

**ENVIRONMENT DIRECTORATE  
ENVIRONMENT POLICY COMMITTEE  
TASK FORCE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL ACTION  
PROGRAMME FOR CENTRAL AND EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA**

**PROGRESS IN MODERNISING ENVIRONMENTAL REGULATION AND COMPLIANCE  
ASSURANCE IN EASTERN EUROPE, CAUCASUS, AND CENTRAL ASIA**

**15-16 March 2007, Brussels**

*Agenda Item 6 (v)*

*This draft report was prepared by the EAP Task Force Secretariat as a Category II document for the Belgrade Ministerial Conference. The report aims to identify achievements and challenges in implementing the Guiding Principles for Reform of Environmental Enforcement Authorities in Eastern Europe, Caucasus, and Central Asia. The review also suggests priority steps to further strengthen environmental enforcement institutions and tools in the EECCA region.*

***ACTION REQUIRED:** Delegates are invited to endorse the report for submission to the Belgrade Conference, subject to comments provided to the Secretariat by 30 March 2007.*

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## FOREWORD

In transition and emerging economies, poor environmental compliance is a major concern for the environmental authorities as it clearly demonstrates the failure to implement environmental policies and laws. In order to address this failure, effective and efficient strategies and institutions for assuring compliance are needed. Commonly, their success will depend upon a broad array of actions that governmental agencies undertake, alone or in co-operation with other stakeholders, to promote and monitor compliance and to correct or halt behaviour that fails to comply with environmental requirements. Well-designed and effectively functioning systems for assuring environmental compliance benefit society by protecting human health and the environment. Furthermore, clear rules that are applied in a fair and consistent manner can help governments to reinforce the credibility of regulation, create a predictable investment climate, and strengthen the rule of law and good governance. The role of compliance in guaranteeing a level playing field for businesses is increasingly important on a global marketplace.

The need to strengthen environmental compliance in Eastern Europe, Caucasus and Central Asia (EECCA) was recognized at the Kiev Ministerial Conference held in May 2003 within the framework of the "Environment for Europe" process. Countries were called to improve the outcomes and work methods of environmental enforcement authorities. Ministers welcomed the *Guiding Principles* for Reform of Environmental Enforcement Authorities in Transition Economies of EECCA and "invited the environmental enforcement authorities in these countries to implement [the recommendations of the *Guiding Principles*] and donor countries to help them to do so". Also countries were called to promote compliance with multilateral environmental agreements (MEAs)<sup>1</sup>.

The Belgrade Conference of Ministers provides an opportunity to assess progress in modernising environmental compliance assurance systems based on the recommendations of the *Guiding Principles*. To this end, the OECD/EAP Task Force Secretariat in a close cooperation with members of the Regulatory Environmental Programme Implementation Network (REPIN) conducted a region-wide review that aims to identify achievements and challenges of the implementation of the *Guiding Principles*. The review also suggests priority steps to further strengthen environmental enforcement institutions and tools in the EECCA region. The study focuses mostly on issues of pollution prevention and control with a limited discussion of "green" enforcement.

The EAP Task Force is an intergovernmental body that aims to facilitate reform of environmental management systems in the EECCA region. It brings together policy-makers from EECCA, Central Europe and donor countries, as well as international institutions and other stakeholders. The Task Force was established at the 1993 "Environment for Europe" Ministerial Conference in Lucerne, Switzerland. The secretariat is provided by OECD's Environment Directorate, Environment and Globalisation Division.

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<sup>1</sup> In this context, Ministers endorsed the Guidelines for Strengthening Compliance with and Implementation of MEAs in the UNECE Region.

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## ACRONYMS

BAT	Best Available Technique
BREF	BAT reference document
CEE	Central and Eastern Europe
CFD	Compensation for Damages
ECENA	Environmental Compliance and Enforcement Network for Accession
EEA	Environmental Enforcement Authority
EECCA	Eastern Europe, Caucasus and Central Asia
EIA	Environmental Impact Assessment
ELV	Emission (Effluent) Limit Value
EME	Environmental Management in Enterprises
EMS	Environmental Management System
EQS	Environmental Quality Standard
EU	European Union
INECE	International Network for Environmental Compliance and Enforcement
IPPC	Integrated Pollution Prevention and Control
MAC	Maximum Allowable Concentration
MAD	Maximum Allowable Discharge
MEA	Multilateral Environmental Agreement
NGO	Non-governmental Organization
OECD	Organisation for Economic Cooperation and Development
PCA	Partnership and Co-operation Agreements
PRD	Performance Rating and Disclosure
PRTR	Pollution Release and Transfer Registry
REPIN	Regulatory Environmental Programme Implementation Network
RIA	Regulatory Impact Analysis
SME	Small and Medium-sized Enterprises
UNECE	United Nations Economic Commission for Europe
UNDP	United Nations Development Programme
WHO	World Health Organization

**ISO Codes for Countries and Country Currencies in EECCA**

<b>Country Code</b>	<b>Country Name</b>	<b>Currency Code</b>	<b>Currency Name</b>
ARM	Armenia	AMD	dram
AZE	Azerbaijan	AZM	Azerbaijani manat
BLR	Belarus	BYR	Belarussian ruble
GEO	Georgia	GEL	lari
KAZ	Kazakhstan	KZT	tenge
KGZ	Kyrgyz Republic	KGS	som
MDA	Moldova	MDL	Moldovan leu
RUS	Russian Federation	RUB	new Russian ruble
TJK	Tajikistan	TJS	somoni
TKM	Turkmenistan	TMM	Turkmen manat
UKR	Ukraine	UAH	hryvnia
UZB	Uzbekistan	UZS	Uzbekistan som

## EXECUTIVE SUMMARY

1. In 2003, by endorsing the *Guiding Principles for Reform of Environmental Enforcement Authorities in Transition Economies*, the countries of Eastern Europe, Caucasus, and Central Asia (EECCA) agreed on a reference model to guide the modernisation of their systems for environmental regulation and compliance assurance. This report reviews their progress in implementing the *Guiding Principles*. The main conclusion is that countries took action to comply with the *Guiding Principles*, mostly to elevate the status of environmental enforcement authorities, clarify responsibilities, and provide training and a better infrastructure. While such improvements are an important basis for further reform, continued lack of progress in modernising strategies and instruments of work will inhibit institutional and environmental performance. Although the report shows that progress was uneven across the region, it was possible to identify the following patterns:

### ***Environmental regulatory frameworks are converging with international benchmarks***

2. The quality of regulatory requirements, which can have an important influence on the level of compliance, has started to improve. Core legal provisions for environmental management were largely established by 2003, and EECCA countries then launched a second cycle of lawmaking. The development of environmental codes (finalised in Kazakhstan, and on-going in Belarus, Kyrgyzstan, and Russia) emerged as a tool to make regulatory requirements more coherent. Following international benchmarks, several countries legally mandated new policy instruments, for instance, Strategic Environmental Assessment and integrated permitting. However, discrepancies between new laws and unreformed by-laws still result in regulatory requirements that are unrealistic thus difficult to implement and enforce. Regulatory Impact Analysis has only been applied in a limited way. Mandatory consultations are often perceived as a procedural burden rather than a tool to balance stakeholder interests. Despite growing recognition that continuous feedback from practice is needed to correct environmental legislation, such feedback is limited, and when a law proves to be ineffective, lawmakers often issue a corrective document without consulting practitioners and without addressing the roots of failure.

### ***The short-term targets of institutional development were met, but long-term challenges remain***

3. During the early transition period, environmental enforcement authorities received marginal attention and support due to the focus on environmental policy planning and lawmaking. Driven by government-wide administrative reforms and, sometimes, international cooperation, the institutional status of environmental inspectorates was recently strengthened in most EECCA countries. In 2004-2005, autonomous inspectorates were established in Kazakhstan and Georgia. In these two countries and Armenia, institutional reforms were preceded or accompanied by efforts to legally define the responsibilities and powers of inspectorates based on the recommendations of the *Guiding Principles*. Also, some EECCA inspectorates enjoyed higher budgets and a partly renovated infrastructure. At the same time, enforcement authorities are still exposed to intensive (up to 30% per year) staff rotation and brain-drain due to uncompetitive salaries, limited social protection and sometimes unsupportive organisational cultures.

4. Institutional capacities remain particularly low at the sub-national level. The workload increased without a proportional adjustment in human, material, and financial resources. Commonly, limited powers and capacities do not allow sub-national units to effectively implement tasks that are delegated to them. In Kyrgyzstan, Moldova, Russia, and some other EECCA countries, the quality of regulation at the sub-national level is negatively influenced by insufficient institutional separation of permitting and inspection. Deficient vertical coordination sometimes leads to the duplication of on-site visits, as reported in

Kyrgyzstan. Occasionally, national-level authorities provide policy and methodological guidance to sub-national units and local public authorities. However, vertical relations are often adversarial due to performance assessment systems that over-emphasise punishment of, rather than support for, poorly-performing sub-national units.

5. Horizontal relations, in particular, coordination and cooperation with other governmental authorities (*e.g.* sanitary inspectorates, fiscal authorities, customs, etc.), have in general improved. For example, in Kazakhstan, eleven inter-agency memoranda of understanding were signed in 2004-2006, specifying concrete areas and mechanisms of cooperation with other authorities. Joint inspections with representatives of other governmental bodies continued in Belarus, Russia, and Uzbekistan. In Belarus and Georgia, the environmental enforcement authorities and the Ministries of Internal Affairs started to share data on administrative offences in order to increase sanctions when recidivism occurs. Paradoxically, the exchange of information and cooperation within environmental authorities remains problematic; in particular, information flows between inspection and permitting units (where they are separated), and between inspection and ambient monitoring units are intermittent.

6. While judicial (either civil or criminal) response to non-compliance is still weak, the judicial authorities in some countries enhanced their environmental awareness and capacity to deal with environmental cases due to internationally-offered or NGO-led training. Regular analyses of court practice in the field of environment were launched in Belarus and Russia. Unfortunately, relations between inspectorates and courts continue to lack feedback on both outcomes of prosecution (as in Armenia, Kyrgyzstan, and Ukraine) or, more commonly, on the quality of evidence collected by environmental inspectors.

7. The need to interact with NGOs for promoting compliance is now largely accepted but concrete actions are very few. Most frequently, interaction is limited to providing access to information upon request from NGOs. Other forms of interaction include workshops and sometimes joint inspections.

***Enforcement is still suffering from unbalanced strategies, political pressures, and opacity***

8. Compliance assurance activities still resemble fire-fighting, often gravitating toward punitive instruments. Despite gradual re-focusing on environmental results, enforcement of pollution charges and fines remains an important element of work and creates perverse incentives for inspectors. Among non-compliance responses, fines are predominant while softer means (such as warning letters) were banned in some countries, *e.g.* in Kazakhstan, in order to prevent dealings between companies and inspectors. NGOs report that the declared “zero tolerance” policy is applied selectively. Lack of sound and transparent enforcement policies, protectionism by high-level officials, pressure from sectoral ministries and opaque decision-making often distort the consistency and proportionality of regulation and enforcement, thus undermining the rule of law, public confidence and staff integrity.

***The analytical basis to design better strategies and boost performance is very limited***

9. Adequate capacity to collect, analyse and disclose compliance and enforcement information is essential not only for strategic and operational planning within inspectorates, but also for ensuring transparency, accountability and integrity of these authorities, and for empowering third parties to act as indirect regulators. Currently, the information management approaches applied by environmental inspectorates favour the quantity of data over their quality or use. Thus, EECCA countries routinely collect over thirty (and sometimes up to one hundred) compliance and enforcement indicators that are broken down by medium-specific programme areas, geographic areas, or sometimes law articles.

10. Although some countries (*e.g.* Russia, Ukraine, and Kazakhstan) started to systematically analyse and disclose data on the greatest contributors to industrial pollution, the economic consequences of non-compliance and forces that drive violations are not quantified. The effectiveness and efficiency of compliance assurance instruments and strategies are not analysed. High performance is associated only with high numbers of inspections, investigated violations, or monetary sanctions. Poor standardisation of

terminology and procedures opens up opportunities for misinterpretation or manipulation of data. For the same reasons, cross-country comparability of compliance and enforcement data is very limited.

***Compliance assistance has become less sporadic, but is still limited***

11. To a large extent, the regulated community in EECCA exhibits poor knowledge of environmental requirements and low capacity to identify and adopt win/win opportunities. In order to address these problems, EECCA environmental ministries and inspectorates made important efforts to improve the access to laws and selected by-laws through their websites and other means. Half of the countries report that they organise special events to inform the regulated community about legal developments or explain new regulatory requirements. However, unlike in OECD countries, there are no comprehensive compliance promotion programmes and the implementation of compliance promotion activities by inspectorates is often seen, especially by NGOs, as exceeding the enforcers' mandate. The compliance promotion efforts still lack mechanisms that would be based on local financing rather than volatile external technical assistance.

***The probability of detecting non-compliance remains low***

12. Despite institutional improvements, the probability of discovering non-compliance remains low. This is often due to continued legal restrictions imposed to prevent corruption whereby planned inspections of industrial facilities should not occur more often than once every year or two, and all site visits should be announced well in advance. Although the problem of corruption does exist, frequency restrictions are not likely to solve it. Measures such as full transparency of inspection procedures and systematic disclosure of inspection results which are more likely to curb corruption received less attention. At the same time, there are positive developments. The use of integrated approaches in inspection widened and procedures of inspection were updated and better documented in several countries, e.g. in Georgia, Ukraine, and Kazakhstan. Modern monitoring tools such as spatial imaging are being adopted by higher-income countries. All inspectorates tend to prioritise their activities in order to use scarce resources more effectively, but the use of risk-based inspection approaches is limited by poor identification and profiling of the regulated community, as well as the absence of priority-setting methodologies and tools.

13. Compliance monitoring by regulatees themselves is still under-developed. Armenia, Georgia, Kazakhstan, and Russia improved the legal basis for enterprise monitoring and reporting. At the same time, environmental authorities still tend to impose an all-encompassing monitoring that turns out to be expensive and unattractive for companies. Self-reporting remains administratively cumbersome: commonly, companies are required to send 3-4 different reports to several authorities in different formats and with different deadlines. In contrast with permitting, this problem hardly received any attention within the "one-stop shopping" approach to regulation that has been actively promoted in the EECCA region. A new impetus for the reform in this domain could be provided by the UNECE Guidelines on Enterprise Environmental Monitoring and Reporting.

***Administrative, judicial, and social sanctions fail to provide sufficient deterrence***

14. Several EECCA countries claim to have achieved a higher deterrent effect of environmental enforcement due to a more adequate level of fines. Indeed, in several countries (Armenia, Georgia, Russia) administrative fines were made more stringent but in some other countries they were not even adjusted for inflation. Analytical tools to estimate illegal financial gains from non-compliance and the affordability of fines are missing. Fine collection rates increased over the last few years. The sharpest increase was recorded in Georgia – from 6% in 2000 to 72% in 2006, and in Azerbaijan – from 20% in 2000 to 80% in 2006. The array of other administrative sanctions is wide but few of them are used in practice, and their application lacks proportionality. Criminal enforcement is still hindered by insufficient communication between environmental inspectorates, prosecutor offices, and courts. The low capacity to collect and record non-compliance evidence and the opacity of decision-making on enforcement cases further undermine both administrative and criminal enforcement.

15. Social pressure on regulatees to achieve better compliance and enforcement by third parties has increased. Kazakhstan, Russia, and Ukraine adopted rating schemes to assess and disclose industry's environmental performance, thus promoting compliance through public pressure. In Russia, at least three different schemes exist, some of them linked to industry associations' efforts of self-regulation while others pursued by NGOs. However, the number of civil judicial enforcement cases remains insignificant despite support from advocacy groups that are active in Armenia, Belarus, Moldova, Ukraine and a number of other countries. Class-action lawsuits are not yet used.

***As a result, the impact of current compliance assurance strategies is modest***

16. Incoherent regulatory frameworks, poor economic incentives, and flawed compliance assurance strategies push companies to focus on short-term profits and disregard environmental requirements: almost every on-site visit ends up by discovering one or several violations. Environmental crime (including organised crime) is gaining ground. For example, in Russia, the number of recorded criminal cases related to the environment rose six-fold over the last decade. Illegal logging and smuggling still dominate the landscape, as crimes linked to pollution and waste management are more difficult to discover or prove. At the same time, spreading voluntary initiatives (such as adoption of environmental management systems and corporate reporting) signal a certain change in mindsets. Despite the fact that a limited number of companies are ISO 14 000 certified, the size and often dominant market position of these companies marks progress in comparison with 2003. Environmental requirements in Western markets and pressure from local communities are important drivers for improved environmental performance in some EECCA countries.

