

Implementing International Environmental Agreements in Russia: Lessons from Fisheries Management, Nuclear Safety and Air Pollution Control

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In the literature on international environmental agreements, processes at the domestic level are receiving increased attention.¹ After an initial main focus on regime *formation*,² the literature has in recent years come to be dominated by studies of regime *effectiveness* and the *implementation*, including processes at the domestic level, of provisions laid down by international regimes.³ Although there has been a certain amount of attention on the implementation of international environmental agreements in so-called transition economies,⁴ there has been little systematic study of such implementation processes in Russia.⁵ This article presents a review of case studies from fisheries management, nuclear safety and air pollution control in Northwestern Russia.⁶ This region is a good

1. See, for example, Hanf and Underdal 1998; and Underdal and Hanf 2000.
2. See, for example, Young 1989, 1991; Haas 1990; Benedick 1991; and Young and Osherenko 1993.
3. See, for example, Haas et al. 1993; Victor et al. 1998a; Wettestad 1999; and Young 1999. Another important volume is Weiss and Jacobson 1998, which focuses particularly on treaty compliance, but understands this concept as part of those processes we define as implementation.
4. The concept of "transition economy"—see, for instance, how Victor et al. 1998b, 3, speak of these countries' "transition from central planning to a liberal, market-based society"—indicates a development optimism on behalf of these states' economy and politics that we find hard to apply to contemporary Russia. Instead, we speak of "post-Soviet Russian economy and politics" to denote the period after the dissolution of the Soviet Union; whether recent developments will lead to a "liberal, market-based society" remains to be seen.
5. A few cases of Russian implementation are compared in Victor et al. 1998a. The works of Vladimir Kotov and Elena Nikitina deserve particular mention (Kotov 1994; Kotov and Nikitina 1996, 1998a, 1998b; Munton et al. 1999; Nikitina 1991, 1995; and Zimmermann et al. 1998). See also Stokke 1998, 2000a, and 2000b for contributions dealing with implementation of international environmental agreements in Russia. International institutions for environmental aid to the former Soviet Union are discussed in Connolly and List 1996; and Connolly et al. 1996. Darst 1997 and 2001 provides detailed information on environmental management at the national level in Russia and on the country's cooperation in this field with other states, but does not focus explicitly on the implementation of Russia's international commitments.
6. Here understood as Murmansk and Arkhangelsk Oblasts, and, to some extent, also the Nenets Autonomous Okrug. The main reason for the selection of the case studies examined here was

case in point since it, in many respects, represents a microcosm of the Russian Federation. Most important in this context, it epitomizes an “exaggerated” version of Russia as a whole with its abundant natural resources and extremely grave environmental conditions.

The article first provides a brief theoretical backdrop to the study of implementation of international environmental agreements, focusing in particular on the interface between the concepts of “implementation,” “compliance” and “effectiveness.” An overview is next given of the environmental problems of North-western Russia and some of the most important international agreements aimed at their solution. Implementation performance and target compliance in fisheries management, nuclear safety and air pollution control is briefly reviewed before we give an account of implementation activities undertaken in the three case studies. Finally, the results are discussed in relation to our initial hypotheses. Methodologically, the investigation builds on numerous interviews with government and industry actors in Murmansk, Arkhangelsk and Moscow, mainly during the period 1997–2001.⁷

Implementation: What, Why and How

What is Implementation?

Whether vague and declaratory or explicit and binding, international commitments generally imply some sort of behavioral changes at the national level, which will ideally lead to the fulfillment of those commitments. Domestic implementation refers to the steps undertaken nationally in order to induce these changes. This process includes the translation of international commitments into national legislation, as well as administrative and other measures adopted by relevant authorities in order to induce target groups to comply. It may also include activities undertaken by NGOs or the target groups themselves. List and Rittberger⁸ thus identify several levels of implementation activity. Transformation of international agreements into national law takes place at the national *normative* level. *De facto* implementation by state activity and by private actors, as well as state supervision and stimulation of private actors, takes place at the national *factual* level. Sometimes, domestic implementation is conceived of as a much narrower concept. For instance, Weiss and Jacobson⁹ take implementation to refer only to national legislative activities (i.e. the national normative level), while subsequent activities are understood in terms of compliance or non-compliance. This understanding of implementation renders the concept a

that fisheries management, nuclear safety and air pollution control are among the most important environmental and resource issues for the region, as will be argued below.

7. In order to protect our interviewees from untoward repercussions, the concrete interviews are not indicated in the text.

8. List and Rittberger 1998.

9. Weiss and Jacobson 1998.

stylized and rather dull thing to study. Moreover, while accords between states are necessarily concluded at the international level, implementation primarily takes place within the individual states, i.e. at the national and sub-national levels. Hence, we understand by implementation the measures undertaken at the national and sub-national levels to bring the behavior of target groups into accord with the particular state's international commitments. We assume that national and sub-national authorities as well as NGOs and target groups can be involved in implementation activities. Moreover, we assume that implementation is sometimes carried out jointly by national groups and members of other states; this is referred to as joint implementation.¹⁰

The concept of implementation is intimately tied to that of effectiveness: if international commitments are not followed through at the national level, the agreement in question will have little effect, since the activities to be regulated are normally of a domestic character. The effectiveness of an international regime is often connected to either the achievements of the stated objectives of the regime or the solution of the problems that led to the establishment of the regime.¹¹ Effectiveness is sometimes seen as primarily related to compliance. However, as suggested by for example, Victor et al.,¹² the degree of implementation may be a more trustworthy measure of effectiveness than the degree of compliance. In cases where commitments are less ambitious, states may achieve perfect compliance with the formal provisions of a given agreement with very little behavioral adaptation.¹³ Compliance may also be accidental, while implementation is by definition instrumental. In accordance with this view, we are interested in the *active* steps taken by authorities and other actors within the state in focus to bring the behavior of target groups into line with the state's international commitments. Compliance by target groups is considered relevant to the extent that it is believed to be the result of implementation efforts. The study does not pretend to say anything about the solution of the problems in question or other aspects of regime effectiveness. To a large extent, the development of concrete regulatory measures takes place at the interface between obligations following from international agreements and federal standards to be applied also in other parts of the Russian Federation. This makes it difficult to judge whether a particular measure emanates from the international regime or would have appeared through the national regulatory process independently of the state's international obligations. Hence, we are more concerned with whether

10. We are aware that the concept "joint implementation" has a more limited meaning when speaking about, for instance, the global climate regime. Nevertheless, we have chosen to use it here referring to all kinds of joint initiatives between Russia and other states that aim to facilitate implementation of Russia's international obligations.

