperative	Cooperative
Potential for implementation of negotiated agreements		Low	Medium	High	High

These elements are summarized in Table 1. Each country is characterized along the following dimensions of its institutional environment: fragmentation of power, access for third parties to enter the game, the ability of industry to undertake collective action, and the informal rules that influence the ability of industry and regulators to cooperate. Countries that are more centralized, have few access points, and are marked by a consensual and cooperative culture are more likely to implement NAs. France and the Netherlands fall into this category. Germany is more decentralized and has more access points than France and the Netherlands, but its consensual and cooperative culture facilitates the development of NAs. The United States, in contrast, is decentralized, has numerous access points, and is marked by an adversarial and individualistic culture. NAs are less likely to emerge in this context.

It is important to note that what makes possible a credible regulatory commitment to NAs can come at the expense of third party participation. Since arrangements are negotiated between industry and regulators only, industry might be appreciative if there is little risk that third party interests can overturn the agreements. However, third party exclusion might not be compatible with democratic principles. This dilemma could be solved by involving third parties

in the negotiation process or by passing NAs through parliaments or Congress. The agreements would then be legitimate and regulatory credibility would be ensured. The Netherlands illustrates this situation. However, adversarial relationships can make the involvement of third parties in negotiations costly, and receiving parliamentary approval can be a lengthy process that may result in strict prescriptions detailing what the NA should look like. This outcome could void the original advantages of NAs.

Conclusion

We have analyzed the features of the institutional environments of the United States, Germany, the Netherlands, and France to better understand the ability of regulators to commit credibly to the objectives of Negotiated Agreements (NAs). We argue that a credible regulatory commitment is key for the implementation of NAs. Since NAs are voluntary, firms participate in NAs only if they can ensure that the rules of the game will not change once the agreements are implemented. Because institutional structures vary in the extent to which they support a credible regulatory commitment to NAs, not all countries rely equally heavily on the agreements for environmental protection.

Our analysis can provide guidance to firms on whether or not to enter NAs. From the perspective of business, participation in NAs can allow firms to have a say in the setting of pollution-reduction targets or the implementation of environmental regulation. However, participation in NAs can be risky. The benefits of participation can be outweighed by costs if the agreements are implemented in an institutional setting that limits the agreements' stability. Managers must be aware of such institutional limitations. Our analysis suggests that for NAs to confer benefits greater than costs to firms, the environment must grant regulators discretion and strong credibility. Fragmentation and open access in policymaking limit such credibility and create uncertainties about future regulations. A culture marked by consensual policymaking also provides a more stable environment for NAs. France, the Netherlands, and Germany fall into this category. The United States does not.

The results of our study are therefore contradictory to previous research suggesting that regulatory discretion should be limited in order to favor credible regulatory commitment. In the case of NAs, discretion could be favored without fearing opportunistic behavior from regulatory agencies. Indeed, the result of the NAs should be aligned with regulatory objectives (i.e., the social benefit of environmental improvement). However, this regulatory discretion should not come at the expense of third party participation in the negotiation process.

Our analysis of the conditions that facilitate or hamper the implementation of NAs can also be useful to policymakers. The knowledge of such conditions should be valuable to understand why some NAs are difficult to implement and which institutional mechanisms would need modification for the successful diffusion of NAs.

Our analysis has focused on the implementation of NAs in Western countries. The analysis could be strengthened by looking at countries in Asia. Recent research has shown that the power of the Keidauran (Japan Federation of Economic Organizations) and the history of close contacts between the public and private sectors have given rise to NAs in Japan (Imura, 1999). Would it be possible to implement agreements in countries with political instability? Are the elements that we found to be important for the implementation of NAs also applicable in developing countries? Would it be feasible to implement agreements in a context in which there is almost no regulatory system in place? Could NAs “replace” such a regulatory system? We hope that further research will address these questions.

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Notes

1. If the potential for administrative expropriation or manipulation is high, *limiting* discretion of regulators might add stability and credibility to regulatory schemes. However, in our analysis we assume that regulators will not engage in such behavior, but instead are interested in the good functioning of NAs, which increase social benefits. This assumption seems reasonable, since NAs are voluntary schemes, and if firms had to fear that regulators might use their discretion for expropriation purposes once an NA was implemented, they simply would refuse to participate.
2. For a discussion of the potential difficulties associated with voluntary agreements, see Delmas and Terlaak (2001).
3. In fact, some U.S. public voluntary programs aim at improving the environmental performance of an entire industry (e.g., the Natural Gas STAR Program focuses on reducing greenhouse gas emissions in the oil and natural gas industry). However, these programs do not meet our definition of an NA, since they do not replace regulation and as firms participate on an individual basis.
4. In the U.S., access to information is granted through a number of statutes. The Administrative Procedure Act requires public hearings and asks government agencies to publicly justify their regulatory proposals. The National Environmental Policy Act requires agencies to publish information about the environmental impacts of their proposals. The Freedom of Information Act and the Toxic Release Inventory guarantee the provision of further information (Kerwin, 1994).
5. Exceptions exist; for example, the Administrative Court (Conseil d'Etat) ruled that a facility contract from 1975 between the Ministry for the Environment and a paper manufacturer was illegal because it restricted the State's authority and the required protection of third parties (CEC, 1996).

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