***Although the reform has been slow, its results provide a basis for further modernisation***

17. Overall, the countries' responses to environmental non-compliance are more systematic nowadays than in 2003. At the same time, profound changes in regulatory frameworks and compliance assurance strategies are still required. A first step would be to finally establish statutory and permit requirements that are not only ambitious, but also fair, feasible, and clear. Also it will be important to renounce the revenue-raising focus of work and re-orient the goals and strategies of environmental enforcement agencies on raising the level of compliance and achieving environmental results. Other priority actions include: (i) better profiling the regulated community and quantifying compliance rates; (ii) analysing the incentive framework for businesses to improve environmental performance; (iii) improving strategic planning and performance management within environmental inspectorates; (iv) encouraging third parties (industry associations, financial institutions or citizens' associations) to act as indirect enforcers; and (v) adopting stepwise, transparent and participatory enforcement policies. Continued institutional strengthening is also necessary to develop better procedures and technical guidance, train staff and improve infrastructure, as well as to ensure adequate staffing and budgets.

***Progress toward the rule of law and environmental performance requires adequate incentives***

18. "The stringency of our laws is tempered by the total laxity in complying with them", says a Russian dictum that reflects well the compliance culture not only in Russia, but in the whole region both during and after the Soviet period. Indeed, for several decades, EECCA has been marked by pervasive environmental non-compliance. Today, EECCA countries stand at a point when integration into the global economy, the legacy of past pollution (*e.g.* almost one million environmental migrants), pressure from the general public, and international cooperation could change the incentive framework thus promoting the rule of law and environmental performance. Harnessing this opportunity is crucial in order to avoid social and economic costs of environmental pollution and degradation, and to ensure a level playing field for businesses.

## 1 INTRODUCTION

### 1.1 Origins of the report

19. The need to strengthen environmental compliance in EECCA was recognized at the Kiev Ministerial Conference held in 2003 within the framework of the “Environment for Europe” process. Countries were called to improve the outcomes and cost-effectiveness at all stages of the regulatory cycle – design, compliance promotion and monitoring, non-compliance response, and evaluation and feedback. Ministers welcomed the *Guiding Principles for Reform of Environmental Enforcement Authorities in Transition Economies of Eastern Europe, Caucasus, and Central Asia* and “invited the environmental enforcement authorities<sup>2</sup> in these countries to implement [the recommendations of the *Guiding Principles*] and donor countries to help them to do so”. Also countries were called to promote compliance with requirements of multilateral environmental agreements (MEAs).

20. The *Guiding Principles* address environmental compliance assurance in a systemic way and aim to: (i) create a reference model for the long-term reform of environmental enforcement authorities; (ii) foster co-operation and information exchange among all parties involved, including governmental agencies, industry, NGOs and the general public, as well as the donor community; (iii) provide a benchmark for self-assessment, regional surveys or peer reviews. In the period after the Kiev Conference, the EAP Task Force Secretariat provided support to EECCA countries to implement the recommendations of the *Guiding Principles*. This work was done under the umbrella of the Regional Environmental Programme Implementation Network (REPIN).

#### **Box 1. REPIN – a regional partnership in the field of environmental compliance assurance**

Regulatory Environmental Programme Implementation Network – REPIN (previously known as NISECEN, or the Newly Independent States’ Environmental Compliance and Enforcement Network) is the main mechanism for dialogue on issues of environmental compliance assurance in EECCA. This dialogue involves senior environmental policy makers from environmental ministries and managers/practitioners from environmental enforcement agencies in the EECCA region, but also representatives of the non-governmental sector. REPIN is open to the participation of officials and experts from the OECD and CEE countries and facilitates know-how transfer and donor assistance to EECCA countries. The Network holds annual meetings to discuss and agree on the work programme, country-specific projects and monitor their implementation.

REPIN work has helped to revise policies and legislation, to reform environmental enforcement institutions, and to upgrade the knowledge and skills of environmental officials and experts in the EECCA region. The Network has enlarged its scope of work after the Kiev “Environment for Europe” Ministerial meeting and has been concentrated efforts in three main areas: (i) environmental policy instruments; (ii) environmental compliance assurance strategies and tools; (iii) performance of environmental enforcement authorities in EECCA. The working methods of the REPIN emphasise policy dialogue and peer learning, and rigorous analysis and good practice guidance to support reform efforts. A suite of practical tools to assist EECCA governments to implement reforms have been developed. Country-specific demonstration projects have been used to both develop and apply such tools.

REPIN is a Member of the International Network for Environmental Compliance and Enforcement (INECE). Its work also draws from, and where appropriate contributes to, activities of other international partnerships, including the IMPEL Network of the EU and the Environmental Compliance and Enforcement Network for Accession (ECENA). The Network activities thus achievements were made possible due to expert input from EECCA, CEE and OECD countries, and financing provided by the EU member countries, including the Czech Republic, Poland, the Netherlands, Sweden, the UK, as well as from the European Commission and also from Norway.

<sup>2</sup> An **Environmental Enforcement Agency** (EEA) is defined as any part of the government structure, whose primary responsibility is to identify, monitor, prevent or take action to correct non-compliance with environmental requirements.

## **1.2 Review objectives**

21. The Sixth Conference of Ministers within the “Environment for Europe” process (Belgrade, 2007) provided an opportunity to assess progress achieved by EECCA countries in modernising environmental compliance assurance systems. Therefore the OECD/EAP Task Force Secretariat conducted a review that aims at the following:

- Assess progress concerning the implementation of the Guiding Principles, major trends in environmental compliance and enforcement, and driving forces for reform;
- Present achievements and challenges with reforming environmental compliance assurance systems, including the effectiveness of stakeholder interaction and of the international aid;
- Suggest priority steps to further strengthen environmental enforcement institutions and tools in the EECCA region.

22. The main target audience for the review’s policy conclusions and recommendations are high level officials who will attend the ministerial meeting in Belgrade. The review will also be useful for environmental enforcement authorities in their efforts to raise support, domestically and internationally, for improving their effectiveness and efficiency. Other stakeholders, in particular NGOs and the regulated community, will get a better understanding of the objectives and challenges of environmental enforcement authorities in EECCA thus being able to meaningfully engage in the reform of these authorities.

## **1.3 Methodology**

23. Information to the current survey was collected on the basis of country responses to a questionnaire which was circulated in September 2006. These results, together with additional information from interviews, discussions during several workshops involving over 250 people from the region and available in literature, have been summarised by the EAP Task Force Secretariat, with support from Mrs. Natalia Zugravu, a PhD student conducting research in the field of economics of environmental compliance in transition and emerging economies.

24. The individual country responses to the questionnaire have been provided by the EECCA country experts: Ms. Julietta Glichyan and Ms. Rosa Julakyan from Armenia, Mr. Rasim Sattar-Zada from Azerbaijan, Ms. Marina Yanush from Belarus, Ms. Elena Jakobidze and Mr. Dmitri Glonti from Georgia, Mrs. Dumitru Osipov from Moldova, Mrs. Kazken Orazalina from Kazakhstan, Ms. Taisia Neronova from Kyrgyzstan, Mr. Yuri Platonov, Mrs. Victoria Sapozhnikova and Mr. Andrei Pechkurov from Russia, Mr. Munimdjon Abdusamatov from Tajikistan, and Mrs. Larissa Fefilatieva from Ukraine. Turkmenistan and Uzbekistan did not respond to the questionnaire. Additional information was gathered through e-dialogues involving the NGO community that were facilitated by the European Eco-Forum. Financial support to conduct the review was provided by the Netherlands.

## 2. QUALITY OF REGULATORY DESIGN

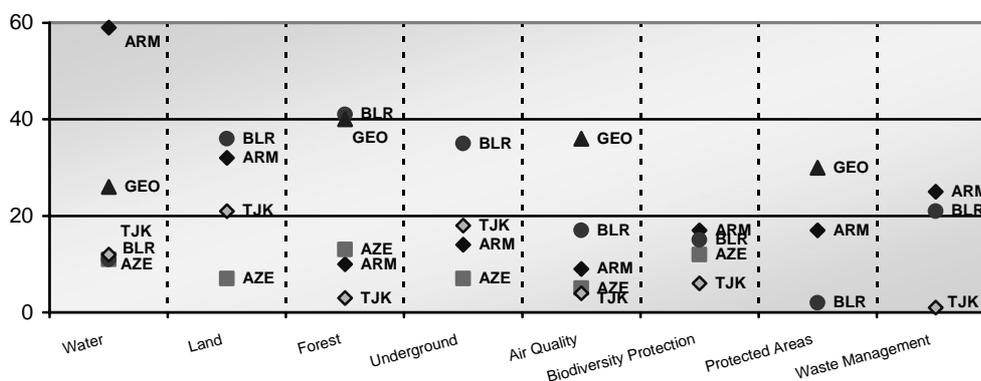
25. The *Guiding Principles* underline that environmental enforcement authorities (EEAs) cannot function effectively unless the legal frameworks establish requirements that are realistic, enforceable and simple to understand. Furthermore, the stringency of regulation and choice of regulatory instruments should take into account market incentives and the social and cultural background. If these pre-conditions are not met, authorities will face wide non-compliance and will often be forced to take discretionary decisions that are likely to lead to corruption and lowering of the credibility of the regulation as a whole. Businesses, in their turn, instead of complying might dedicate more time and money to lobbying authorities to change the requirements or to ask for special treatment.

### 2.1 Overall evolution of legal frameworks

26. The transition period in EECCA was marked by an intensive development of legal frameworks for environmental management. For example, in 2005, the environmental legal framework in Russia comprised more than 30 federal laws as compared to only six laws/codes that existed in early 1990s. In other EECCA countries, the scope of environmental law is similar. Many new legal acts were enacted over the first decade of transition, comprising umbrella laws, which set the key principles and institutional arrangements for environmental management, as well as many medium-specific laws. In mid and late 1990s, in many EECCA countries, cross-cutting laws were developed or amended to promote a more systematic use of core instruments of environmental policy.

27. The development of implementing regulations<sup>3</sup> has been slower than the adoption of framework acts, leaving in force many Soviet regulatory documents. As a consequence, it is not always clear which norms apply in a specific case. Moreover, some by-laws do not follow exactly the primary legislation (as reported by Belarus) thus multiplying the inconsistencies. In addition, the number of by-laws can be quite high (Figure 1), especially in policy areas that constitute a high priority for individual countries. All these create confusion for regulators and regulatees alike.

**Figure 1. Number of regulations establishing implementation mechanisms for media-specific legislation in selected EECCA countries (2006)**



Source: Data provided by the EECCA environmental enforcement authorities.

<sup>3</sup> The regulatory system in EECCA countries relies extensively on a large body of subordinate (“secondary”) legislation—decrees, resolutions, regulations, administrative orders, decisions, etc.

28. Once enacted the majority of laws are relatively stable, although many exceptions to this observation exist (Table 1). EECCA countries reported that amendments commonly aimed to address gaps, overlaps and contradictions in different laws. For instance, Armenia introduced 31 amendments in the Land Code over a period of four years. In general, medium-specific legislation is more stable than cross-cutting environmental legal acts. In this context, it is important to mention that while improving the legal framework is an important function of governmental authorities, it cannot become a goal in itself. Multiple and frequent amendments make the regulatory requirements unpredictable and difficult to address within a normal business planning process thus increasing the costs of compliance.

**Table 1. Some examples of the law amendment incidence in selected EECCA countries**

Scope of laws	Armenia			Belarus			Tajikistan		
	Enacted	Last changed	No of amendments	Enacted	Last changed	No of amendments	Enacted	Last changed	No of amendments
Water	2002	2005	12	1998	2006	1	2000	2005	3
Land	2001	2005	31	1999	2006	2	1996	2006	5
Air quality	1994	2005	7	1997	2006	2	1996	2004	1
Environmental Review	1995	1997	4	1993	2000	1	2003	2006	2
Economic instruments	1998	2005	13	1991	2005	12	2004	2004	0

Source: Data provided by the EECCA environmental enforcement authorities.

29. The ambitious and often uncoordinated environmental lawmaking resulted in a high level of fragmentation and a general loss of simplicity and coherence. Therefore, since 2002-2004, a second cycle of lawmaking was launched in many EECCA countries in order to improve the quality of legal acts. Several of them decided to pursue this goal by means of codification. The first document of this kind was adopted in December 2006 in Kazakhstan. Russia, Belarus and the Kyrgyz Republic are also actively developing their environmental codes, and several other EECCA countries are likely to follow. This trend is consistent with the drive to streamline and simplify regulation (environmental in particular) in many OECD countries. However, there is a risk that scarce resources will be distracted to produce mere “law registers” instead of fully-fledged codes that would streamline and clarify complex regulatory requirements that have been introduced haphazardly over the last 15-16 years.

**Box 2. Brief overview of the Environmental Code of Kazakhstan**

The Environmental Code of Kazakhstan, an act of 342 articles and some 400 pages, seeks to incorporate most of existing environmental laws and minimise the need for implementing regulations (some 80 by-laws were abrogated). The Code resolves many discrepancies in the preceding legal acts (albeit some contradictions remain within the Code) and advances important new concepts and instruments. Thus, it mandates integrated permitting for large industry starting in January 2008 while companies with a low environmental impact will only declare their activity. To prevent corruption, detailed inspection procedures are included in the Code. The focus of compliance monitoring shifts from governmental inspections to self-monitoring by industrial operators. Also, regional discrepancies in pollution charge rates were resolved by introducing nation-wide rates. In the Code, many other important reforms are mandated.

The Environmental Code was developed through extensive stakeholder consultations. Unfortunately, the very tight schedule of its preparation influenced negatively the quality of these consultations. No in-depth social or economic analyses were conducted to assess the impact of regulation although stakeholder consultations compensated to a certain degree the absence of such analyses by guarantying that new requirements are not at odds with interest of various stakeholders and the capacity to comply with, and enforce, new requirements.

Source: Personal communication and Kazakh Ministry of Environment ([www.nature.kz](http://www.nature.kz))

30. Several countries (such as Armenia, Belarus, Kyrgyzstan, Russia, and Ukraine) initiated the revision of secondary legislation. This process is at the very beginning but shows to be challenging due to the scale of reform that often covers hundreds of regulations and standards. First lessons learned, for instance from Russia (Box 3), indicate that this process need be better designed: often, the very prescriptive character of secondary legislation inherited from Soviet times remains intact.

**Box 3. Challenges in the process of secondary legislation reform in Russia**

In Russia, the new Federal Law on Technical Regulation that came into force in July 2003 abrogated the Soviet-era standards, sanitary and construction norms and other similar regulation (in total, around 60 000 secondary legal acts). According to expert opinion, up to 8 000 sectoral laws and a similar number of by-laws will need to be developed and approved during the seven-year transition period allowed by this law. There are hopes that this reform will considerably reduce the administrative burden on industries and exclude some 8-10 billion USD per year from shadow economic activity.

At the same time, progress on enacting new regulations has been extremely slow while old regulations had been abolished. In early 2007, the Russian Union of Industrialists and Entrepreneurs pointed at important delays in implementing the Law and called for a better harmonization with international standards. Heavy criticism was expressed *vis-à-vis* the highly prescriptive character of regulations in Russia, which seek to determine and control economic activity down to the smallest details thus stifling innovation.

Source: Web site of the Russian Union of Industrialists and Entrepreneurs, [www.rspp.ru](http://www.rspp.ru), last accessed on 17 February 2006.

## 2.2 Convergence with the EU environmental legislation

31. The substantive reform of environmental legislative frameworks in EECCA is largely based on the concepts of relevant European legislation. Indeed, several economic, political, and other factors make the EU *acquis communautaire* an attractive benchmark. The enlargement of the European Union to the borders of Belarus, Moldova, Ukraine and Russia has provided a powerful incentive for these countries, particularly for Moldova and Ukraine, to focus the environmental regulatory reform on moving their national environmental legislation closer to EU norms. In addition, trans-boundary environmental problems require calibrating relevant elements of the regulatory framework in these countries to be able to adequately address such issues together with the EU. Even in EECCA countries who do not identify European integration as a central political and economic goal, it is recognised that strengthened relationships with EU members in terms of trade and investment will require a certain degree of convergence of environmental regulation, *i.e.* adoption, to a feasible extent, of the main principles and features of the EU legislation, without necessarily transposing environmental directives article-by-article.

32. Although gradual convergence with key principles and standards of the EU environmental Directives has been largely accepted as a policy direction in most EECCA countries, neither EECCA governments nor the donors have a clear sense of scope, priorities and strategy for the convergence efforts. The first steps in drafting an EU convergence strategy have been taken in Ukraine, Moldova and Georgia but the process is very slow due to the limited institutional capabilities of the environment ministries and, sometimes, lack of continuity. For example, a ten-year process of convergence (started in 1996, when the first concordance tables were produced for some 10 directives) had very modest results in Moldova. In addition, there is little capacity in EECCA countries to monitor the evolution of the EU environmental legislation, while currently it undergoes important changes within the “better regulation” process (see Box 4).

#### **Box 4. European Union's "Better Regulation" Initiative**

The "Better Regulation" initiative is a centrepiece of the European Commission's "Partnership for Growth and Jobs" (also known as the renewed Lisbon Strategy) launched in spring 2005. Its key objective is to ensure that the regulatory environment is simple and of high quality since the regulatory framework in which businesses operate is a key factor of their competitiveness, growth and employment performance. To make sure that regulation is used only when necessary and that the burdens they impose are proportionate to their aim, the European Commission put a number of processes and tools in place: (i) withdraw or modification of pending legislative proposals; (ii) taking measures to simplify existing legislation; (iii) insuring better quality of new proposals through systematic use of the Regulatory Impact Assessment and public consultation.