11. See, for example, Weiss and Jacobson 1998.

12. Victor et al. 1998b.

13. This is, of course, very much a question of how effectiveness is defined. Underdal 1992 points out that effectiveness may be understood either in terms of relative improvement, or in terms of the distance to a defined optimal state of affairs. The scope of implementing activities carried out may give a better indication of relative improvement, while compliance rates may say rather more about the distance to the optimal state.

the necessary “implementation measures” have actually been taken in the Russian Federation (focusing on *implementation*), than with the extent to which these measures are in effect the *result* of the international regime (which would have been an indicator of the regime’s *effectiveness*).

Why Study Implementation?

Implementation of international environmental regimes is, perhaps surprisingly, often a very difficult task. If our subject of study were, say, international cooperation in the field of disarmament, it might be argued that the process of attaining agreements would warrant more interest than their subsequent implementation, since the former could be expected to be the most difficult part of the process. Once an agreement on reducing, for example, the number of nuclear warheads is in place, the state in question will usually have little difficulty in carrying out that commitment—providing, of course, that it intends to honor the agreement. In contrast to this, recent studies indicate that failure on the part of states to implement *environmental* commitments is often unintentional, in the sense that it is a result of real and often unexpected difficulties encountered during the implementation process, rather than a conscious choice to refrain from implementation.¹⁴

Successful implementation of international commitments is contingent upon both the will and the ability of states to influence activities at the domestic level. Environmental problems are a side effect of legitimate activities, and environmental policies tend to penetrate deeply into other policy areas.¹⁵ Regulating the behavior leading to, for example, pollution often involves constraining the actions of many actors or groups of actors—from certain sectors of the economy down to the individual citizen. Moreover, precisely because of the “intrusive” character of environmental politics, its implementation is seldom left to the environmental authorities alone. Just like the “problem” activities, the regulative efforts typically involve many actors: environmental authorities as well as industrial ministries, along with agencies at the central, regional and local levels. Moreover, “the *costs* of environmental protection tend to be certain, immediate, and concentrated to specific sectors of the economy, while the *benefits* will appear, by comparison, to be diffuse, uncertain, collective, and something that can be harvested only in a more or less distant future.”¹⁶ Thus, successful implementation may be highly dependent on a given state’s *capacity to govern*, and on its ability to design policies to overcome such potential problems as the danger of *vertical disintegration*, whereby a vast number of micro-decisions lead to unexpected and contrary aggregate outcomes.¹⁷

14. Chayes and Chayes 1993, 1995; Mitchell 1994a, 1994b; Weiss and Jacobson 1998; and Victor et al. 1998a.

15. Hanf 2000.

16. Hanf and Underdal 1998, 157.

17. Ibid.

Analyzing Implementation Processes in Post-Communist States

Weiss and Jacobson¹⁸ have specified a number of variables that are believed to affect the chances of successful implementation of international environmental agreements. The characteristics of the activity to be governed imply that some activities are of greater economic value to the state than others, that some are easier to monitor than others, and that the process of implementation has more side effects related to some activities than to others. Another important issue is the nature of the agreement. What is the scope of the agreement—in other words, how much behavioral adaptation does it require by states? Are its provisions precise or general? Are they binding or non-binding? Moreover, a state's implementation efforts are presumably affected by the encompassing international environment. Have other states taken action to implement the agreement in question? Is it possible to be a free rider under the accord? Finally, the social, cultural, political and economic characteristics of the implementing country are assumed to influence implementation and compliance.

This article focuses on Russian implementation activities related to the international commitments outlined below. By implementation activities we understand the active steps initiated by Russian authorities, and presumably carried out in cooperative efforts between federal and regional authorities, target groups and other nonstate actors (and sometimes also in cooperation with other states), in order to bring the behavior of target groups in line with international commitments. Compliance with international agreements is here not seen as the most interesting thing in itself. One particular reason for this in the present context is the tendency of post-Communist states to show "compliance without implementation," i.e. compliance is the result of reduced industry activity and not of active implementation measures.¹⁹ However, compliance is viewed as relevant to the extent that the observed behavior of target groups can be causally linked to implementation activities. Therefore, an overview of target group compliance is presented in the discussion of implementation performance below as a basis for the discussion of how implementation measures have affected target groups' behavior.

A point of departure for this article is the lesson drawn in previous studies that implementation failure is often unintentional; the result of difficulties encountered during the implementation process rather than a conscious choice by the state in question to refrain from implementation. This can be assumed to be the case for post-Communist states, although it is hard to say whether they would have had the necessary "will" had the "capacity" been in place. During the so-called transition period, these states have experienced devolution of power—lengthening the previous chain of implementation—weakened fiscal strength and control over target group activities, a slow legislative process, a tendency for sanctions to be ineffective and have only a brief history of independ-

18. Weiss and Jacobson 1998.

19. Raustiala and Victor 1998, 670.

ent enforcement agencies. Hence, this study has a particular focus on Russia's "capacity to govern." Here this is taken to mean capacity to initiate and coordinate the necessary organizational and policy-related measures necessary to bring the actions of target groups in accordance with the country's international commitments. We ask—in line with the hypotheses of Weiss and Jacobson—to what extent the observed level of compliance in each case study can be explained by the nature of the problem and agreements at hand, and by the implementation activities of public authorities and target groups.

What's the Problem?

The northwestern part of the Russian Federation can be characterized as a region both blessed with extremely bountiful natural resources and, at the same time, bedeviled by grave environmental problems. The region, a northern periphery partly located north of the Arctic Circle, owes the existence of its human settlements largely to the presence of natural resources. In the southern parts of the region, mainly in today's Arkhangelsk Oblast, forestry has for centuries constituted the foundation for life. In the more barren Murmansk Oblast, which geographically corresponds to the Kola Peninsula, fisheries and mining provided the industrial foundation for the creation of large human settlements after World War I, rendering the region the most densely populated area of the Circumpolar Arctic during the last half of the twentieth century. The fishing grounds of the adjacent Barents Sea are among the most productive in the world, and the mineral deposits of the Kola Peninsula, mainly iron ore, nickel and apatite, are remarkable for their richness. From the 1920s onwards, massive fishing fleets were built up in the region and, at the time of the break-up of the Soviet Union, Murmansk had the largest fish-processing plant in the entire Union.²⁰ Town names such as *Nikel* and *Apatity*, for their part, indicate the importance of the mining and metallurgical complex in the region.

The extraction of natural resources and the accompanying military build-up have, however, taken place at the expense of environmental considerations. Throughout the last decade, Northwestern Russia has been more renowned for its environmental degradation than for its abundant resources.²¹ Since Western journalists were gradually given easier access to this heavily militarized region from the mid-1980s, the black tree stumps of the dying forests around *Nikel* and *Monchegorsk* have come to symbolize the sullen environmental state of Russia to many in the West. The nickel smelters of these two towns had virtually killed the forests surrounding them and served as sources of pollution also for the neighboring Nordic countries and other parts of Russia. "Stop the death clouds!" became the slogan of environmental organizations in the Nordic

20. For an overview of Northwest Russian fisheries, see Hønneland 1998, 2000a; and Hønneland and Nilssen 2000, 2001.

21. See AMAP 1997, 1998 for authoritative reviews of the environmental state of the Russian Arctic.

countries in the early 1990s. The Nordic countries had plans for gigantic assistance programs to reduce the pollution spewing out of the production plants of the mining and metallurgical complex of Northwestern Russia, but nothing has come of these plans so far.²² Financial hardship has forced the plants to cut back on activities in recent years, though without affecting the alarming rate of air pollution in the European Arctic to any significant extent.

Throughout the 1990s, another environmental threat in the region upstaged air pollution as a focus of public concern, namely the danger of radiation from nuclear installations, discarded nuclear vessels, radioactive waste and spent nuclear fuel. Towards the end of 1990, rumors emerged that the Soviet Union had been dumping radioactive material in the Barents and Kara Seas.²³ The rumors were officially confirmed in a Russian parliamentary report a few years later.²⁴ A major problem in the latter half of the 1990s was the build-up of radioactive waste and spent nuclear fuel in Northwestern Russia. Existing storage facilities were full, and there were no safe vehicles to transport the radioactive material out of the region for reprocessing or permanent storage. Moreover, financial constraints have forced the Northern Fleet to decommission large quantities of nuclear-powered vessels in recent years.²⁵ Rumors are also circulating about the unsafe functioning of vessels still in service. The Kursk accident of August 2000, albeit mainly a human tragedy, functioned as a reminder of the potential dangers residing in the Northern Fleet's nuclear-powered vessels, not least to the environment. Although radiation levels in the region are at present low, there are considerable risks connected with the unsatisfactory storage of radioactive waste, decommissioned nuclear submarines awaiting dismantling and the continued operation of unsafe nuclear power installations, notably the Kola Nuclear Power Plant at Polyarnye Zori.

Finally, signs of resource depletion have recently been emerging in the Barents Sea fisheries.²⁶ These fisheries, managed bilaterally by Russia and Norway since the mid-1970s, had for many years been seen as a management success. At the turn of the millennium, however, the Norwegian-Arctic cod stock, by far the most commercially important species in the area, appeared to be in severe crisis. Some would have it that the situation is similar for the management system itself due to the dire state of its main object of regulation. There are indeed reasons for such an allegation: scientists are uncertain as to the size of the stock; managers do not follow the advice of the scientists in the establishment of quotas; and the enforcement system, at least on the Russian side, seems

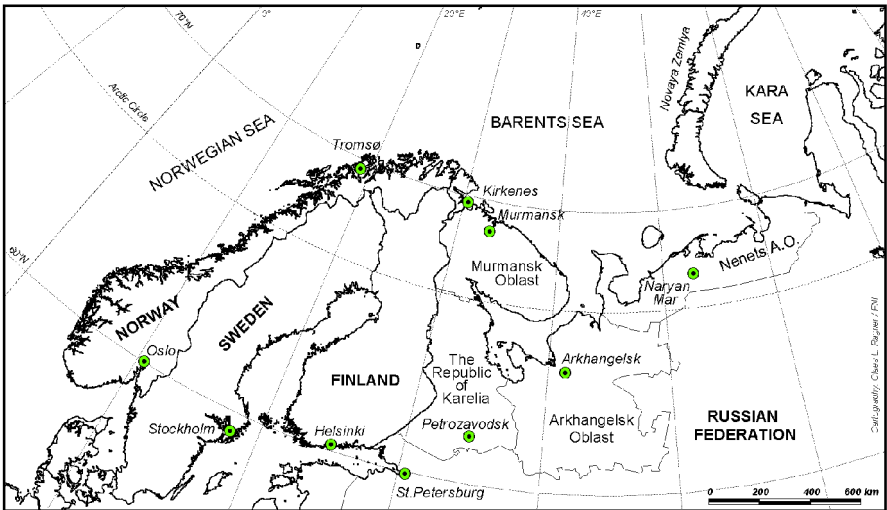
22. Previous schemes were finally buried in 1997, but a new agreement on the modernization of the Pechenganickel smelter was concluded between Norway and Russia in June 2001. The new project is scheduled to be completed in 2006–07.

23. See, for example, Stokke 1998, 2000b.

24. Yablokov et al. 1993.

25. For an authoritative assessment of the risk of radioactive contamination from the Russian Northern Fleet, see Nilsen et al. 1996.

26. As mentioned above, the extraction of stationary resources on the Kola Peninsula has decreased in recent years due to economic problems at the company level.

Figure 1 Northwestern Russia

poorly fit to keep track of actual catch levels and discourage fishing of juvenile specimens.

What's to be Implemented?

The environmental problems of Northwestern Russia are directly or indirectly addressed by a number of international treaties, agreements, regimes and other cooperative arrangements. Some of these are global instruments that happen to have implications for the particular problems of the region; others are specifically aimed at solving them. In some cases, specific arrangements are linked to more general instruments at the global level. Moreover, some are "hard," legally binding arrangements and others "softer" approaches of a more programmatic character.

The major global instrument underlying systems for marine fisheries management throughout the world is the 1982 Law of the Sea Convention (LOSC),²⁷ which entered into force on 16 November 1994. Most important for fisheries management is the introduction of the principle of 200 mile exclusive economic zones (EEZ). This implies that coastal states are given "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources" in these zones.²⁸ With the rights follows the *obligation* to secure reasonable exploration, exploitation, conservation and management of the resources. For instance, fish stocks are to be maintained at a level that can produce *maximum sustainable yield* (MSY), i.e. the level at which the greatest quantity of fish can be caught annually without the total size of the stock being re-

27. United Nations 1982.

28. *Ibid.*, Article 56 [1].

duced. Moreover, coastal states are required to promote the objective of optimum utilization of the living resources of its EEZ, and to establish total allowable catches (TACs) for each fish stock within its EEZ. Finally, coastal states are obliged to cooperate in the management of shared stocks.²⁹ In the Barents Sea, both Norway and Russia established their EEZs in 1977. This led to a transition from multilateral negotiations for the Barents Sea fisheries under the auspices of the Northeast Atlantic Fisheries Commission (NEAFC) to bilateral negotiations between coastal states with sovereign rights to fish stocks. To formalize these mutual fishing rights and establish a common management regime suitable to secure the fish stocks of the area, Norway and the Soviet Union entered into several bilateral fishery cooperation agreements in the mid-1970s.³⁰ The Norwegian-Russian management regime for the Barents Sea fish stocks defines objectives and practices for cooperative management between the two states within the fields of research and regulations, and, since 1993, also enforcement. The Joint Russian-Norwegian Fisheries Commission establishes TACs for the joint fish stocks. A Permanent Russian-Norwegian Committee for Management and Enforcement Co-operation within the Fisheries Sector administers enforcement cooperation and functions as a forum for discussion and clarifications between the parties in the periods between sessions in the Joint Commission.