In 2006, the Commission gave new impetus to its actions in this field by:

- Proposing the launch of an ambitious strategy to reduce the administrative burden of existing regulation. The Commission proposes that the Spring European Council agrees to fix a reduction target of 25%, to be achieved jointly by the EU and Member States by 2012, with the aim of generating tangible economic benefits.
- Adding a further 43 new initiatives to its rolling programme to simplify existing regulations, thereby contributing to the goal of enhancing competitiveness of the European economy.
- Setting a target date of 2008 for the finalisation of a programme to reduce the volume of the existing body of EU legislation through codification;
- Withdrawing in 2007 a further 10 proposals pending before the legislator;
- Reinforcing the scrutiny of regulatory impact assessments through the creation of an independent Impact Assessment Board (IAB);
- Taking more preventive action to strengthen the transposition and enforcement of EU laws.

An Action Programme, presented on 24.01.2007, demonstrates in concrete terms the way in which the Commission intends to work with Member States to cut administrative burdens on businesses by a quarter by 2012. The measures could reduce the burdens on businesses by 1.3 billion euro on an annual basis. The Programme focuses on information obligations in thirteen selected priority areas including environmental law. In this field, the following directives were selected as a priority for measurement of administrative burdens deriving from information obligations:

- Regulation No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste;
- Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control;
- Waste Electrical and Electronic Equipment Directive 2002/96/EC;
- Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles;
- Directive 2003/105/EC of the European Parliament and of the Council of 16 December 2003 amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances.

Source: "Better regulation" web site [http://ec.europa.eu/enterprise/regulation/better\\_regulation/index\\_en.htm](http://ec.europa.eu/enterprise/regulation/better_regulation/index_en.htm); Action Programme for Reducing Administrative Burdens in the European Union: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. COM(2007)23, [http://ec.europa.eu/enterprise/regulation/better\\_regulation/docs/com\\_2007\\_23\\_en.pdf](http://ec.europa.eu/enterprise/regulation/better_regulation/docs/com_2007_23_en.pdf)

### 2.3 Lawmaking procedures

33. Lawmaking procedures play an important role in securing the quality of legislation. Lack or poor organisation of Regulatory Impact Analysis (RIA) and stakeholder consultations are detrimental to compliance because authorities may not find out about important factors impeding compliance or fail to secure target group support for the proposed regulation. RIA helps to quantify the likely costs of compliance on the individual citizen or business and clarify the costs of enforcement for the State. Consultation allows target populations to have an input into the terms of the proposed regulation so that they understand why it is necessary and how their concerns have been addressed. This can give them a sense of “ownership” or understanding that will increase their commitment to the objectives of regulation and therefore increase rates of compliance.

34. In EECCA, the first generation of legal acts were drafted and enacted within “technocratic” processes that hardly included public consultations and cost-benefit analyses to estimate the feasibility or requirements. This approach showed to be counterproductive in terms of achieving regulatory compliance. The *ex-ante* Regulatory Impact Analysis to assess the potential costs and benefits of new legal provisions was and continues to be carried out sporadically and commonly has a very narrow character, mostly quantifying the costs for the State to enforce new legislation. Nine countries out of twelve assess administrative costs of enforcement, and only six countries report that they estimate compliance costs (for example, compliance costs were estimated in comparison with benefits of regulation when the Euro-2 standard for vehicles was introduced in Russia). Such analyses take the form of “explanatory notes” to draft laws and provide justification why regulation is needed.

35. Traditionally, lawmaking involves more or less extensive consultations within governmental authorities. Environmental inspectors can provide feedback on the enforceability of legislation but cases still occur when feedback from practice is requested irregularly or not requested at all. As a rule, primary legislation is coordinated with other ministries and a legal opinion from the Ministry of Justice must be obtained before sending the draft to the Government and further to the Parliament. Sometimes, sectoral ministries veto new environmental legislation, as it happened in Moldova with the introduction of integrated permitting.

36. Due to national policies of encouraging entrepreneurship and attracting foreign investments, the interests of the regulated community are increasingly taken into account within the lawmaking process and the regulatory requirements are not anymore “parachuted” on industry. For instance, the legal frameworks of Georgia and Kyrgyzstan are very explicit in this sense. The consultation process, however, seems to be very much focused on consulting industry and in some countries (*e.g.* in Azerbaijan) authorities have the right to decide whether consultations are needed at all. Furthermore, procedures providing for public consultation mechanisms may be deficient, as in Armenia and Russia, or absent, as in Tajikistan.

#### Box 5. Opportunities for public participation in environmental lawmaking in some EECCA countries

**Armenia.** The Law of the Republic of Armenia “On Legislative Acts” stipulates the right of any citizen or citizens’ organization to submit their proposals and comments on a draft legal act. Under this law, comments are accepted for five days after the draft has been posted at the web-site of the Parliament. Since the general public does not get any systemic information (directly from the Ministry or through mass media) about the laws drafted or submitted to the Parliament, this legal provision does not work in practice. Citizens’ organizations and citizens usually find out about adoption of a legislative act or regulation following its official promulgation, *i.e.* when all the opportunities to make comments or proposals have already been lost. Furthermore, the five day deadline is too tight and does not allow holding meaningful consultations.

**Azerbaijan.** The procedural framework for lawmaking, adopted in Azerbaijan, allows for public participation but the organisation of consultations is left to the discretion of the leading institution (the Parliament or relevant government agency). A body in charge of developing the draft law, as a rule, creates a commission consisting of its own employees and external experts. Representatives of various stakeholders, including NGOs, local authorities, scientists and other governmental agencies, may be involved in the work at this stage. Law drafting may also be contracted out. The leading agency may publish the draft law and/or initiate national discussion; however, there is no obligation to do so.

**Georgia.** All legal acts must be issued through a Public Administrative Proceeding, and the public must have an opportunity to participate in the proceeding. The proceeding is as follows:

- The announcement about the launching of the Administrative Proceeding and the draft law must be published;
- Twenty working days must be provided to the public for consideration of the draft;
- A hearing is held where participants should be given an opportunity to be acquainted with the proposed regulation and to suggest possible modifications;
- The responsible Governmental authority must consider public opinion in making its final decision; and
- The adopted legal act must be published.

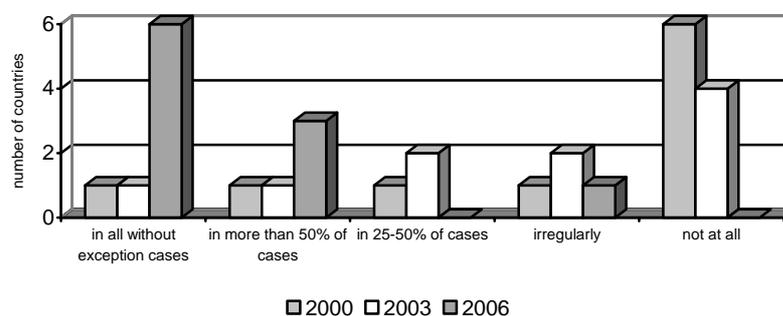
**Russia.** The consultation procedures within lawmaking are largely handled by individual governmental actors. Current law makes the lead author of a regulation responsible for organising working groups to contribute to the drafting process and to prepare background material. It is up to the author whether to consult academic or other non-governmental bodies. He is obliged, however, to consult with regional governments when a draft law is in the joint domain of federal and regional authorities. It is possible to set up permanent advisory boards including representatives of government agencies and of public associations and businesses. Several such boards have already been established, including one by the Federal Service for Environmental, Industrial and Nuclear Supervision in late 2006. These groups may discuss draft regulations and reform programs, offer opinions or make their own regulatory proposals. However, a proliferation of “consultative commissions” is reported to have little real impact.

**Tajikistan.** The general public, including NGOs, does not currently have any role in the legislative process, except for the extremely rare occasions when authorities themselves decide to seek public opinion on the draft.

Source: OECD, 2005 (Armenia) and 2006 (Russia) UNECE, 2003 (Azerbaijan) and 2004 (Tajikistan); UNEP, 2006 (Georgia).

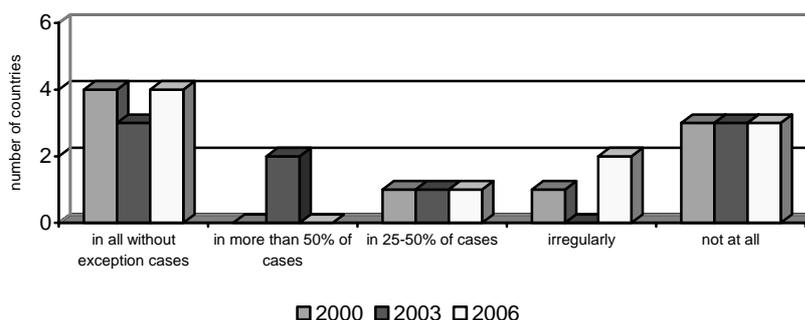
37. Stakeholder consultations will gain in quality if authorities involve a greater variety of non-governmental actors, including banks, insurers, citizens’ environmental and consumer associations, professional associations or research centres, etc. In general, the legal frameworks in EECCA encourage such stakeholder pluralism: in most of EECCA countries, agencies who draft laws are obliged to publish drafts on their web-sites and provide an entry point for comments and proposals (Figure 2). The environmental authorities from Georgia, Kyrgyzstan, and Ukraine report that they already do this regularly; more rarely this is done in Armenia, Belarus and Tajikistan. There are other means to provide access to draft laws, *e.g.* through newspapers or during meetings (Figures 3 and 4).

**Figure 2. Number of countries that posted draft environmental laws on the Ministry’s of Environment web site (2000-2006)**



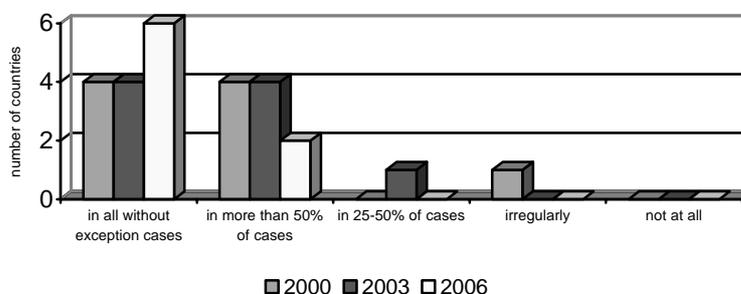
Source: EECCA Environmental Enforcement Authorities. Data missing for Turkmenistan and Uzbekistan.

**Figure 3. Number of countries that published draft environmental laws in newspapers (2000-2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

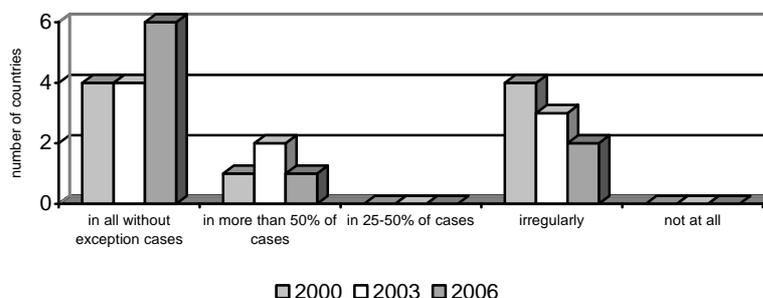
**Figure 4. Number of countries where environmental authorities hold stakeholder meetings to seek feedback on draft environmental laws (2000-2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

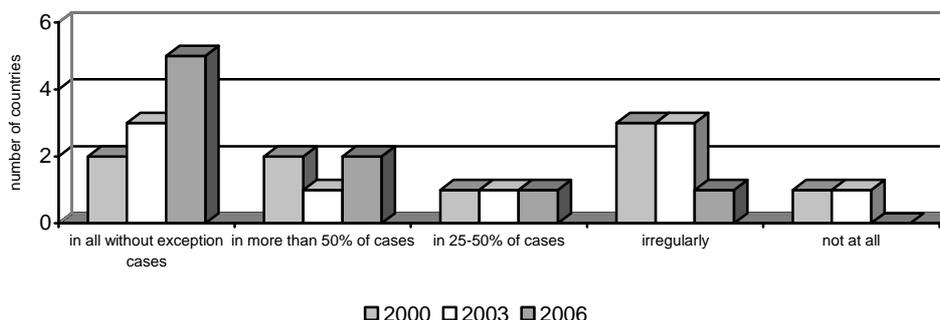
38. While important measures were taken so far to improve procedural aspects of lawmaking, a next step is proving that consultations are not meaningless and stakeholder opinions make a difference. The environmental authorities from Armenia, Azerbaijan, Kyrgyzstan and Ukraine report that they accept written comments on draft laws/regulations from NGOs and regulated community and explain what comments were [not] accepted and why in all without exception cases. Also according to information offered by environmental authorities, this is done more than 50% of cases in most of other EECCA countries. NGO community has expressed a less optimistic view, particularly as concerns acceptance of comments or provision of explanations why they were not accepted.

**Figure 5. Number of countries where environmental authorities accept written comments on draft laws/regulations from NGOs**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

**Figure 6. Number of countries where environmental authorities accept written comments on draft laws/regulations from the regulated community**



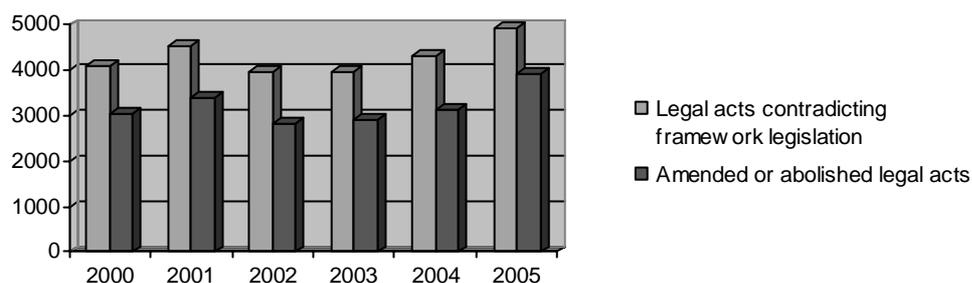
Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

## 2.4 Lawmaking at the sub-national level

39. Lawmaking at the sub-national level is very limited: among EECCA countries, only Russia, which is a federal state, provides for the right to enact primary and secondary legal acts at the sub-national level (Box 6). In some centrally-organised countries, *e.g.* Kazakhstan, sub-national authorities may, however, enjoy the right of setting more stringent ambient standards. While sub-national level lawmaking has the virtue of better responding to local parities, particularly in countries with a vast territory, safeguards need to be put in place that would guarantee the quality of resulting acts and their consistency with framework legislation, in particular with minimum environmental requirements

### Box 6. Quality of lawmaking at the sub-national level in Russia in 2000-2005

In Russia, many subjects of the Federation have actively used their right of lawmaking but the quality of resulting legal acts and their adherence to the federal-level framework was low. A number of publications by the World Bank support the view that sub-national governments and businesses insiders actively worked to undermine federal policies, regulation, and oversight.



At the same time, discrepancies between old federal and new sub-regional laws are likely to reveal problems with the quality and coherence of federal legislation that serves as a benchmark for such analysis. A careful analysis of law quality is therefore needed at both federal and sub-national level.

Source: State of the Environmental Reports of the Russian Federation for 2002-2005, [www.mnr.gov.ru](http://www.mnr.gov.ru)

## 2.5 Gradual phase-in of regulatory requirements

40. An important change in EECCA is the gradual phase-in of legal requirements. Until 2003, in many countries of the region legal requirements used to come into force immediately after a law (or a normative act) was approved and officially published. This practice changed. For instance in Kyrgyzstan, due to an amendment to the Law on Legal and Normative Acts introduced in 2004, at least three months should pass after official publication for a legal act to come into force if interests of economic agents are concerned. If immediate compliance is not possible due to technical reasons, the law should provide for a longer implementation timeframe. These constructive changes in the lawmaking procedures are very helpful in addressing some of the current regulatory failures.