The threats of nuclear radiation emerge from several different sources in the region: dumped radioactive materials, decommissioned nuclear submarines, nuclear waste and spent nuclear fuel, as well as the unsafe functioning of nuclear installations. Hence, the handling of these various problem complexes is regulated by different instruments at different levels. The 1972 London Convention³¹ is the main instrument of the global dumping regime, banning the disposal at sea of hazardous waste, defined in terms of toxicity, persistence and tendency to bioaccumulate in marine organisms. Two regional instruments stand out as relevant for nuclear safety issues in Northwestern Russia: the Declaration on Arctic Military Environmental Co-operation (AMEC)³² and Co-operative Threat Reduction (CTR) programs in connection with discarded nuclear submarines and storage of spent nuclear fuel and other nuclear wastes. AMEC was signed in 1996 by Norway, the Russian Federation and the USA.³³ Norway and the USA pledged their support in providing the Russians with technological and other assistance to help them de-fuel nuclear submarines re-

29. More recent global fisheries agreements include the 1995 Fish Stocks Agreement (United Nations 1995) and two FAO documents: the FAO Compliance Agreement of 1993 (Food and Agriculture Organization 1993) and the FAO Code of Conduct for Responsible Fisheries of 1995 (Food and Agriculture Organization 1996). There is not room for a specific discussion of these agreements in this context.

30. Stortinget 1975, 1976.

31. International Maritime Organization 1972. The Convention entered into force on 30 August 1975. It has been signed and ratified by the Russian Federation.

32. Ministry of Foreign Affairs 1996.

33. See Sawhill (2000) and Sawhill and Jørgensen (2001) for a description and assessment of the AMEC cooperation.

moved from service, and to develop safe storage facilities for spent nuclear fuel and other nuclear wastes. In 1998, US authorities decided to link AMEC with the Nunn-Lugar CTR Program.³⁴ The CTR Program was created by the US Congress in 1991 as a mechanism to assist the Soviet Union in complying with its obligations of arms reductions with the START I Agreement, and hopefully also new commitments under START II. It has provided more than US\$ 2,000 million to former Soviet states since 1991. One of the goals of the CTR Program was to scrap 30 Russian ballistic missile submarines by 2001. The Russians currently have the capacity to scrap only a handful of submarines per year, the major obstacle being the de-fueling process and dealing with the resulting waste and spent nuclear fuel. By linking AMEC and CTR, US authorities were able to provide a ready source of cash and indemnification from liability. Finally, various bilateral activities of a programmatic character exist in the field of nuclear safety between Russia and other countries. The most comprehensive bilateral cooperation program is the one with Norway, organized under the Joint Russian-Norwegian Nuclear Safety Commission since 1998.

By far the most important international instrument related to the air pollution of Northwestern Russia is the 1979 UN Economic Commission for Europe Convention on Long-range Transboundary Air Pollution (LRTAP).³⁵ It addresses problems in Europe and North America concerning airborne pollutants, notably acid rain, and establishes a framework for coordinating pollution control measures and common emission standards.³⁶ Five substantive protocols have been negotiated under the regime: on NO_x (1988);³⁷ volatile organic compounds (1991);³⁸ sulfur (1994);³⁹ heavy metals (1998);⁴⁰ and persistent organic pollutants (1998).⁴¹ The Soviet Union/Russian Federation has been an active partner in the LTRAP regime. Traditionally rather reserved towards cooperation with the West during the Cold War, in the late 1970s the Soviet Union was enthusiastic in its support of the LRTAP process, regarding it more in terms of "high politics" than from an environmental point of view.⁴² At present, Russia has ratified the Convention itself and the NO_x Protocol and signed, but not ratified, the Sulfur Protocol.

Implementation Performance and Target Compliance

Northwest Russian fisheries can, during the 1990s, be described in terms of three main features, each partly issuing from the others: the diffusion of man-

34. US Department of State 1992, 1993; and Sawhill 2000.

35. UN Economic Commission for Europe 1979.

36. See, for example, Hanf (2000) for an overview of how the acid rain regime evolved.

37. UN Economic Commission for Europe 1988.

38. UN Economic Commission for Europe 1991.

39. UN Economic Commission for Europe 1994. The Protocol follows the former Sulfur Protocol adopted in Helsinki, 8 July 1985.

40. UN Economic Commission for Europe 1998a.

41. UN Economic Commission for Europe 1998b.

42. Kotov and Nikitina 1998a.

agement responsibility, the degeneration of implementation performance and the reduction in target compliance. Notably, Russian authorities were, towards the end of the 1990s, no longer able to perform effective monitoring and enforcement in the Russian EEZ in the Barents Sea. According to anecdotal evidence, this greatly increased the propensity of fishers to cheat.⁴³ However, the indication of reduced performance implies that Russian authorities had previously scored better on implementation performance and target compliance. Indeed, the Soviet Union had a system for fisheries research, regulation and enforcement—not to mention the production plans of the command economy—which enabled the country to manage fisheries in its exclusive economic zone in accordance with the principle of maximum sustainable yields, to establish total allowable catches for each fish stock within the exclusive economic zone, to cooperate with other coastal states in the management of shared stocks, and to promote compliance with fishery regulations among all vessels under Soviet flag.⁴⁴ The extent to which the existence of this regulatory system reflects the determined implementation of international obligations is disputable; probably, the national system for fisheries management developed in parallel with Soviet adjustment to the country's international fisheries obligations. Target compliance decreased during the 1990s, mainly as a result of changes in the targets' incentive structure brought about by the end of the command economy; suddenly, it became profitable for Russian fishers to cheat. At the same time, bureaucratic controversies seriously reduced the management system's ability to monitor and enforce regulations (see below).

In comparison with fisheries management, the nuclear safety sector is more complex both with regard to issues to be covered and actors involved. Most of the Russian nuclear safety obligations date from the post-Soviet period and several of the same problems have been encountered in their implementation as with the fisheries obligations. In particular, bureaucratic controversies—notably between the "hard" and "soft" regulatory agencies at the federal level—have clearly hampered implementation. For instance, the 40 ton casks commissioned under AMEC were not finalized in time due to disagreement between Minatom and Gosatomnadzor as to which had the right to license them. Moreover, foreign assistance has come to dominate the implementation game of Russia's international nuclear safety commitments during the post-Soviet period. Some of the most serious problems encountered in the implementation can be ascribed to the interface between Russia and the Western donor states, i.e. problems related to indemnity against liability, access to nuclear sites, personnel immunity and tax exemptions. While there is at the moment some progress in the

43. Official violation statistics do not exist.

44. Data on the functioning of the Soviet system for fisheries management are poor, but it seems fair to assume that management agencies were relatively well endowed in terms of competence and material resources to perform their tasks satisfactorily. Moreover, target compliance was probably quite high since the command economy implied a high degree of control over the activities of the target groups and the latter had low incentives to cheat.

implementation of Russia's international nuclear safety commitments, it is slow and fumbling.