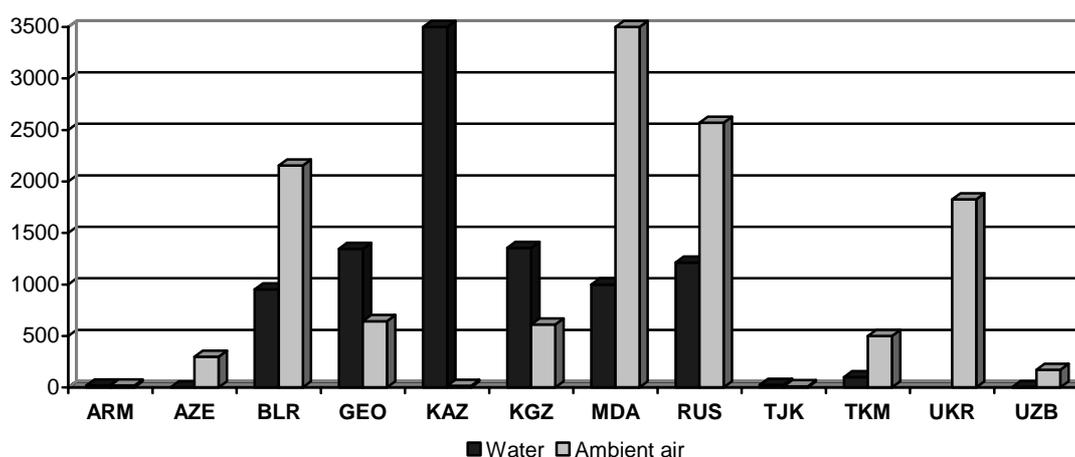
## 2.6 Realism of regulatory requirements

41. Compliance rates are likely to be low when a government is using policy instruments and setting regulatory requirements that fail to take into account market and social incentives. In EECCA countries, such a situation persisted for many years as core regulatory instruments remained mostly at odds with incentives faced by the regulated community. Lack of realism was particularly worrying.

42. The system of environmental quality standards is among the last legacies of the Soviet regulatory regime that have remained virtually intact. This system covers hundreds of parameters and sometimes mandates very low concentrations of pollutants compared with respective WHO guiding values and other international benchmarks. Ambient standards (maximum allowable concentrations, MAC) usually set by the Ministry of Health are determined exclusively on the basis of zero impact on human health and ecosystems without accounting for risk management factors such as economic feasibility of compliance.

43. In some countries, the number of polluting substances that are currently regulated is still very high (Figure 7) and cannot be effectively monitored with the limited technical capacity and human resources available (this refers to both authorities and industry: see Chapters 3 and 4). At the same time, a regulatory requirement makes sense only if it is possible to demonstrate compliance (or non-compliance) with it. In comparison with 2003, none of the countries reduced the scope of regulation. Furthermore, there is no consistency in the number of regulated substances on a sub-regional level where priority pollutants are rather similar in several countries.

**Figure 7. Number of air and water pollutants that are regulated in EECCA countries (2006)**



Source: EAP Task Force questionnaire; data for Russia (2003) are based on Krotov Yu. (2003), *Maximum Allowable Concentrations of Chemical substances in Ambient Air, Water, and Working Area*. The number of regulated substances reflects the sum of MACs and the so-called TSELs (tentatively safe exposure levels).

44. The excessive stringency of a large number of MACs often resulted in the neglect of standards, well illustrated by the magnitude of past and contemporary pollution problems. For example, in Kazakhstan the MAC of lead in soil is 32 mg/kg – this is much more stringent in comparison with 400 mg/kg in United States and Germany, or even 530 mg/kg in the Netherlands. At the same time, uncontrolled lead production in the city of Shymkent resulted in concentrations that are almost 800 times higher than the MAC. Therefore, the exposure of children from three schools and a kindergarten located in the vicinity of the plant was extremely high and 66% of children developed different symptoms of lead intoxication.

45. Although no major progress has been achieved in changing the system of environmental standards, the reform process has started in several EECCA countries, *e.g.* Armenia, Kazakhstan, Moldova, and Russia. In Moldova, an international project implemented by the EAP Task Force Secretariat is underway to support convergence with EU surface water quality standards. Under this project, a new system of surface water quality standards was proposed for Moldova, reducing the list of regulated parameters from 1,083 (in the current regulation for fishery waters) to just 77. The proposed system also distinguishes five water quality classes with numerical standards for each parameter, with each of the classes defining which uses are supported given certain surface water quality. This scheme is intended to be used as an active water management tool, where designation of a target water quality class would drive respective regulatory requirements. The reform efforts are not always coherent. For example, in Kazakhstan, the Water Resources Committee of the Ministry of Agriculture has recently introduced “maximum allowable harmful impact norms” for surface water quality which represent a half-hearted attempt to combine the European water quality classification with the old MACs without turning water quality objectives and standards into tools of environmental planning based on risk management.

46. The general goal of the reform of the Environmental Impact Assessment (EIA) systems in EECCA countries has been to reduce the gap between the State Environmental Review (SER, also known as ecological expertise) systems inherited from the USSR and internationally accepted EIA standards. This intention was reflected in more than fifty EIA-related laws and regulations adopted in the region during the 1990s. Currently, all EECCA countries have laws requiring EIA, although these laws vary in consistency and comprehensiveness. EIA practice has varied between countries in the region more than the legislation. In those countries where EIA/SER laws were passed in the early or mid-1990s (*e.g.* Russia, Ukraine, Moldova), considerable practical experience has been accumulated, allowing these countries to contemplate the introduction of “second generation” EIA legislation bringing the SER systems into closer conformity with international best practices, including the requirements of the EU EIA Directive. However, no significant progress in the regulatory basis for EIA and SER has been reported since 2003.

47. Most of EECCA countries continue to use case-by-case single-medium permitting for air, water and waste, the scope of regulation spanning a large number of substances and practically all pollution sources irrespectively of their size. Enterprises must still comply with a wide range of environmental statutes, each requiring a separate permit. Having centred their regulatory systems on compliance with excessively strict air and water quality standards, EECCA countries fail to consider the technical and economic feasibility of resulting emission/effluent limit values (ELVs).

48. This approach has led to permits being oriented toward inflexible end-of-pipe solutions rather than pollution prevention and imposition of excessive costs on industry. In practice, however, temporary (but routinely renewed) limits are often set at values close to actual pollution levels, providing no incentive for pollution reduction but, instead, resulting in budget revenues that provide a perverse incentive to authorities to leave intact the current system. An alternative approach is used in Armenia, who introduced longer-term negotiated compliance schedules to compensate for the stringency of ELVs.

49. Over the last four years, EECCA environment ministries have come to realise the deficiencies of this Soviet-legacy permitting system. Most EECCA countries have started a permitting reform process, with industry's support, trying to shift the regulatory emphasis to more realistic technique-based norms. The changes are largely inspired by the approach of the European Union's IPPC Directive (96/61/EC) but take different form in different countries (see Box below). The permitting reform process in EECCA countries is likely to intensify in the near future.

**Box 7. Different models of environmental permitting reform in EECCA**

In **Ukraine**, the political commitment to convergence with the EU legislation aligns the reform more closely with the European norms. With assistance from the World Bank, Ukraine's Ministry of Environmental Protection expects to draft a law on environmental permitting in 2007 which would stipulate a phased transition to integrated permitting based on best available techniques for large industry and simplified permit requirements for Small and Medium-Sized Enterprises (SMEs).

In **Georgia**, the diversification of regulatory requirements based on the environmental significance of installations and the concept of BAT were introduced already in 1996. The recent Law on Licenses and Permits lays a basis for procedural integration of the permitting process, where one designated permitting authority consults other stakeholder agencies. However, the practical implementation of these principles is compromised by the narrowed range of installations that require an environmental permit, eroded authority of the Ministry of Environmental Protection and Natural Resources, and numerous deficiencies of the permitting regulations themselves.

In **Kazakhstan**, separate medium-based environmental permits have been integrated into a single document and the new Environmental Code calls for the introduction of integrated permitting for large industry already in 2008. However, there are serious capacity constraints for such radical short-term changes in the country.

In **Russia and several other EECCA countries** (e.g. Armenia, Belarus, Kyrgyzstan), regulations are being drafted that are likely to replace environmental quality-based permit requirements with uniform technology-based ELVs, thereby limiting the discretion of permitting authorities. This reform is seen as a way to facilitate investments and alleviate the regulatory burden on industry. Results achieved so far are controversial, as industry requires a wider use of performance-based standards.

Source: OECD/EAP Task Force Secretariat, 2007.

## 2.7 Law enforceability

50. In order to deter wrongful conduct and remedy violations that take place, the law should determine appropriate remedies and sanctions. Legal systems must also indicate who should bear the loss when accidental harm occurs. These characteristics of legal systems reflect their "enforceability".

51. In EECCA, a very large spectrum of enforcement tools exists, including

- "Soft" responses, such as warning phone calls and letters with compliance recommendations;
- Formal notices of violation;
- Monetary penalties (fines), administrative and judicial;
- Suspension or cancellation of the permit(s), facility shut-down, forced corrective actions, or attachment of property, all of which may be required by administrative or judicial order;
- Criminal punishment, including imprisonment.

52. Some EECCA (such as Armenia, Georgia, and Russia) countries increased the level of administrative fines but in a few other countries they were not even adjusted for inflation. In comparison with OECD countries, the level of fines is still very low and there are very large variations, including within smaller geographical units. For instance, in the Caucasus, the maximum

levels of administrative fines that may be imposed on companies differ as much as 100 times between Georgia (app. 40 000 USD) and the other two countries – Armenia and Azerbaijan (app. 400 USD).

**Table 2. Stringency of administrative monetary penalties and criminal non-compliance responses in EECCA countries**

Indicator	Year	Armenia	Azerbaijan	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Moldova	Russia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
<b>Instruments of administrative enforcement</b>													
Maximum fine for a legal entity (thousand USD)	2000	*			35.4								
	2003	0.4	0.4		35.4								
	2006	0.4	0.4	14.5	40.0								
Maximum fine for a natural person (thousand USD)	2000	*			35.3								
	2003	0.2	0.05	0.4	35.3								
	2006	0.2	0.05	0.7	40.0								
<b>Instruments of criminal enforcement</b>													
Maximum fine for a legal entity (thousand USD)	2000	108			-								
	2003	65	6.3		-							0.3	
	2006	147	6.3		-							0.3	
Maximum fine on a natural person (thousand USD)	2000	n.a			-								
	2003	n.a	6.3	8.0	-							0.1	
	2006	n.a	6.3	14.5	-							0.1	
Maximum imprisonment of a natural person (months)	2000	n.a		60	96								
	2003	n.a	180	180	96								
	2006	n.a	180	180	96								

**Note:** Information is being gathered to complete the table.

(\*) In 2000, the maximum administrative fine in Armenia constituted 0.5 US dollar for a natural person and 2 USD for legal entities.

Source: EECCA Environmental Enforcement Authorities.

53. As a rule, authorities escalate sanctions where soft restorative action fails to achieve results and, in principle, the current penalties at the top of the so-called “enforcement pyramid” are sufficiently serious. Overall, the “enforceability” of legislation in EECCA improved but improvements are still marginal to serve as a real deterrent to violations. Chapter 4 discusses how various sanctions are used and whether they are effective.

54. At the same time, the deficiencies of the current environmental liability system in EECCA remain unaddressed. The existing methodologies for environmental damage assessment are speculative, inaccurate, and often too complex to present to arbitration courts that are supposed to adjudicate on these issues (explaining very low collection rates of compensations for damage). For the first time in EECCA, Kazakhstan’s new Environmental Code envisages expert assessment of damages based on actual costs of a selected remedy but implementation guidance is yet to be developed. Mandatory environmental insurance for hazardous industrial installations introduced in Russia (in the late 1990s) and several other EECCA countries will remain a dysfunctional instrument until industry’s exposure to environmental liability becomes real.

### 3. INSTITUTIONAL ARRANGEMENTS

55. In many cultures, including EECCA countries, the notion of “institution” has been associated with structures and organisation charts. As a consequence, “institutional reform” was often reduced to multiple re-organisations of governmental bodies. The modern interpretation of “institutions” shifts this notion towards strategies and working methods rather than structures. This implies a need to change the focus on the way in which people work, interact, make decisions and thus resolve problems.

56. The *Guiding Principles* advocate that enforcement authorities are established as autonomous institutions, with clear, legally-defined responsibilities and appropriate powers to monitor compliance and exercise administrative enforcement, as well as offer compliance assistance and ensure open communication with, and participation of, the general public. In a vertical structure, the mandate to take enforcement-related decisions should be delegated to, and made at, the lowest level where issues can be effectively managed. National level authorities should support sub-national units in maintaining institutional integrity, strengthen their capacity, provide methodological guidance, staff training and establish appropriate funding and performance measurement mechanisms. The internal organisation should promote teamwork and effective working relations should be established and maintained with other agencies and departments whose activities are linked to environmental enforcement.

#### 3.1 Institutional status of environmental enforcement authorities

57. All EECCA countries, except Turkmenistan, have specialised units responsible for the monitoring of compliance with regulatory requirements and administrative enforcement though their institutional status and organisation vary. The environmental enforcement authorities (often called “inspectorates”) are usually well integrated into the Environment Ministries. At the national level, they have the status of a Ministry’s department (as in Azerbaijan) or a more autonomous specialised unit of the Ministry (as in Armenia, Georgia, Kazakhstan, Moldova, Russia and Ukraine). Autonomous units have, as a rule, legal identity and, sometimes, a separate budget. In Belarus, Tajikistan and Uzbekistan a range of different inspectorates (for air, water, etc.) exist as subdivisions of the Ministry (or the State Committee) responsible for environmental protection. Only in Turkmenistan inspection is carried out by various departments of the Ministry of Environment.

58. During the early transition period, the enforcement arms of environmental ministries received marginal attention and support due to the focus on policy planning and lawmaking. Since 2003, the importance and visibility of inspectorates increased and they gained higher institutional status in almost all EECCA countries. For instance, heads of inspectorates are appointed by the Prime Minister in Kazakhstan, Moldova, Russia, and Ukraine. Independent inspectorates were created in Georgia (in September 2005) and Kazakhstan (in October 2004). In Armenia, Georgia, and Kazakhstan, institutional reforms were preceded or accompanied by efforts to legally define the responsibilities and powers of inspectorates, based on the recommendations of the *Guiding Principles*.

59. Institutional changes were often driven by government-wide administrative reforms. For instance, this happened in Russia where the executive bodies were streamlined in 2004 based on the principle of clear division of policy making, regulatory, and service provision functions (see Box 8). Similar lines of development could be observed in Kyrgyzstan and Moldova where “functional” analyses of government bodies were conducted by UNDP in 2004 and 2006, respectively.

**Box 8. The 2004 administrative reform in Russia and its impact on environmental authorities**

In Russia, the administrative reform of 2004 pursued the goal of clearly separating policy making, regulatory and compliance monitoring, and service provision functions of government authorities. Such a separation has the virtue of increasing the effectiveness of government authorities while reducing the conflicts of interests that arise when these functions are combined. Three types of executive bodies were instituted:

- **Federal ministries**, which are policy-making bodies. They conduct the problem analysis, development and evaluation of policies in their domains, as well as draft new legislation. Also they coordinate and monitor the activities of federal services and agencies within their jurisdiction. They are not authorized to perform enforcement functions, to manage state property or to provide services;
- **Federal services**, which are federal executive authorities vested with permitting, inspection and administrative enforcement functions, but are not authorized to develop primary legislation;
- **Federal agencies**, which can provide public services and manage state property, maintain various types of registers, but are not authorized to engage in regulatory development or perform any compliance assurance functions.

Today, the key authorities responsible for formulating and implementing the environmental policy and law in Russia are the Ministry of Natural Resources (MNR) and the Federal Environmental, Industrial, and Nuclear Supervision Service (*Rostekhnadzor*, or RTN). The compliance assurance functions were delegated to two federal authorities: the RTN, accountable to the prime-minister, and the Federal Service for Supervision over Use of Natural Resources (*Rosprirodnadzor*) that is subordinated to the MNR. They supervise industrial impacts and natural resource use, respectively. There is little evidence that the reorganisation achieved its aims as functions are not totally separated and regulators continue to be exposed to political pressure.

Source: OECD, 2006. Environmental Policy and Regulation in Russia: the Implementation Challenge.

60. Also international cooperation supported the process of institutional development by sustaining policy dialogue among countries and creating peer pressure to catalyse reforms. Thus, a pilot Peer Review Scheme was launched in 2004 in the framework of the OECD/EAP Task Force in order to help countries of the region to implement the *Guiding Principles*. Experts representing OECD member states, other transition economies, international organisations, NGOs and the private sector take part in the programme. It aims to: (i) identify major policy and institutional development needs; (ii) enhance government's transparency, accountability, and visibility, at national and international level; and (iii) extend opportunities for inter-government dialogue and support capacity building.

61. So far, this programme was applied in two EECCA countries – Armenia in 2005 and in Kyrgyzstan in 2004 and confirmed to be an effective mechanism for distilling achievements and bottlenecks in environmental enforcement. It also helped to attract more resources and build in-country partnerships for improving the effectiveness of environmental compliance assurance. For example, in Armenia the review resulted in greater support from the government, including a better financing of the State Inspectorate for Environmental Protection to upgrade facilities, and remunerate and train staff. Use of modern strategies of compliance assurance was part of such training. Donor aid was provided to procure office equipment and train staff. As a result, the Inspectorate has increased its capacity to prevent and reveal environmental violations.

62. Contrary to the general trend, enforcement authorities in Kyrgyzstan (Box 9) and Tajikistan were downgraded. In Kyrgyzstan, they operate at the level of a division within the State Agency for Forestry and Environmental Protection (SAFEP). In Tajikistan, the entire State Committee for Environmental Protection (and its sub-division, including several specialised inspectorates) was integrated into the Ministry of Agriculture at the level of a ministerial department. In early 2007, Kyrgyz authorities finally decided to elevate the status of environmental enforcement authorities and establish an autonomous sub-division (with its own legal entity) of the SAFEP that would be responsible for both permitting and inspection.

**Box 9. The instability of the environmental enforcement authorities in Kyrgyzstan**

The organizational structure of environmental enforcement authorities in the Kyrgyz Republic was quite instable last few years. Before 2001, the main environmental enforcement agency in Kyrgyzstan was the Main Division for Environmental Inspection (MDEI) of the Ministry of Environment Protection (MEP). Following the merger of the MEP with the Ministry for Emergency Situations in March 2001, the MDEI was transformed into the Department for State Environmental Control (DSEC). In 2003, the DSEC was merged with the former Department for Ecology and Environmental Monitoring, to form the DENRU – the Department for Ecology and Nature Resource Use. Before 2001, the Regional Departments for Environmental Protection (RDEPs) were directly subordinated to the national inspectorate. Under this model, staff from the national level supervised the activities carried out at the sub-national level. In 2003, the national-level inspection authority lost the direct jurisdiction over RDEPs and this situation did not change when the State Agency for Forestry and Environmental Protection was created in 2005.

Source: OECD (2005), *Environmental Enforcement in Kyrgyz Republic*.

63. However, even in countries where inspectorates are autonomous, the limits in autonomy become visible when enforcement actions are taken against largest companies. For example, in Russia the Minister of Natural Resources was very closely involved in the operational decision-making on the controversial Sakhalin II case<sup>4</sup> that goes against the authorities' goal to pursue a clear separation of policy making and enforcement functions.

64. The fact that most enforcement authorities are sub-divisions of environment ministries is not a problem as such. On the contrary, it might be beneficial for a better functioning of various elements of the regulatory cycle, especially for effective interaction with peers responsible for lawmaking and permitting. Experience from OECD countries has shown that a variety of organisational models exist and can function effectively if relationships are clearly defined and institutional arrangements allow the inspectorates to operate relatively free of political pressure and take independent decisions.

65. An EECCA-specific problem caused by the subordination of environmental inspectorates to environmental ministries down to the operational level stems from the structural instability of these ministries and frequently changing leadership. As a result, during very long periods of time officials across environmental authorities concentrate on setting up the new structures and sorting out their respective roles. This situation does not improve last 6-7 years and often brings the system of environmental management to the edge of institutional paralysis.

### **3.2 Scope of work**

66. Unlike the OECD countries, in the EECCA region, inspection and administrative enforcement in both “green” and “brown” areas were largely integrated under the umbrella of environmental ministries (state committees) and, as mentioned above, delegated to one or several “inspectorates”. The level of integration varies between countries and frequent changes in scope occur. For instance, in 2004 the Russian government decided to separate “green” and “brown” enforcement and delegate the latter function to the agency in charge with industrial and nuclear safety. This decision was taken less than two years after another major reorganisation that integrated supervision of natural resource use with supervision over regulated industrial sites. Also in Kyrgyzstan and Ukraine the control over forest resources was several times delegated to environmental enforcement authorities then withdrawn from their jurisdiction.

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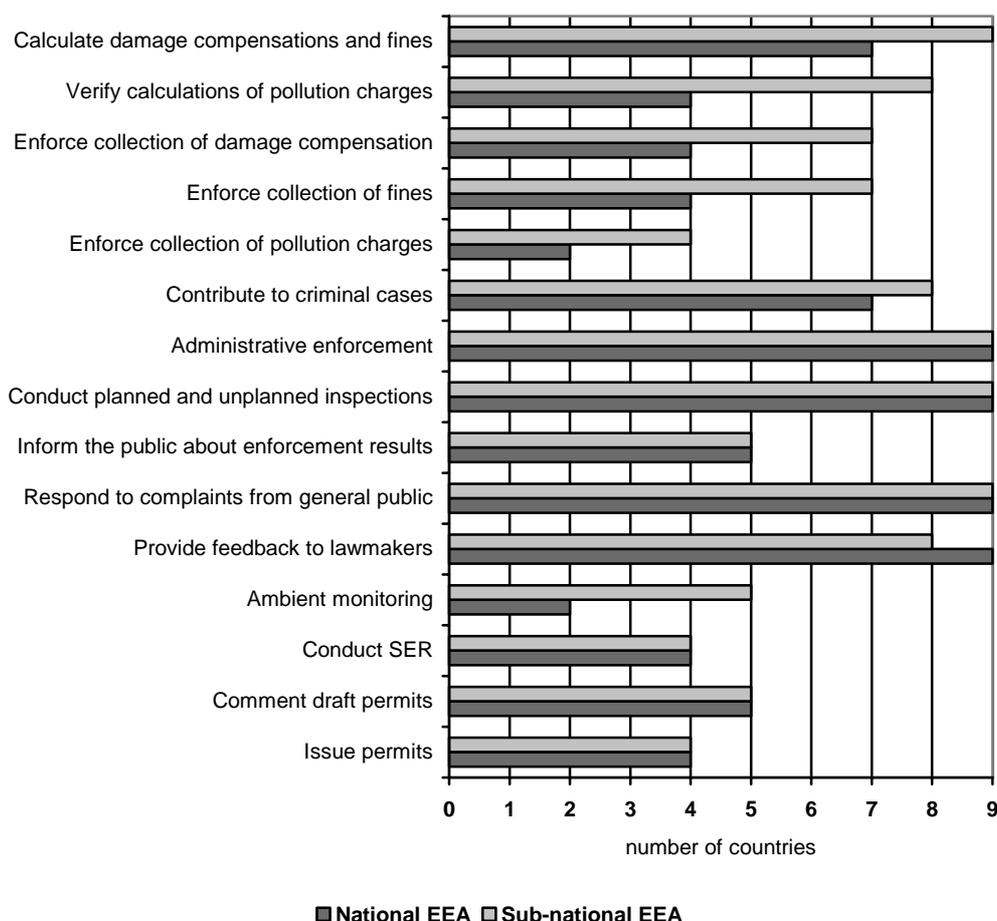
<sup>4</sup> The Minister of Natural Resources made several public declarations in relations to environmental compliance by Sakhalin II project developer, incriminating the project developers, led by Shell, for criminal breaches of the environmental law. However, as reported by BBC, “some analysts said the way the Sakhalin issue had been handled was designed to strengthen the government's position in renegotiating the development of the field. The aim, they said, was to get Russian energy giant *Gazprom* into the project - the world's largest single oil and gas scheme – as a partner.”

67. The implications of a wider scope of work are not clear in any country. On the one hand, it enables authorities to provide a more integrated approach to environmental management, as well as should help to avoid duplication of work of different state bodies. For instance, recent administrative reforms in Russia resulted in a high level of institutional fragmentation: at the federal level, at least seven agencies have environmental management functions, while at the sub-national level their number is almost double. At the same time, the effectiveness of “integrated” enforcement agencies is often inhibited due to scarce resources and lack of clear priorities and measurable compliance targets.

### 3.3 Responsibilities

68. The EECCA environmental inspectorates report having clearer, legally defined responsibilities. These responsibilities universally include inspection and administrative enforcement, and in one third of countries – permitting. Compliance promotion responsibilities are rarely assigned to EECCA inspectorates. As mentioned in the previous chapter, inspectorates provide feedback to lawmakers although sometimes it is totally disregarded thus highly de-motivating any further feedback (as happened, for instance, with comments provided by inspectors on the Water Code of Ukraine). Some important functions, such as analysis of economic trends and law drafts, or of any emerging challenges, as well as strategic planning are not well covered in EECCA.

**Figure 8. Responsibilities attributed to environmental enforcement agencies at the national and sub-national level in EECCA (2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

69. Commonly, the role of the enforcement authorities is legally-defined: relevant provisions are either part of the umbrella laws on environmental protection or other framework acts. Recently, such framework laws that regulate the functioning of compliance assurance systems were developed in Armenia (2004) and Georgia (2005), and a separate chapter included in the Environmental Code of Kazakhstan (2006).

70. In terms of assigning responsibilities, an important decision is whether to delegate environmental permitting to an EEA. The institutional relationship between permitting and inspection is important as it can affect the degree to which information is fed back from the process of setting the facility-specific regulatory requirements to complying with them, and *vice-versa*. Opinions on this subject and real-life institutional arrangements may be situated at extremes. The Netherlands, for example, strictly separates the two functions, while in Denmark, Ireland and the UK these functions may be carried out by the same individual. Depending upon the country context, both models can be effectively applied. To avoid conflict of interest, however, in transition economies it is advisable that permitting and inspection are not assigned to the same sub-unit within the EEA.

71. Box 10 provides some information on the institutional relationship between permitting and inspection in selected EECCA countries. There is clear variability, though in most cases the two functions are separated. The separation is achieved either by using different divisions within the enforcement authority, or having staff assigned to the different roles. In some cases, *e.g.* in Kyrgyzstan and Uzbekistan, the same staff may undertake both functions.

**Box 10. Institutional models used in EECCA countries to perform permitting and inspection**

**Complete institutional separation at both national and sub-national level:**

Such a model is now promoted in Ukraine. Previously, at the sub-national level, both functions were carried out by the territorial units of the Ministry of Environment Protection. The State Environmental Inspectorate was not involved in this process. In 2007, the MEP decided to finally separate permitting from inspection at the sub-national level. While this organisational re-structuring could bring benefits by allowing inspectors to focus their work on compliance monitoring, it maximises the risk of poor consideration of inspection results within the framework of permitting.

**Separation of permitting and inspection within the enforcement authority:**

This model is used by the Moldovan State Environmental Inspectorate. Traditionally, both permitting and inspection were undertaken by the Inspectorate, but involved different subdivisions or personnel. When permitting staff needed to clarify issues they could participate in inspections. Due to a higher cost-effectiveness, this model was relatively well adapted to the country needs. At the same time, the opacity of permitting and inspection procedures made this system exposed to problems ranging from undisclosed poor design of permits to corruption. Therefore, Moldova would need to make both permitting and inspection more transparent while continuing to use a model that is least demanding in terms of necessary funding. At the same time, delegation of both permitting and inspection to the same person need be imperatively avoided.

**Partial institutional separation:**

In Kazakhstan, permitting and inspection at the national level are under the jurisdiction of different bodies of the Ministry for Environmental Protection. At the sub-national level, permitting and inspection are undertaken by different units of the Territorial Departments for Environmental Protection.

**Same staff undertaking both inspection and permitting:**

In Kyrgyzstan, at the national level permitting and inspection are undertaken by the same staff. It is reported that inspection results are actively used in revising permits. However, such a model often leads to precedence of permitting over inspection due to tight permitting deadlines, and sometimes poor quality permits due to a heavy workload.

Source: Data provided by the EECCA environmental enforcement authorities.

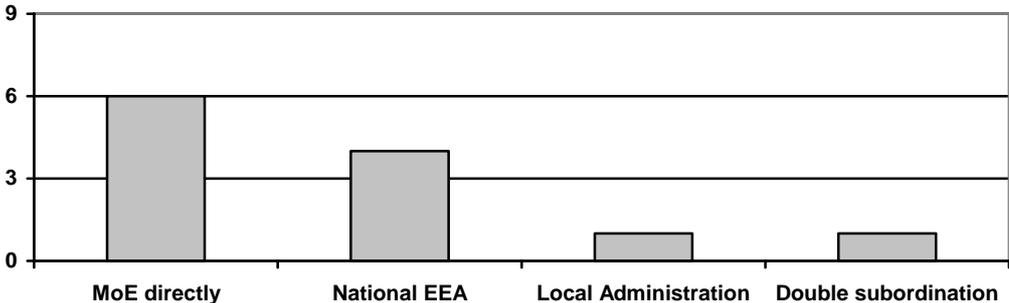
72. Institutional separation of permitting and inspection calls for adequate information flows that often shows to be limited in EECCA countries. Some countries started to acknowledge and even address this problem: for example, in Georgia, a database of permits and licences was created to enable permit writers and inspectors to regularly share information. In terms of feedback from inspection to permitting, the current practices differ across the EECCA region. For example, in Azerbaijan inspectors are requested to visit the facility during the permitting period and to issue a report on the inspection which is taken into account when the decision to issue the permit is made. Permits can be suspended or cancelled when the requirements are not met or where other environmental violations are revealed. On the contrary, the results of inspections in Ukraine are not taken into account in revising permits.

**3.4 Vertical organisation**

73. A basic institutional issue of compliance assurance is to what extent to centralise responsibilities for enforcement at the national level or decentralise them at more local levels. There are advantages and disadvantages to both centralisation and decentralisation. A national presence in compliance assurance helps ensure that at least minimum environmental standards and requirements are met; that the system is consistent and fair throughout the country; and that national resources are available to support compliance assurance efforts. Involvement of sub-national authorities is important because they are closest to the actual environmental problems and best able to efficiently identify and correct them. Great geographic dispersion of regulated facilities provides another strong argument in favour of decentralisation.

74. Generally, the environmental enforcement systems in EECCA countries are decentralised. However, the organisation and exact relationship between the sub-national environmental enforcement authorities and the national authority vary. In most countries, the sub-national units are part of the environmental administration and report either to the Ministry of Environment directly (as in Kazakhstan) or to the national-level environmental enforcement authority (as in Armenia and Moldova). In Russia, local administration (including at the municipal level) received the right to regulate and inspect a certain segment of the regulated community. In Tajikistan, local-level environmental inspectorates are accountable to both environmental administration and local administration. In Ukraine, the candidates for the chief inspector position at the local level must be endorsed by local administration that, in fact, also turns into some kind of double subordination, which creates ambiguity about responsibilities. Such arrangements need careful revision.

**Figure 9. Lines of subordination of the sub-national environmental enforcement authorities in EECCA**



Source: EECCA environmental enforcement authorities. Data missing for Turkmenistan and Uzbekistan.

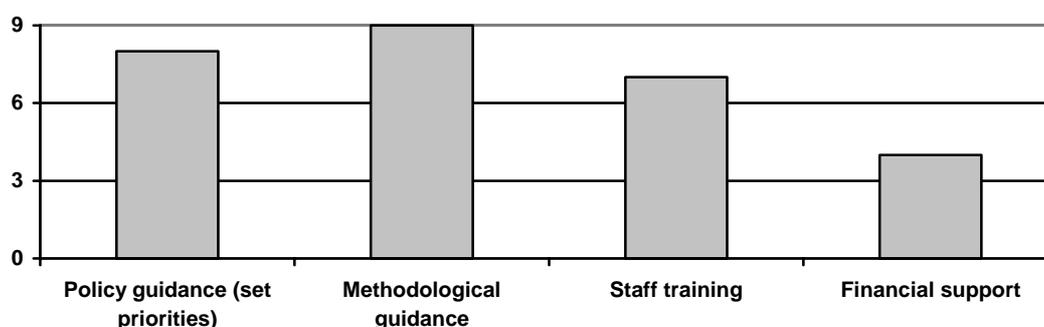
75. Due to the differences in social, cultural, political, and economic situation, it is hardly possible to identify a standard vertical structure of enforcement authorities and the optimal level of delegation of functions to sub-national units. This will rather follow the national administrative traditions. Another factor is the institutional capacity, which remains particularly low at the sub-national level, despite a general trend to delegate more responsibilities to lower-level agencies. This

shift needs to be done gradually in order to ensure that lower-level EEAs accumulate sufficient knowledge and practical experience, which often is a time consuming process.

76. For instance, in Armenia, the State Inspection for Environmental Protection (SIEP), has subdivisions in each of the main administrative units (*martzes*) of the country. The number of inspectors, however, is greater at the national level and the SIEP envisages achieving a more balanced geographic distribution of personnel. The SIEP subdivisions, however, are found to have insufficient institutional capacity and are not yet ready to take more responsibilities. Thus, simultaneously with delegating an enlarged mandate to territorial units, the central unit will need provide intensive capacity building. The central unit will also need to establish mechanisms to provide methodological and other kinds of support to the sub-national level.

77. To enable effective delegation of responsibilities to sub-national units, a number of criteria need to be followed. These are: clear definition of jurisdictions, standardisation of inspection tools, clear enforcement policy, capacity building and quality control, creation of co-ordination mechanisms, and financial support to sub-national units.

**Figure 10. Types of support provided to sub-national environmental enforcement authorities from the national-level authorities in EECCA (2006)**



Source: EECCA environmental enforcement authorities. Data missing for Russia, Uzbekistan and Turkmenistan.

78. A particular relevance for EECCA countries has the need for clear definition of jurisdictions. This is usually based on such criteria as size of regulated facilities, complexity of activities, sectors and the geographical scope of facility's impact. In Russia, for instance, criteria for attributing a facility to the federal jurisdiction are approved by act of the Government of the Russian Federation of 29 October 2002 No. 777 (revised in 2005) "On the List of Facilities Subject to the State Federal Environmental Compliance Assurance". The following regulatees remain under federal jurisdiction:

- Nuclear power plants, military units, and facilities situated on land in federal ownership,
- Facilities that have adverse impact on the sites included in the World Cultural Heritage List and World Natural Heritage List and facilities contributing to the cross-border environmental pollution;
- Facilities that annually: store or dispose of more than 10,000 tons of waste of 1st or 2nd class of hazard; discharge more than 15 million m<sup>3</sup> of wastewater; and have more than 500 tons of air emissions.