The productivity of Russian industry decreased to such an extent during the 1990s that the country's LRTAP commitments were achieved without any evident effort. In accordance with the 30 per cent reduction target of the first Sulfur Protocol, SO₂ emissions from European Russia had by 1993 decreased by more than 50 per cent from their 1980 level. Moreover, Russia was already in compliance with the second Sulfur Protocol when it was signed in 1994 and SO₂ emissions from the Kola Peninsula smelters have continued to fall since then.

As far as implementation in national legislation is concerned, the situation varies in the three case studies. The Federal Parliament of the Russian Federation has been working on a fisheries act since the early 1990s, but not yet succeeded in getting it in place. In nuclear safety, on the other hand, a rather well-elaborated set of legal acts at the level of law—some with explicit reference to the country's international obligations—was set up during the 1990s. Russian air pollution control, for its part, is still regulated in accordance with a Soviet law from the early 1980s.

Implementation Activities

More interesting than the extent to which Russian environmental obligations have been complied with or not concerns the steps Russian authorities have taken in order to induce such compliance by target groups. A brief summary is given in the following of implementation activities taking place in fisheries management, nuclear safety and air pollution control.

Fisheries Management

The implementation of the international fisheries obligations of the Soviet Union was the responsibility of the Soviet Ministry of Fisheries. In connection with the dissolution of the Soviet Union and establishment of the Russian Federation, the federal fisheries agency had its status reduced to that of a state committee. During the 1990s, the State Committee for Fisheries repeatedly had to fight off "intrusions" from other federal bodies of governance. These attempts were only partly successful. On the one hand, the Committee succeeded in sustaining its status as an independent administrative body (except for the period 1997–98, when it was placed under the Ministry of Agriculture and Foodstuffs). On the other hand, it was compelled to relinquish responsibility for enforcement at sea to the Federal Border Service and to accept the introduction of a system of quota sales proposed by the Ministry of Economy. The federal agencies are only partly involved in implementation activities aimed directly at target groups; these are predominantly carried out by federal agencies in the region in cooperation with regional authorities. The most important federal agencies in the re-

gion are the enforcement body Murmanrybvod, the remnants of the former "industry complex" of Sevryba and the newly established (1998) Murmansk State Inspection of the Arctic Regional Command of the Federal Border Service. While Sevryba has lost most of the powers it enjoyed in Soviet times as the "extended arm" of the Ministry of Fisheries, it has not lost its role in the regulatory process altogether. Until recently, its general director led the Technical-Scientific Catch Council, which distributes quota shares among the federal subjects of the Northwestern Russia. Also, Sevryba has retained some management tasks related to the practical regulation of fishing activities.

More than anything, important decisions related to the management of Northwest Russian fisheries seem to be made by a somewhat diffuse corporate leadership of the area's "fishery complex," consisting of representatives of regional authorities (a fisheries department was established under the regional administration in 1993), the various federal authorities located in the region, research institutes and target groups.⁴⁵ Such a constellation is visible in the bodies responsible for quota allocation at the inter-regional and regional levels, for instance the Technical-Scientific Catch Council and the regional fishery councils, which distribute quotas between shipowners in each federal subject. The main reason for the drop in target compliance in Northwest Russian fisheries in recent years—apart from the change in the fishers' incentive structure—seems to be the negative consequences of the transfer of responsibility for enforcement at sea from Murmanrybvod to the Border Service. The latter so far has a poor record of presence at sea; for several months on end not a single enforcement vessel was present in the Russian zone of the Barents Sea. This, it is believed, allowed a massive subsequent catch of undersized fish to take place. However, despite this flaw in enforcement—admittedly a necessary link in the implementation chain—there is nevertheless a system in place that takes care of the new and specific obligations continuously emanating from various international agreements and cooperative regimes, mainly the bilateral Russian-Norwegian regime. In other words, there is a "capacity to govern" in the Russian system for fisheries management although reorganizations forced upon the existing system from the outside have reduced this capacity.

Nuclear Safety

In the nuclear safety sector, the Ministry of Atomic Energy (Minatom) is the organizational heavyweight, responsible for the implementation of most of Russia's international agreements in the field. To some extent, Minatom delegates the implementation of concrete projects to the so-called Inter-branch Coordination Centre Nuklid, which forms part of the "Minatom system." In the military-environmental collaboration under AMEC, the Ministry of Defence is the responsible partner on the Russian side. The Federal Inspectorate for Nuclear and

45. Admittedly, important decisions have to be sanctioned by federal authorities, but the State Committee for Fisheries does not interfere to any extent in the day-to-day management of Northwest Russian fisheries.

Radiation Safety (Gosatomnadzor) was established in 1991 to control and license activities related to the application of nuclear energy. This agency has also had an important role in the implementation of Russia's international nuclear safety obligations. There is a limited measure of horizontal integration between the various federal agencies involved in the implementation process. There is also a rather high degree of tension between the "hard" agencies of Minatom and Nuklid on the one hand and Gosatomnadzor on the other. The two former have gradually expanded their sphere of influence at the expense of the latter.

Murmansk regional authorities have created a department for nuclear safety within their structure, but this has seen its role as mainly to co-ordinate the various regional, national and, above all, international attempts at ensuring nuclear safety in the oblast. It has also had a certain "negative" sway, halting projects planned by the federal authorities. The federal agencies located in the region are of less importance in the nuclear safety area than in fisheries management. Implementation failure or delay has mainly been caused by bureaucratic controversies at the federal level—primarily between Minatom/Nuklid and Gosatomnadzor—or by inadequacies in inter-state agreements with foreign donors. As was the case in the fisheries management, Russia does have the "capacity to govern" also in the sphere of nuclear safety, but new patterns of joint implementation with other states have created new challenges that so far have yet to be overcome.

Air Pollution Control

Soviet implementation of the country's international obligations related to air pollution control was ensured by an interdepartmental commission charged with overseeing such implementation as well as the incorporation of the requirements of the obligations in national industrial production plans. The interdepartmental commission was led by the State Committee for Hydrometeorology and Environmental Monitoring (Goskomgidromet) (presently the Federal Service of Hydrometeorology and Environmental Monitoring, or Rosgidromet). A State Committee for Environmental Protection was created in 1988 and elevated to ministerial status three years later. The responsibility for coordinating Soviet implementation of international air pollution control requirements was transferred from Goskomgidromet to the new State Committee once it was established. The old implementation system disintegrated through this reform because the new governmental structure was not given the political authority and financial muscle that the interdepartmental commission had previously enjoyed. The Ministry of Environmental Protection came under increasing pressure from other federal authorities in the mid-1990s. In 1996, its status was again reduced to that of a state committee and in 2000 it was disbanded altogether and its remnants incorporated into the Ministry of Natural Resources as a department for environmental protection.