79. In smaller countries, such as Armenia and Kyrgyzstan, sub-national units find it difficult to exercise authority over large, powerful enterprises at the local level. Therefore, the jurisdiction might be shared and inspectors from the national level are usually involved in the inspection of such enterprises. In general, there seems to be a more clear division of jurisdictions between national and sub-national EEAs in comparison with 2003. This is usually accompanied by coordination mechanisms, including periodic meetings of managers.

80. All national-level EEAs receive reports from, and assess the performance of, sub-national units. To this end, some EECCA inspectorates, for instance the State Committee for Environmental Control of Kazakhstan, introduced performance rating schemes of sub-national units. The quality control procedures, unfortunately, often over-emphasise punishment of those who lag behind instead of building their capacity thus achieving a consistent application of inspection methods and instruments across the country. At the same time, capacity building mechanisms improved in EECCA. Same observation applies to other types of support, such as policy and methodological guidance.

81. Few of the EECCA countries report problems with the role of the local administration. Inconsistencies arise especially when these bodies are given overlapping responsibilities. For example, a 2002 law in Armenia provides local administration with some environmental enforcement responsibilities and the EEA is unclear about how these relate to its own role. Tajikistan also reports a problem with dual reporting of regional EEAs to both the national EEA and local authorities. This is driven by poor legal drafting, whereby a clear delineation of function between the institutions is not established. Some involvement of local authorities may, however, be useful. In Kyrgyzstan, for example, local authorities do not have enforcement functions, but they can request information from the EEA and participate in inspections. This avoids the problems of the duplication of authority and allows for concerned local communities to influence the process of compliance assurance.

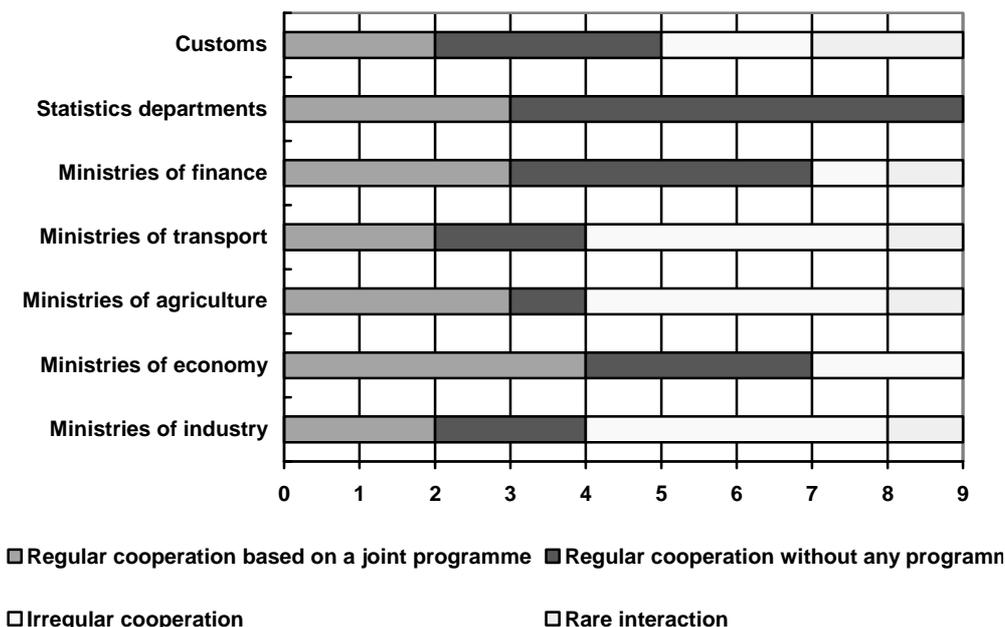
82. Given the administrative traditions in EECCA and frequent regulatory capture by local administration to pursue economic development at any costs or favour certain companies, it might be more effective to keep the regulatory and enforcement functions under a close control of the central government. Of course, the federal organization in Russia requires adjusting this model. At the same time, in Russia an effective oversight of the regulatory and enforcement activities of local public administration is needed.

### **3.5 Cooperation with other executive and judicial bodies**

83. In every EECCA country, there is a wide range of official actors that are involved in the compliance assurance process. Nowadays, environmental enforcement authorities work with an increasing number of governmental partners, including a variety of ministries, such as those covering industry, economic development, agriculture and transport (Figure 11). They also have more regular contact with the judicial system but their relationship is still difficult due to a number of reasons.

84. Most EECCA countries report that they improved co-operation with other government ministries, indicating various forms of interaction, *e.g.* formal agreements for co-operation or joint work programmes. In a number of cases, as in Moldova, Kazakhstan and Ukraine, the Ministry signs such agreements with other government agencies, rather than the inspectorate itself. In many instances, however, joint activities are implemented more or less regular without special agreement or work programmes. Nevertheless, laws often prescribe such cooperation, very often with the aim to decrease the administrative burden on industries through joint inspections. Such laws, for example, exist in Armenia, Kazakhstan and Russia, but their implementation is still weak.

**Figure 11. Mechanisms and regularity of cooperation between environmental enforcement authorities and other governmental bodies in EECCA (2006)**



Source: EECCA environmental enforcement authorities. Data missing for Russia, Uzbekistan and Turkmenistan.

85. In comparison with 2003, countries report that interaction with tax authorities (which are involved in the enforcement of pollution charges) improved. Also, cooperation with customs offices is more regular, particularly on issues related to CITES Convention, trans-boundary movement of waste, and air emissions from vehicles in transit. There is also more diversity in partnerships beyond the traditional interaction with the ministries of health and departments of statistics (see Box 12). At the same time, cooperation with the sectoral ministries such as ministries of industry, agriculture and transport remains irregular that is at odds with the environmental priorities in several EECCA countries.

**Box 11. Co-operation between the State Inspectorate for Environmental Protection (SIEP) and other governmental authorities in Armenia**

In Armenia, the Inspectorate interacts with several authorities on the basis of inter-departmental agreements, which have remained unchanged since 1999, and the Law of the RA “On Organizing and Conducting Inspections” that provides for conducting joint inspections. The SIEP and the State Tax Service (STS) share verification and enforcement functions regarding the payment of pollution and product charges. Cooperation with the Customs Committee (CC) covers shipment of hazardous goods, biological resources and waste, and verification of exhaust gases from transit vehicles. Currently, a methodology of joint activities to control imports to Armenia and export from the country of rare species of flora and fauna is being developed. The Inspectorate also co-operates with the Ministry of Health, the Department of Emergency Situations, ministries of agriculture, industry, physical planning, national security, interior, and transport. Interaction with the Ministry of Justice takes place when draft legislative acts and regulations are coordinated.

Source: State Inspectorate for Environmental Protection of Armenia, 2005.

86. In many countries, adversarial relations with Public Prosecutors Offices (PPOs) persisted. Inspectors repeatedly reported that PPOs often limit their role in auditing the work done by environmental enforcement authorities without providing due support for investigation of criminal cases brought to courts by EEAs. While accountability and integrity indeed should be strengthened in EECCA, and the PPOs may play an important role in this process, they also may want to consider a certain re-orientation of efforts on the preparation of environmental cases. This issue might constitute a topic of discussions between the ministries of environment and ministries of justice in EECCA.

87. The judicial authorities in some countries enhanced their environmental awareness and capacity to deal with environmental cases due to internationally-offered or NGO-led training. Regular analyses of court practice in the field of environment were launched in Belarus and Russia.

88. However, the judiciary enforcement continues to be ineffective in a number of the EECCA countries. Only a very small fraction of cases transmitted for judicial prosecution are processed and the rate of convictions is even smaller. Fines and other monetary penalties, proposed by inspectorates, is quite often revised down to levels that have no deterrent effect. In those cases when fines and compensations for damage are imposed by courts, they seem to be poorly collected. In general, there is lack of feedback from courts on both outcomes of prosecution (as in Armenia, Kyrgyzstan, and Ukraine) or, more commonly, on the quality of evidence collected by environmental inspectors.

89. The roots of these problems seem to concern three areas of judiciary capacity:

- A heavy workload thus a limited capacity to deal with multiple cases that they have, regardless of whether these concern the environment or not.
- A general lack of understanding of environmental issues by lawyers, judges, etc.
- A feeling, in some instances, that the judiciary authorities do not consider the environment as being as serious an issue as other areas of law enforcement.

90. The EEA is not able to address the problem of the workloads of the courts on its own. However, it should be able to increase the effectiveness of non-compliance prevention and administrative enforcement thus reducing the number of cases going to court to only those which are more serious. There is also a clear need for the raising awareness of the judiciary about environmental requirements and costs of environmental non-compliance. The EEAs may address this need through short courses for selected lawyers. An EEA might also seek to influence the content of legal courses in universities, so that environmental law and the importance of environmental protection are better understood by the next generation of lawyers.

91. Some failure in the courts may relate to inadequate preparation by the EEA for its cases. For example, in Russia many lawyers believe that if direct and indisputable evidence of non-compliance is produced and the legally-prescribed procedures are complied with, court manifest a positive attitude. Inspectorates themselves do generally state the need for a greater number of legal specialists among their staff to produce higher quality evidence and cases. However, from the information received, in those EECCA countries where judicial problems occur, it would seem that even if EEAs presented perfect cases every time, inadequate legal decisions would still be made.

### **3.6 Decision-making policies and performance management**

92. To ensure credibility of environmental inspectorate and not distort the level playing field for businesses through heterogeneous inspection and enforcement, the environmental enforcement authorities should secure standardisation of their work methods used to assure compliance. This will include development of decision-making policies, regulations, methodologies, inspection tools such as checklists, and standard reporting requirements. Oversight mechanisms – both formal, *e.g.* exercised by prosecutor offices, and informal, *i.e.* exercised by NGOs – should be put in place to avoid any misuse of enforcement powers. These also have to be supported by effective reporting procedures which not only ensure that the guidance is being implemented, but also identify where problems arise and allow the EEA to seek changes, *e.g.* in future legislation.

93. Most EECCA countries report that a range of guidance documents are available for individual inspectors and for sub-national units of the EEA. Such guidance documents usually describe inspection procedures (a new guidance of this kind was enacted in Georgia in 2006), application of non-compliance responses, reporting procedures, sampling procedures etc. Also EEAs report that guidance documents are regularly updated. Discussions with practitioners give a less optimistic picture, as some countries did not update their internal guidance documents for ten or more years. Inspection tools such as checklists are rare, although exist in some countries, *e.g.* in Kazakhstan.

94. The issue of non-compliance response policies remains largely unresolved. The only case known to the Secretariat is a concise document developed in Ukraine. This policy explains what actions inspectors should take in a particular case as a follow up to the on-site visit. Communication with practitioners from this country let suspect that the policy remained a mere theoretical exercise.

**Box 12. Policy of the State Environmental Inspectorate of Ukraine on follow-up enforcement actions**

In 1999, an environmental inspector's handbook was developed in Ukraine to provide the staff of the State Environmental Inspectorate with detailed guidance on exercising the compliance assurance role. Among other things, the handbook gives instructions on follow-up enforcement actions. As a result of completed environmental inspection, the inspector may resort to the following actions:

**No violations of norms/permit conditions have been detected:**

- Consider need for environmental improvements. Recommend improvements to the enterprise, if desired;
- Consider if permit conditions are too loose. Recommending amendment of permit conditions to the relevant authorities, if appropriate;
- Review future inspection frequency. Recommend decreasing inspection frequency, if appropriate.

**Violations were not registered before, and they did not result in serious environmental consequences**

- Prepare and send to the facility formal instructions to complete specific improvement measures within established deadlines. Deadlines for completion of the identified measures should be established on the basis of urgency of required improvement and upon consultations with the appropriate experts in order to assess realistic periods for implementation. The instructions should also state that the facility will be inspected again after the deadlines have passed.

**Repeated violation(s), without serious environmental threat**

- Impose a penalty on officials of the enterprise that were held responsible for correcting the earlier detected violation(s);
- Repeat formal instructions to the enterprise to correct the non-compliance within the established deadlines.

**Detected violations are not eliminated for a long period, or they present a serious threat to the environment and/or human health**

- Consider application of sanctions by the chief *oblast* (regional) environmental inspector. Recommend applying penalty by the chief inspector, or temporarily suspend activity of the particular process until the detected violations are eliminated;
- Consider need for compensation of damage as a result of the detected violations. Propose to the enterprise to compensate voluntarily estimated damage, if the latter can be proved;
- Consider if the detected violations constitute a case of criminal offence. Submit recommendation for criminal prosecution and collected evidence to the regional prosecution office.

**Review enforceability of particular norms/permit conditions**

- Consider if environmental norms, applicable to the enterprise, and issued permits, are practically enforceable. Signal to the *oblast* chief inspector what regulatory requirements should be revised, if appropriate.

Source: Environmental Inspector's Handbook, State Environmental Inspectorate of Ukraine (1999).

95. In each EECCA country, over thirty core ECE indicators are routinely collected within relatively structured frameworks. Examples of key indicators are the number of inspections, number of violations, number of fines and amounts collected, and number of criminal cases. The scope of collected data is quite comprehensive: Commonly, the ECE indicators cover the entire corpus of environmental legislation and are broken down by media-specific programme areas, geographic area and sometimes by industry sectors. Often non-compliance patterns are analysed by specific articles of the Administrative and Criminal Codes. Regular reporting to internal and external audiences ensures a certain level of transparency and accountability.

96. At the same time, indicators are designed around activity counts and much less attention is paid to their use to make strategic and operational decisions. Enforcement authorities measure the intensity of inspection and the extent of application of enforcement tools without showing the connection between these activities and expected behaviour (compliance) and environmental changes. Other major problems include:

- A widespread use of output indicators as “targets” and association of high performance with high numbers of inspections, investigated violations, or monetary sanctions applied regardless their behavioural and environmental effect;
- Lack of indicators that would demonstrate causal links between activities, compliance behaviour and environmental results, as well as absence of measures of cost-effectiveness;
- Poor standardisation of terminology and processes used for performance measurement that opens up opportunities for misinterpretation or manipulation of data;
- Absence of ECE indicators that would cover the application of innovative instruments of compliance assurance.

97. Demand for ECE indicators is increasing as recognition is growing that continuous feedback from practice is needed to correct environmental legislation and policies. Currently, such feedback is limited and, when a law or a policy proves to be ineffective, government officials often yield to the temptation to issue a corrective document without understanding the roots of failure. Such a scenario, which perpetuates “symbolic” regulation and policy-making, becomes a serious threat to governments’ credibility.

98. Reporting on activities is relatively wide in scope and provided regularly. There are internal reports of individual inspectors and branches (developed on a weekly or monthly basis), and reports of the entire enforcement authority (these may be produced quarterly, semi-annually and annually). The quality of reports, however, is very low as they focus on “bean counting”: presentation of results and anecdotal information with very little analysis. Also internal reporting for official use tends to be poorly standardised and automated, and too frequent in the majority of EECCA countries. Ukraine has recently developed specialised software to facilitate reporting. In general, the issue of corporate reports needs further elaboration, including some reflection on the optimal frequency of reporting in order to optimise the use of inspectors’ time.

99. In developing the performance management and assessment system special emphasis has been placed on establishing the mechanisms for ensuring internal accountability. Besides regular reporting, these oversight mechanisms include monthly and annual gatherings of sub-national EEAs (as done in Armenia, Moldova, Kazakhstan and Russia) and missions of national-level officials to regions (for example, in Georgia a special unit was created to exercise such oversight). In addition, internal audits are used to identify cases of mismanagement or misbehaviour. External accountability has had only marginal relevance; reporting to other stakeholders is not tailored to their needs.

**Box 13. Reporting procedures in Armenia and Russia**

**Armenia:** Within the State Inspectorate for Environmental Protection of Armenia, there is a hierarchical system of reporting: quarterly, each inspector submits a report to the head of their subdivision, which provides key performance indicators (names of inspected facilities; detected violations by area; number of prepared acts; decisions made; amounts of imposed fines and damages, in compliance with the current legislation). The head of the sub-national unit compiles the inspection results and submits a report to the Head of the Inspectorate. The analytical division at the head office of the SIEP analyzes the submitted reports, compiles them, and prepares a report with conclusions and proposals for the Inspectorate as a whole, which is submitted to the Minister for Nature Protection of Armenia.