Unlike the cases of fisheries management and nuclear safety, the Murmansk regional administration has not established a department for envi-

ronmental protection within its structure. Rather, the regional representation of the Department for Environmental Protection (under the Ministry of Natural Resources) functions as an implementing agency not only for its federal head office in Moscow, but also for the regional administration. The regional administration determines environmental policies for the oblast by elaborating programs, action plans and concrete regulations. Hence, although the Murmansk regional administration has established departments for fisheries management and nuclear safety, though not for environmental affairs, it is more active in regulative measures in the latter area than in the two former (where such measures are almost exclusively set out by federal authorities). Relations with the federal agencies in the region also differ in the three cases. In the fisheries management, relations have at times been quite confrontational while the most important decisions have continued to be made at the federal level. In the field of nuclear safety, the regional authorities have aimed only at a coordinative role, preferring not to contest seriously the authority of federal agencies. In the area of air pollution control and environmental management more generally, there has indeed been a certain devolution of powers to the regional level. However, the regional administration has not found it necessary to establish a department for environmental protection, but has continued its traditionally close cooperation with the regional environmental committee, which represents the federal authorities in the region.

As the Soviet system for implementation of the country's international environmental obligations (led by the interdepartmental commission) disintegrated, as the federal environmental agency gradually lost its authority, and as public authorities increasingly lost control of industry enterprises, the enterprises themselves became more important actors in the Russian implementation game. There is little evidence that the various managements of the Kola Peninsula smelters have been overly concerned with implementation of air pollution regimes. Hence, the case of Russia and the LRTAP regime is clearly one of "compliance without implementation." The Russian commitments "implemented themselves," rendering "implementation activities" on the part of public authorities, target groups and others superfluous. The LRTAP regime contributed to certain behavioral changes domestically in the Soviet Union, mainly in planning, research and monitoring activities, but had little effect on actual emissions. It is also an open question to what extent Russian authorities during the 1990s would have been either capable or willing to actively contribute to the implementation of the country's commitments under the LRTAP regime had emissions not been reduced to acceptable (according to the commitments) levels by exogenous factors. First, the federal environmental agency was seriously weakened during the 1990s, culminating in its total dissolution and the incorporation of its remnants under the Ministry of Natural Resources—a typical "user agency"—in 2000. Second, the regional administration of Murmansk Oblast—although having significantly increased its political authority since Soviet times—would be expected to prioritize further industrial activity in the mono-industrial towns of the oblast (contributing both employment and con-

siderable revenues for the regional budget) over environmental issues. Third, public authorities' chance to influence the workings of private enterprises declined significantly during the 1990s. Finally—and partly related to the latter circumstance—it is doubtful whether the authorities' compliance mechanisms (here: fines) are compelling enough to induce compliance among the nickel plants on the Kola Peninsula. In sum, while Russia can show a high degree of formal compliance with its LRTAP commitments in the 1990s, its record of implementation efforts during the same period is correspondingly poor.

Table 1 gives an overview of the most important actors in the Russian implementation of international commitments in fisheries management, nuclear safety and air pollution control. The relative strength of the agencies at the various levels is discussed in the next section.

Discussion

How have these political processes affected implementation? We observed above that an important lesson drawn from previous studies is that implementation failure is often unintentional, being the result of difficulties encountered during the implementation process rather than a conscious choice by the state not to implement the commitment in question. In the following, we systematically review our conclusions in relation to our hypotheses about how the nature of the problem, the nature of the international commitments, implementation in national legislation, implementation activities performed by public authorities and others have affected implementation in our cases.

Nature of the Problem

The problem areas within our three case studies can, on the one hand, all be characterized as relatively "malign" in an implementation perspective: the fishery, nuclear and mining and metallurgical complexes are cornerstone activities in the Northwest Russian economy. In the hard economic climate of post-Soviet Russia, one would expect authorities to prioritize employment and tax revenues on the basis of continued resource extraction (as in the case of fisheries), risk behavior (as in the nuclear complex) and polluting activities (from the mining and metallurgical combines) over environmental and natural resource protection. This would clearly be assumed to reduce the potential for successful implementation of international commitments that restrict industrial activities or resource extraction. Further, public control over target groups has declined since the major enterprises in at least the fisheries and air polluting sectors have been privatized. On the other hand, the chances for monitoring target activity range from "relatively good" in fisheries management to "very good" in nuclear safety and air pollution control. The targets of the two latter are mostly stationary; and while fishing vessels, nuclear ice-breakers and submarines and surface vessels of the Northern Fleet admittedly move over a considerable ocean area, they are at least easier to control than a million cars. Moreover, the targets

Table 1

Most Important Actors in the Russian Implementation of International Commitments in Fisheries Management, Nuclear Safety and Air Pollution Control*

	<i>fisheries management</i>	<i>nuclear safety</i>	<i>air pollution control</i>
federal authorities	<ul style="list-style-type: none"> • State Committee for Fisheries • Federal Border Service 	<ul style="list-style-type: none"> • Minatom • Nuklid • Ministry of Defence • Gosatomnadzor • Rosgidromet 	<ul style="list-style-type: none"> • Department for Environmental Protection (Ministry of Natural Resources) • Rosgidromet
regional authorities	<ul style="list-style-type: none"> • fisheries departments at the regional administrations 	<ul style="list-style-type: none"> • nuclear safety department at the Murmansk regional administration 	<ul style="list-style-type: none"> • regional administrations (no specific departments for environmental protection)
federal agencies in the region	<ul style="list-style-type: none"> • Murmanrybvod • Murmansk State Inspection of the Arctic Regional Command of the Federal Border Service • (Sevryba) 	<ul style="list-style-type: none"> • Minatom • Gosatomnadzor • Rosgidromet 	<ul style="list-style-type: none"> • Department for Environmental Protection (Ministry of Natural Resources) ('regional environmental committees') • Rosgidromet
target groups	<ul style="list-style-type: none"> • individual fishing companies 	<ul style="list-style-type: none"> • Northern Fleet • Murmansk Shipping Company • Kola Nuclear Power Plant 	<ul style="list-style-type: none"> • Pechenganickel • Severonickel

* The table is not meant to be exhaustive. It includes those agencies and enterprises that are given most attention in the article's case studies.

are themselves largely the main "losers" if implementation fails—at least in the long-term perspective. Adding to the relative "benignity" of the problem is the keen Western interest in solving the problems under scrutiny here.