**Russia:** There are two federal environmental enforcement authorities in Russia and both established sound mechanisms of ensuring internal accountability that include semi-annual and annual reports from sub-federal units, reports on operation monitoring by managers, cross-regional analysis of results, agency-wide annual meetings that gather representatives of all sub-federal units, and missions of federal-level officials to regions. Reports on progress with programme implementation are provided to higher level policy makers. However, *Rosprirodnadzor* does not issue its own annual activity (corporate) report, as does *Rostekhnadzor*. The latter is very elaborated and is comparable to international benchmarks. The latest – 2005 – annual report is downloadable from the web site [www.gosnadzor.ru](http://www.gosnadzor.ru) In addition, some pilot projects were implemented at the sub-national level to help authorities to design performance indicators. For example, one project was carried out at the Committee for State Environmental Control and Nature Use of the Saratov *Oblast*, in the context of introducing performance oriented budgeting approaches.

Source: OECD, 2005 (Armenia); OECD, 2006 (Russia).

100. While environmental authorities in general become more transparent, none of the EEAs in EECCA countries having participated in the review is publishing on its web site its current work plans/ inspection schedules, on-site visit reports, compliance data on specific facilities or its long term strategies. Only Russia gives open electronic access to its annual report. Other countries communicated that they disclose their reports to a wide range of stakeholders, including NGOs, but direct interviews with stakeholders does not support this thesis. Thus, unlike reporting on the state of the environment, the corporate reporting (including financial reporting) remained opaque.

101. In some instances, lack of transparency leads to corruption, *i.e.* the misuse of powers and the status of a civil servant for private gain. While discussions about corruption can be heard very often, there is no evidence except for some anecdotal cases about the magnitude of this phenomenon within the environmental enforcement authorities of EECCA. Nor there are studies that would give hard data on the costs of corruption. However, it could be useful to spot this issue, even in general terms.

102. In the field of environmental management, corruption can lead to a (deliberate) design and implementation of environmentally damaging practices to enrich individuals. Environmental corruption also means trafficking in wildlife, hazardous waste and natural resources, often through bribery within the framework of permitting and inspection. Besides being rooted in a lack of transparency and accountability, corruption is commonly nurtured by weak institutions, high level of bureaucracy and low professionalism. It could touch all levels of management – from high level officials to field inspectors (see Table 3).

103. Although all EECCA countries are exposed to high level of corruption, most of empirical data are available from Russia where reporting on corruption is more transparent and easily available than in other countries of the region. For example, internal auditing reveals annually some cases of funds mismanagement. For example, federal auditors conducted 255 audits of the Ministry of Natural Resources and its territorial units in 2003. As a result of these audits, a total amount of 4 million roubles were recuperated out of total 7.2 million roubles misspent. Besides material and disciplinary liability, the response to misconduct included criminal liability (*e.g.* six cases of criminal prosecution in 2003). Cases of mismanagement or misbehaviour have been made known to the general public through the Ministry's web site. The prosecutors' offices are another source of such information; their records indicate that particularly spread is corruption among inspectors responsible for biodiversity protection who are often themselves involved in illegal logging, poaching, or smuggling.

**Table 3. Areas of environmental management vulnerable to grand, mid-level, and petty corruption**

Level of corruption	Areas vulnerable to corruption
<b>Grand corruption</b>	<ul style="list-style-type: none"> <li>Relates mostly to high level of public officials and involves large illegal transactions or flawed policy and regulatory development.</li> </ul>
<b>Mid-level corruption</b>	<ul style="list-style-type: none"> <li>Environmental and natural resources policy and regulations development;</li> <li>Distribution and designation of environmental/natural resources and territories for particular utilization (including through public procurement);</li> <li>Permitting and certifications – issuing permits and certificates for different utilization of territories and natural resources, and operating of industrial sites including permits for emissions, discharges, and solid wastes;</li> <li>Environmental assessments (including EIA).</li> </ul>
<b>Petty corruption</b>	<ul style="list-style-type: none"> <li>Inspections by environmental protection agencies and other related agencies to assess whether established environmental standards are being met; and</li> <li>Non-compliance response to violations.</li> </ul>

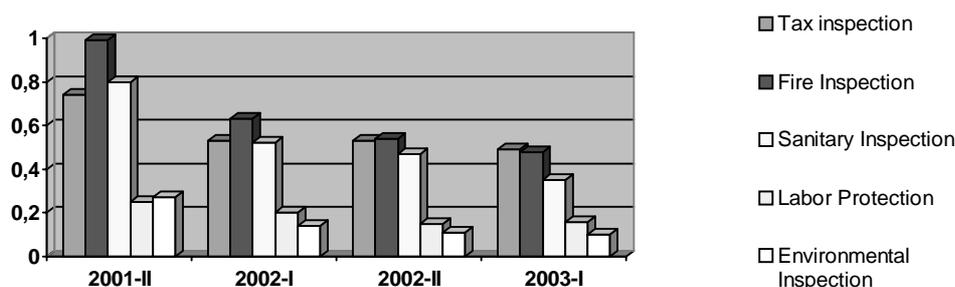
Source: USAID (2002) Corruption and the Environment: Sectoral Perspectives. [http://pdf.usaid.gov/pdf\\_docs/PNACT876.pdf](http://pdf.usaid.gov/pdf_docs/PNACT876.pdf)

104. So-called “de-bureaucratisation packages” were adopted in several EECCA countries to address the high level of administrative burden and corruption in this region. Such packages included, among other things, laws specifying the power of officials to conduct inspections of enterprises (e.g. such laws were adopted in Kazakhstan and Russia). They streamlined inspection procedures and imposed an annual or biennial (every two years) frequency of inspection, as well as required authorities to inform the regulated community on any developments of the regulatory framework thus creating a pre-requisite for more intensive compliance assistance. Besides strict criteria and procedures on inspection, these laws specify appeal procedures and allow for the compensation of losses in the case of violations by state agencies. While the goals of such laws are laudable, their implementation leads to unsustainable results, as in Russia (Box 14) and sometimes opposite effects (discussed in the following chapter).

**Box 14. Results of four rounds of monitoring of the regulatory burden imposed on Small and Medium-Sized Enterprises in the Russian Federation**

The Center for Economic and Financial Research (CEFIR) in Moscow in collaboration with the World Bank is monitoring the level of the regulatory burden imposed by the government agencies on small businesses. The purpose is to document the progress of deregulation started by the Russian federal government. The reform package includes simplification of licensing, certification, and registration procedures, and reduction of inspection frequencies. The new law on inspection was introduced in August 2001. With its introduction the number of on-site visits by all the government bodies decreased significantly. For most of the agencies the frequency of inspections corresponds to legal requirements (not more than once in two years, i.e. 25% of firms in half a year). As the figure below shows, the frequency of environmental inspections is one of the lowest.

**The average number of inspections of SMEs in 2001-2003 (per company per 6 months)**



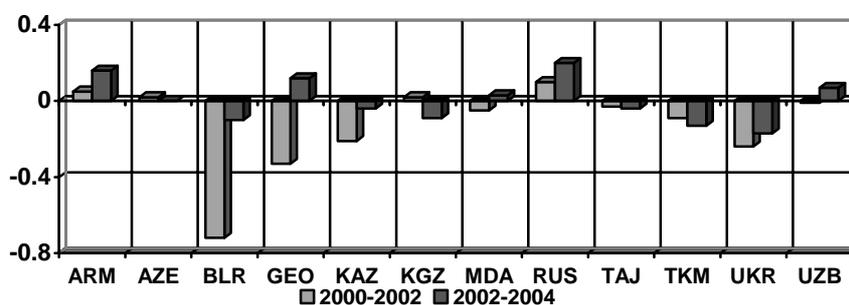
In 2002-2004, the amount of time spent on inspections by the management of small enterprises and monetary costs involved diminished. In the first round of CEFIR's Surveys the respondents claimed that the management of their enterprises spent an average of 11.4 % of their time on all kind of inspections. In the second round, the number fell to 9.2 %, and in the third round, to 8.2 %. But the results of the second and the third rounds indicated that substantial abuses continued on the part of inspecting agencies in 2002 and 2003. For example, half of the unplanned inspections are conducted without a warrant, the share of such cases stayed more or less unchanged. There were no significant changes in the amount of bribery either. Respondents mostly do not see a change in transparency of inspection procedure and predictability of the enforcement policy. A slight bias is towards worsening of situation, although small firms have different opinions about the transparency of procedure: about 30% deem it transparent, while an equal share think the opposite.

Source: Centre for Economic and Financial Research, [www.cefir.ru](http://www.cefir.ru)

105. Finally, the environment can be affected by corruption in other sectors, for example, in agriculture, privatization, public procurement, customs, the judiciary, and others. Thus, privatisation conducted through corrupt procedures may allow new owners to use privatized land or facilities in an environmentally damaging manner; or regulations and procedures established in customs may open opportunities for trafficking in wildlife.

106. Overall, corruption will remain a concern if the general country context is not favourable and officials do not have adequate incentives to keep integrity. Studies implemented by the World Bank show that the effectiveness of corruption control is quite variable among EECCA countries and needs improvement. Although salaries increased in EEAs and civil servants are more rigorously selected, these measures alone might be insufficient to fight corruption. In the future, it will be important to aim at raising predictability of enforcement and transparency of inspection and enforcement.

**Figure 12. Changes in the effectiveness of corruption control in the EECCA countries in the period 2000-2002 and 2002-2004**



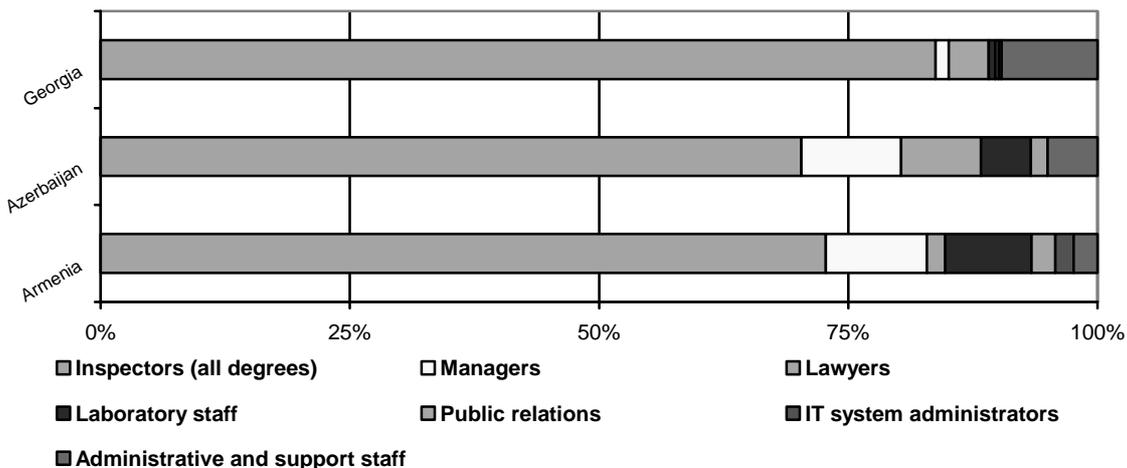
Source: Based on data from Governance Matters V: Governance Indicators for 1996–2005, by D. Kaufmann, A. Kraay, and M. Mastruzzi, 2006

### 3.7 Human resources, infrastructure and financing

107. A range of actions is required to build stronger inspectorates to apply enforcement strategies and tools consistently and continuously. Capacity building is a major challenge. Capacity can be defined as a combination of available staff, their skills, support facilities (including measurement equipment, laboratories and transport means) as well as the financing required for them to fulfil their roles. Maintaining adequate human resources within an inspectorate is vital as its work will only be as good as the people within it.

108. Figure 13 provides information on the professional balance of staff in the Caucasus, which is illustrative of other EECCA countries as well. There is a strong emphasis to have a high number of inspectors. Even though general professional characteristics are usually balanced a number of EEAs do report a need for additional specialists in some areas. The most common of these needs are for legal specialists. Given the problems noted above with the courts this is an obvious need. Other gaps are also noted, especially in the areas of certain concrete scientific specializations, economics, and public relations.

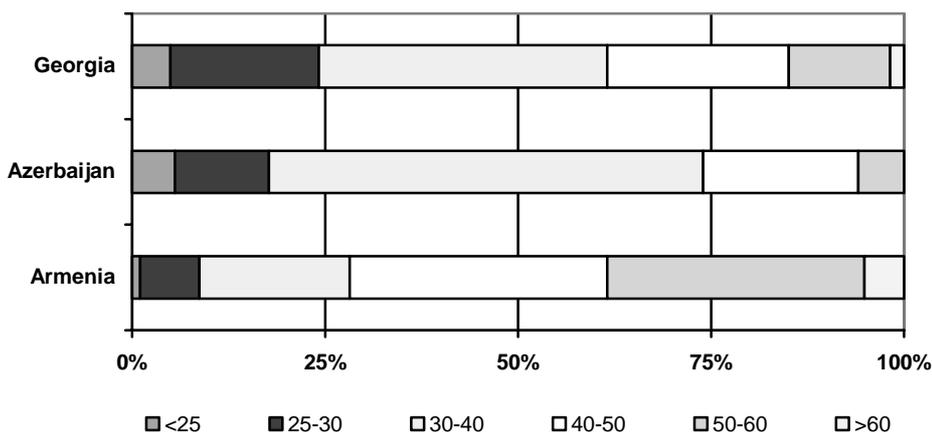
**Figure 13. Cross-country comparison of the professional distribution of staff within the environmental enforcement agencies based on example of the South Caucasus countries**



Source: Data provided by EECCA Environmental Enforcement Authorities.

109. Recruitment of good specialists remained a problem as other government agencies and especially the private sector offer more competitive salaries and inspector working conditions may be a disincentive for new staff to join. This also increasingly poses the problem to retain existing staff. For example, in Kyrgyzstan and Ukraine the average period of employment for an inspector is only three years. Most EEAs target young recruits from universities, usually with an environmental background. As a result, the age structure becomes more balanced. In others, problems of recruitment have resulted in a rise in the age profile, e.g. in Armenia. Some EEAs, e.g. in Uzbekistan, are also making efforts to attract specialists with technical skills relevant to industry or from the industries themselves. This can benefit the EEAs as the staff would be familiar with insider problems and opportunities for better compliance. Similarly to other civil servants, EEA staff are usually recruited through standard, open competition procedures.

**Figure 14. Cross-country comparison of the age distribution of staff within the environmental enforcement agencies based on example of the South Caucasus countries**



Source: Data provided by EECCA Environmental Enforcement Authorities.

110. The number of staff employed by the EEAs in EECCA varies to a considerable extent as shown in Table 4. The number, of course, primarily depends upon the size of the country and the number of regulated subjects that the EEA has to work with. Where information was available, most of the staff listed are directly involved in enforcement activity, with only a small percentage acting as

administrators and support staff. It is also important to note that some EEAs include a permitting role (sometimes in separate units). The majority of staff are employed at sub-national level. This stresses the points raised earlier about the importance of ensuring full coordination, communication, training, etc, of these staff and that funding, including international support, must recognise the importance of the work at that level.

**Table 4. Staff numbers in enforcement agencies at national and sub-national levels in 2006**

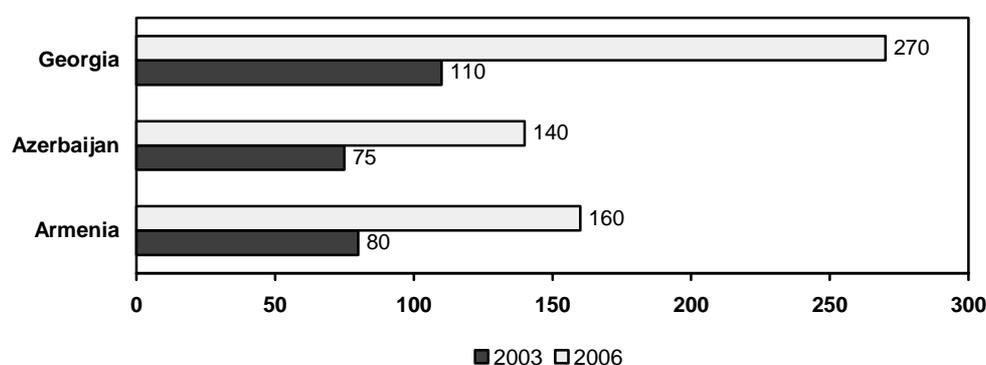
Country	National		Sub-national	
	2003	2006	2003	2006
Armenia	70	83	122	112
Azerbaijan	81	81	408	152
Belarus				
Georgia	12	58	153	242
Kazakhstan				
Kyrgyzstan				
Moldova				
Tajikistan				
Turkmenistan				
Russia				
Ukraine				
Uzbekistan				

**Note:** Information is being collected.

111. Since 2003, no dramatic changes in staff numbers occurred in all but two countries: in Georgia, the inspectorate grew five times; in Azerbaijan, the number of inspectors at the sub-national level decreased from 408 to 152 people. In general, fluctuations represent relatively small increases or decreases in staff numbers at both national and sub-national level. In general the total number of staff employed might seem comparable with the numbers in the OECD or CEE countries. However, the broad functions of the EEAs (when the responsibilities include forestry, hunting, nature protection) must be taken into account. Also a number of EEAs report significant staff shortages in specific areas, such as very low staff numbers in a sub-national unit or in specialised units at the national level. Thus many consider the workload for the available staff to be high.