Clearly, the role of fisheries, nuclear power and industry production companies as cornerstone enterprises in the region has influenced the propensity of public authorities not to give priority to environmental and natural resource protection concerns. In the fisheries sector, this has been most obvious in the

Russian positions *vis-à-vis* various international negotiations. For instance, the Joint Russian-Norwegian Fisheries Commission from the late 1990s established cod quotas far above the scientific recommendations of the International Council for the Exploration of the Sea (ICES), mainly as a result of Russian pressure within the Commission. But despite the importance of fisheries to the Northwest Russian economy, it has not led to a determined effort to avoid international obligations once they are established.⁴⁶ Likewise, while authorities would probably have been reluctant to accept or implement international obligations that seriously impeded further industrial activity in the mono-industrial towns of the Kola Peninsula, it is hard to argue that this factor accounts for the problems found in the implementation of Russia's international nuclear safety and air pollution control commitments in the northwestern region of the country. However, the loss of control over fishing and air polluting companies as a result of the privatization of these enterprises seems to have hampered implementation, at least in the cases of fisheries management and air pollution control. Finally, the relatively good opportunities to monitor target group behavior have improved the prospects of successful implementation, but cannot by themselves serve as a main explanation for the achieved implementation. In sum, factors related to the nature of the problems at hand can partly account for implementation performance, but hardly constitute any decisive element in this context.

Nature of the Commitments

The hypothesis on the varying influence of commitments on implementation performance is that agreements that are binding upon the signatories, contain precise obligations for the parties, and require a large degree of adjustment in the behavior of target groups are more difficult to implement than accords that are non-binding, vague and demand only minor or no efforts on the part of target groups. Of our case studies, air pollution control is the one in which the nature of the commitments can obviously explain much of the actual implementation efforts taking place, or more correctly, not taking place. As a result of reduced industrial activity, the commitments more or less fulfilled themselves. In nuclear safety, the situation is the opposite: the international accords are so demanding upon the Russian party—requiring restructuring of certain elements of the Northwest Russian nuclear power complex to a so-far unforeseen extent—that it can largely explain much of the trouble encountered in the implementation process. In both cases, the nature of the commitments proves an important explanatory factor in accounting for implementation success or failure. This is not the case in fisheries management. The commitments following from the bilateral Russian-Norwegian regime, reflecting the parties' commitments in accordance with regional and global agreements, are binding, precise

46. Another question is whether the decisions of the Joint Russian-Norwegian Fisheries Commission reflect the parties' obligations as set out in the global fisheries agreements.

and generally require significant changes on the part of target groups. But even this does not account for implementation failure observable in the Barents Sea fisheries.

Implementation in National Legislation

Is the implementation of international commitments in national legislation (for implementation at the national normative level) a prerequisite for their further successful *de facto* implementation at the national level? The elaboration of a national, and, to some extent, also regional legislation at the level of law has been quite successful in the areas of nuclear safety and air pollution control. Russia does not yet have a law on fisheries although the Federal Parliament has been working on such a law for nearly a decade. Hence, the incorporation of international commitments in national legislation at the level of law does not seem to be a prerequisite for successful implementation of Russia's international fisheries agreements.⁴⁷ There is little reason to assume that the situation related to air pollution control would be much different had a law on environmental protection not been adopted in the early 1990s, i.e. that Russian authorities would have been able to pursue more or less the same air pollution policy as today in the absence of this law. It should also be observed that the existing law on air pollution is from the Soviet era. In nuclear safety, the situation might be a bit different, although this is mere speculation. One might at least imagine that public management of Russia's vast nuclear complex—with the conflicting public agencies involved—would have proven more difficult had not a legal framework at the level of law been in place.

Implementation by Public Authorities

The lengthening of the previous chain of implementation has clearly been an obstacle to effective implementation in our case studies. Not only was Soviet implementation of the country's international commitments ensured by the incorporation of these commitments into national production plans; the Soviet Union also possessed administrative systems in areas such as fisheries management, nuclear safety and air pollution control that were indeed "capable of governing." When we claim the decreased implementation performance and target compliance in Northwest Russian fisheries in recent years to be the result of the disintegration of the previous enforcement system, this is clearly an example of

47. This is not meant to imply that the implementation of Russia's international fisheries agreements has been completely successful. However, to the extent that it has not been successful, it has not been a result of lacking incorporation of international commitments in national legislation. It could also be argued that the absence of a law on fisheries does not mean that the management of Russian fisheries takes place in a legal vacuum. Legal documents at lower judicial levels are constantly being issued. Further, the definition of "incorporation in national legislation" is not obvious (for example, how about a fax sent from Murmansk to a fishing vessel?), so we limit ourselves here to concluding that such incorporation at the level of law does not seem necessary to spur further implementation efforts.

“unintentional” implementation failure. Rather than “Russia” as a rational unitary actor deciding that “from this moment on we will no longer adhere to our international fisheries commitments and therefore dissolve the existing enforcement system,” the reorganization was partly the result of genuine suspicion on the part of the presidential administration that the existing fishery inspection was incapable of performing its tasks,⁴⁸ and partly of more common bureaucratic battles over budget shares (which depend on areas of formal responsibility). The delays in the implementation of some of the international nuclear safety projects reflect inter-agency conflict between Minatom and Gosatomnadzor rather than an overarching Russian unwillingness to implement the projects. Likewise, some implementation processes in nuclear safety have reportedly been delayed by the Ministry of Foreign Affairs “displaying political strength” to compensate for its lack of financial gain from international cooperation. We should also avoid the Western tendency to perceive the Russian “hard” agencies as necessarily “the bad guys” and the “soft” ones as always “the good guys.” While there is ample evidence of Minatom attempting to curb the independent nuclear safety protection agency, it is possible at least to imagine that Gosatomnadzor may “be more meticulous than necessary” in its licensing activities, thus hampering the implementation of Russia’s international agreements, in order to legitimize its own existence as an independent agency. Some would say that this is what happened when the 40-ton cask developed under AMEC was denied a license.⁴⁹ The point is that the devolution of power to new agencies—while being desirable either to ensure independent environmental control or to increase the influence of regional authorities or stakeholders—often involves the cost of lengthening the chain of implementation and hence reducing implementation effectiveness, at least in the short run. It should be observed in this context that delegation of power to the regional level has not hampered implementation. Quite the contrary, the coordinating role generally assumed by regional authorities in our case studies has evidently furthered rather than obstructed successful implementation.

In sum, implementation efforts by public authorities at both the federal and regional level can generally explain the failure or success of the individual cases of implementation. On the negative side, most of the problems found in

48. Added to this picture of a lack of conscious effort to avoid implementation of its international fisheries commitments in the Barents Sea comes the fact that the original impetus behind the reorganization process came from events in the Far Eastern fishery basin, where rumors of corrupt fishery inspectors were far more widespread than in the northern basin.

49. Another example, this time from the area of fisheries management is the following. Towards the end of the 1990s, it became increasingly difficult for Norwegian and Russian marine researchers to get permits from Russian authorities to conduct joint scientific cruises in the Russian part of the Barents Sea. From the Norwegian side, it was generally believed that some of the “bad guys” (the “power agencies”) were behind the refusals. While we will not contest that this had an effect, we were once told by a Russian fisheries civil servant that the main obstacle was in fact the State Committee for Environmental Protection—by Norwegians generally perceived as a “good guy” *par excellence* in Russian environmental politics. According to our source, the Committee felt obliged to increasingly spread its tentacles into new areas of governance in order to justify its existence.

all our three case studies can be accounted for by the high level of conflict between federal agencies. On the positive side, much of the successful implementation activity that is taking place can be ascribed to the existence of reasonably well-functioning systems for environmental and natural resource management (i.e. well-functioning as long as they are protected from interference from other bodies of governance). Moreover, the inclusion of regional authorities and federal agencies located in the regions in some of the implementation processes seems to have had a positive effect on implementation performance.

Implementation by Others

Participation by actors other than public authorities in the implementation process is sometimes believed to enhance chances of success. In particular, the participation of target groups, research communities and NGOs is assumed to bestow legitimacy on the process and increase the knowledge base for implementation. Participation by such other actors is generally limited to target groups in our case studies. In addition, scientific institutes are also to some extent included in implementation activities, mainly in fisheries management. Where participation by target groups and researchers is observed, primarily in fisheries management, but partly also in nuclear safety, it has contributed positively to those aspects of the implementation process that have proven effective. But, again, this has not been a decisive element in explaining implementation performance.

An assessment of the explanatory power of the various factors we have reviewed in relation to implementation performance is given in Table 2. The nature of the problem seems to have had a moderate effect in explaining implementation performance in all three case studies. Most importantly, the fact that major target groups have been privatized during the 1990s has quite seriously hampered implementation. The nature of the commitments proved an important explanatory element in the areas of nuclear safety and air pollution control, but not in fisheries management. The air pollution control commitments constituted no real challenge for the Soviet Union/Russian Federation, while the nuclear safety accords require behavioral changes so far-reaching that, it may be argued, complete compliance should not be expected for some time yet. Based on the results in the fisheries sector, implementation of international commitments in national legislation at the level of law is no prerequisite for further implementation activities. The performance of public authorities is a major explanation to implementation success or failure, while implementation activities of others, mainly target groups and partly also scientific communities, play a certain role. In sum, the implementation performance in the case of fisheries management can be explained mainly by both positive and negative elements in public authorities' implementation efforts. In air pollution control, the nature of the commitments, i.e. the lack or very limited need of behavioral changes, is the main explanation of implementation performance. Finally, the picture is a

Table 2

Assessed Explanatory Power of Various Factors Related to Implementation
(3: high importance; 2: some importance; 1: little importance)

	<i>fisheries management</i>	<i>nuclear safety</i>	<i>Air pollution control</i>
nature of the problem	(2)	(2)	(2)
nature of the commitments	(1)	(3)	(3)
implementation in national legislation	(1)	(2)*	(1)*
implementation activities by public authorities	(3)	(3)	(3)*
implementation activities by others	(2)	(2)	(1)

* These assessments are made on the basis of contra-factual exercises: based on the experiences of the fisheries management, it is assumed that the incorporation of international commitments in air pollution control, and, to a degree, also nuclear safety, is not a prerequisite for their successful *de facto* implementation. Furthermore, it is assumed that the high level of conflict among federal agencies would have hampered implementation of Russia's international air pollution requirements had they not implemented themselves through the reduction in industry productivity.

bit more complex in the case of nuclear safety where all the factors reviewed have had a moderate or considerable effect on implementation performance.

Conclusion

The break-up of the Soviet Union and establishment of a new Russian state in the early 1990s was accompanied by a green wave of environmental concern in the population and the reorganization of the state structure to incorporate independent agencies for environmental protection and monitoring. The State Committee for Environmental Protection, created in 1988, was elevated to the status of a ministry in 1991. An independent control agency for nuclear safety, Gosatomnadzor, was established the same year. A contrary trend followed in the second half of the decade: the federal agency for environmental protection lost its ministerial status in 1996 and its status as an independent agency four years later. Gosatomnadzor has so far maintained its independence, but has seen its powers and areas of responsibility constrained by Minatom. Similarly, the State Committee for Fisheries lost its independent status temporarily in 1997 and has since been under constant attack from other federal agencies, notably the Federal Border Service and the Ministry of Economy. Ironically, some of the present tensions at the federal level in Russia concerning the management of the environment and natural resources are the outcome of reorganizations encouraged by the West, partly even spurred by binding agreements with Western countries. Had Russia not established an independent agency for nuclear safety control, these tasks may very well have been performed successfully by Minatom and the difficulties encountered in the implementation of CTR and AMEC would not have occurred. If responsibility for fisheries enforcement at sea had not been

transferred to the Federal Border Service—a reorganization completely in line with the “Western” view that such control should be performed by agencies with limited affiliation with their target groups—our Barents Sea fisheries case study might very well have had excellent implementation performance and target compliance. While we do not intend to imply that Gosatomnadzor should not have been established—or that the transfer of enforcement powers to the Federal Border Service was necessarily a mistake in a long-term perspective—we would like to repeat that Russia in some areas of the management of the environment and natural resources has a considerable “capacity to govern” as part of its Soviet heritage. This is particularly obvious in the management of fisheries.

Hence, while the general climate surrounding the protection of the environment and natural resources is not very promising in Russia at the turn of the millennium, our case studies have also revealed patterns of governance at the regional, federal and international level that do not bode too badly for the future. First, there is the established “capacity to govern,” often overlooked by well-meaning Westerners loaded with good intentions to “teach the Russians.” Lack of knowledge of existing structures of governance in Russia might well lead to the destruction of systems that already work quite well. Second, the recent history of Northwestern Russia gives a certain hope for the future as far as the role of regional authorities in the implementation process is concerned. Apart from some initial confrontations in fisheries management, regional authorities have in all three cases taken upon themselves a coordinating role that has clearly had a positive effect on implementation performance. Third, most joint implementation initiatives have had a similarly positive effect, not only on implementation problem-solving, but also in overcoming structural difficulties created by the lack of integration and high level of conflict between various Russian agencies of governance. In both fisheries management and nuclear safety, bilateral cooperation with Norway has “forced” representatives of conflicting Russian agencies—for example, the Federal Border Service and the “traditional” fisheries complex, and Minatom and Gosatomnadzor and the State Committee/Department for Environmental Protection—to join forces, which, in turn, has had positive effects on Russian implementation efforts. Based on these conclusions, our main recommendation for the establishment of future environmental agreements with Russia would be to take into consideration the specifics of Russian political culture in drawing up implementation plans for the agreements. Moreover, the potential that lies in joint implementation at the micro level and in involving regional authorities in implementation processes should not be overlooked.

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