112. Where information was provided all of the EEAs indicated that their inspectors have the status of civil servants. This implies that their salaries are paid according to standard civil service rates. The comparison of salary levels between countries is difficult. Figure 15 provides some basic information on salary levels in a relatively homogenous sub-region. The intention of providing these data is not to stimulate comparisons between the Caucasus countries, but merely to provide a very general view of the levels of salary and their impressive increase since 2003.

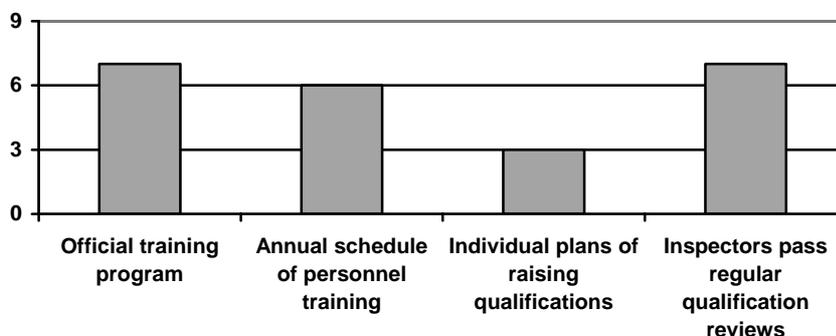
**Figure 15. Monthly average wage (US Dollars) of staff employed by the environmental enforcement authorities in the South Caucasus countries (2003 and 2006)**



Source: Data provided by EECCA Environmental Enforcement Authorities.

113. As mentioned above, most EEAs aim to recruit university graduates with a range of skills necessary to meet the specialist requirements of the EEA. However, once employed, staff require training in the specific tasks at hand. Figure 16 provides data on how many countries use certain elements of training programme.

**Figure 16. Major elements of staff training programmes present in EECCA countries (2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

114. Since 2003, important progress was observed as concerns staff training within environmental inspectorates. In Armenia, Azerbaijan and Kyrgyzstan, official training programmes were developed. In Armenia, Azerbaijan and Belarus, there is an annual schedule of the personnel training. Since 2006, individual plans of raising qualification exist in Belarus. Finally, in Armenia inspectors pass regular mandatory qualification reviews since 2006. Inspector manuals exist in Belarus, Georgia and Moldova. In the latter case, the Inspectorate issued the third edition of the manual.

115. Unfortunately, the majority of EEAs do not have sufficient resources to provide adequate training for staff which should be the prerequisite for strengthening the inspectors' skills, allowing transfer of experience and the consistency in applying inspection procedures across the country. While the financial constraints of many EEAs in the EECCA is well understood, some analysis is required to determine whether investment in training would allow staff to become more efficient in their tasks and, therefore, the investment to prove cost effective in the longer term. It will also be important to see how staff rotation influences this cost effectiveness. Also international support will continue to play an important role in this field, particularly as concerns the implementation of Multilateral Environmental Agreements. To this end, UNEP continues to conduct training sessions, including for actors outside the system of environmental ministries, as done in Georgia (Box 18) and other EECCA countries.

**Box 15. Capacity building to implement selected MEAs in Georgia**

**Ozone MEAs.** Georgia acceded to the Vienna Convention and Montreal Protocol in 1996. In addition to legislative and regulatory development, Georgia has invested heavily in building capacity to implement the MEAs. To develop an effective system for monitoring and controlling the import of Ozone Depleting Substances (ODS), the Ministry of Environment of Georgia organized a National Train-the-Trainers Workshop for Customs Officers on Monitoring and Control of ODS. This workshop was held in Tbilisi in 2003. The remaining customs and enforcement officers in the country are being trained by the trained customs trainers who participated in the first phase of the training. About 200 experts are expected be trained during the second phase. In 2003 and 2004, two workshops were organized using the trained customs officers as faculty. The Customs Academy of Georgia is expected to incorporate a training module on the Montreal Protocol and control and monitoring of ODS. In addition to human capacity development, Georgia has sought to improve the technical resources of customs officers. Toward that end, Georgia obtained ODS identification equipment from UNEP for distribution at the main customs entry points. Capacity building targeted also the private sector and the public at large.

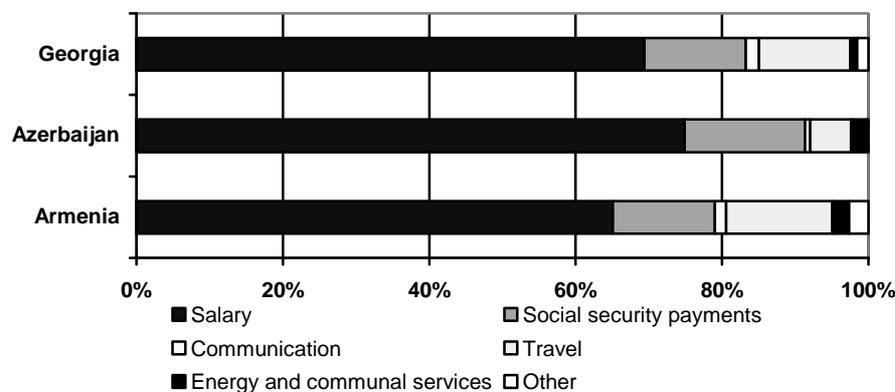
**CITES.** To build capacity of customs officers in Georgia to identify and interdict illegal trade in CITES-listed species, the Government developed a special CITES handbook in the Georgian language. This handbook contains all species of wild fauna and flora that are found in Georgia and listed in the CITES appendices. For each species, there is a photo and a brief description. The Government also conducted a seminar for customs officials to raise their awareness on CITES issues, as well as the general importance of protecting wild fauna and flora.

Source: UNEP (2006). *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements.*

116. An alternative to using EEA staff is to contract out specific tasks to external consultants. This is a common practice for many EEAs in OECD countries. It is usually undertaken where specialist services are required that would not warrant the longer-term costs of employment of such staff. Some EEAs in the EECCA do use such external services, such as in Belarus and Kazakhstan. However, many EEAs, while they would like to contract out specific tasks, are either unable to do so or only could on rare occasions due to the severe financial constraints under which they work.

117. Indeed, it is important for EEAs to have sufficient funds for their operation and that these budgets can be used to support priority EEAs operations. In general the EEAs are funded through the state budget which usually faces severe constraints. There have been widely different changes in budgets which have risen significantly (e.g. Kazakhstan) or dropped. In all cases, the EEAs do not seem to receive the funds which can cover all necessary expenses and their budgets are spent primarily on salaries and social payments (Figure 17). In some countries funding was available for capital investment. For example, Belarus, Kazakhstan and Ukraine are now rehabilitating their laboratory infrastructure. In general, the infrastructure of environmental inspectorates started to improve, even in the poorest countries.

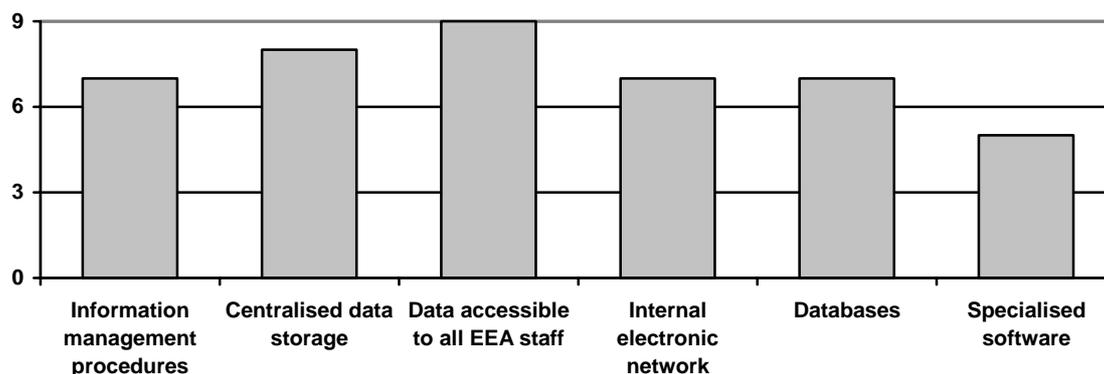
**Figure 17. Allocation of money across budget lines: the example of environmental enforcement authorities from the South Caucasus countries (2006)**



Source: EECCA Environmental Enforcement Authorities.

118. Also many EECCA countries report to have invested into the modernisation of information management systems. For instance, all countries except Armenia and Ukraine say that they use Local Area Networks. Also countries reported that centralised storage of information about inspection is in place in most countries, as well as databases with information on the regulated community and inspection results (except Kyrgyzstan and Moldova). Specialised software for data management exists in Azerbaijan, Belarus, Tajikistan and Ukraine. As for progress, significant changes were noticed in Georgia and Kyrgyzstan, and at a lesser extent in Kazakhstan and Tajikistan.

**Figure 18. Overall characteristic of information management systems within the environmental enforcement authorities (2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

119. Budget planning is still mostly based on historical figures rather than assessment of needs and advantages and disadvantages of various scenarios. This practice is likely to change due to the adoption of performance-oriented budgeting and mid-term expenditure frameworks, *e.g.* in Azerbaijan, Moldova, Kazakhstan, Russia, and Ukraine. While performance-oriented budgeting (that presupposes a strong focus on outcomes of work) constitutes a positive change, it might be challenging for EEAs that do not possess proper skills and tools for target setting and still rely on an indicator system that focuses on inputs and outputs only.

## 4. STRATEGIES AND TOOLS

120. The *Guiding Principles* encourage the adoption by EEAs of a performance-based approach whereby compliance assurance is not an end but a means to achieve compliance and environmental improvements. In securing compliance, prevention is better than cure; therefore a deterrence atmosphere inducing voluntary compliance should be created. Within such a system, enforcement actions need to be based on a solid justification and the regulated community has to be treated equitably, with consistency, in a transparent and proportionate manner.

121. The *Guiding Principles* suggest that EEAs should have access to the full range of informal, administrative, civil and criminal remedies in order that non-compliance is sanctioned in a timely and proportionate manner. Whatever remedies are available, guidelines should define the criteria for selecting one path to justice over another. Recourse to courts will be necessary for serious criminal and civil cases. For cases that are small and simple (seeking financial penalties or other limited remedies), administrative enforcement, with appropriate provisions for appeal, should be optimal. Overall, the objective of enforcement is primarily to achieve compliance and create an atmosphere in which the regulated community is stimulated to comply because the government has demonstrated a willingness to act when non-compliance is detected.

### 4.1 Strategic focus and planning approaches

122. Strategic planning enables an easier, faster, and more effective implementation of regulatory goals. Because EEA resources are seldom sufficient to the need, strategic planning means first to choose sectors, geographic areas, or statutes that are facing the most serious problems, and then to choose the enforcement tools to best address them. The EEA also need to identify the individual members of the regulated community that pose the highest environmental and compliance risks to be targeted first because changing their behaviour will contribute most to achieving the goal. Strategic plans should be refined as lessons are learned from implementation and new challenges anticipated.

123. Several documents guide inspectorate's activities in the EECCA countries but only Georgia is now finalising a strategic plan which would meet most of the criteria described above. More common in the EECCA, although still limited in extent, are annual national and sub-national work plans which are activity-based. Annual plans usually include a schedule of planned on-site visits. In Moldova, for instance, such schedules have a tabular form and contain information on the facility to be inspected, its identification number (usually a fiscal code), the date (month) and duration of inspection, as well as contact details for the company to be inspected. Unfortunately, analysis on how effective such annual plans are, or whether they were fully implemented, is carried out sporadically and not by all EECCA countries.

124. In some EECCA countries, the EEA work is based on clearly identified priorities. In Armenia, for example, these priorities (currently including combating illegal logging, waste, air pollution, and excessive water resource use) are endorsed by the Minister of Nature Protection and they are re-evaluated on an annual basis. In the process of re-evaluation, the State Inspectorate for Environmental Protection can express its position on eventual priorities. Based on the endorsed priorities, the Inspectorate produces an annual work plan that describes activities to be undertaken by the inspectors at the central and regional level. This plan reflects inspection priorities. It also contains a specific target of inspecting 80-90% of the regulated community annually.

125. Several criteria are used to identify installations to be inspected. They include, for example, environmental risks, compliance history, and seasonal variations in production volumes. Priority sectors are identified. The inspection of facilities representing these sectors is comprehensive, involving thorough assessments of all environmental media. For large facilities, joint inspections are conducted involving specialists from the central and regional levels.

126. At the same time, not all elements of strategic enforcement have been fully adopted. The EEAs tend to focus on punitive instruments (*e.g.* in Armenia, Kazakhstan, and Ukraine), thus their strategies are unbalanced and do not address some key roots of non-compliance, such as limited knowledge of legislation or low capacity within some industry branches to address environmental problems. Furthermore, due to the absence of facilities and skills, the compliance with administrative requirements, such as availability of permits or timeliness of payments related to pollution charges, is preponderantly checked rather than industries' environmental performance. Activity and budget planning are not well linked, thus the policy makers do not receive a strong message with regard to the gap between the resources that would be required to implement policies and those actually provided.

127. For EECCA countries it would be beneficial to develop compliance assurance strategies with clearly identified environmental outcomes, compliance targets, better balanced implementation tools, and an implementation schedule. Such strategies should be designed with a good knowledge of roots of non-compliance, and take into account overall environmental, economic, and social priorities. In conjunction with strategic planning, the EEAs will need to introduce the practice of drafting phase-in plans for newly adopted laws and regulations, which would take into consideration both compliance challenges of the regulated community and enforcement challenges, such as staff training and resource allocation. Furthermore, the strategic documents may need to be supported by the development and enactment of separate laws or regulations on enforcement agencies which can provide a firm basis for their operations and link them to the overall policy implementation cycle.

#### **4.2 Identification and profiling of the regulated community**

128. As a background for strategic enforcement, the identification and profiling of the regulated community needs improvement. Nowadays data on regulatees are scattered and still kept mostly in paper form. This information needs to be integrated in one database and converted to electronic format, so that different divisions are able to share data on the regulated community. Back in 2002, the majority of EEAs from the region stated that they clearly defined and identified the regulated community and this was not a problem. However, practical work and interaction with field inspectors within several demonstration projects showed that the situation with identification and profiling of the regulated community is far from being perfect.

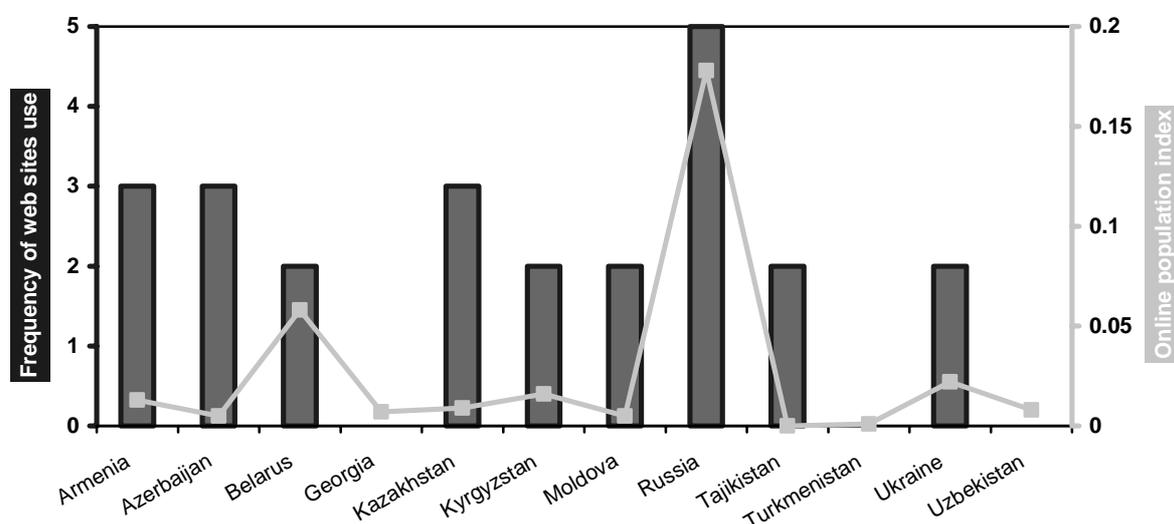
129. The structure of the regulated community has substantially changed over the last decade. As a result, and in combination with deliberate strategies (*e.g.* a frequent change of names) used by companies to avoid fiscal and other regulatory responsibilities, environmental authorities had limited success in collecting and systematising facility-specific data. Experience from Georgia, Kyrgyzstan, and Moldova has shown that even the most basic information about large industry – the number of enterprises – may be contradictory and difficult to obtain. SMEs rarely register their activity with environmental authorities (or any authorities, in fact). Given that estimates say that some 50% of economic activity in EECCA belongs to the shadow economy, merely half of the SMEs segment of the regulated community is not known. Fiscal and statistical authorities are commonly reluctant to disclose information on enterprises. Progress in identifying the regulated community was made where cooperation amongst governmental authorities was satisfactory or improved (Armenia, Georgia, Kazakhstan, and Uzbekistan).

### 4.3 Communication tools to promote social disapproval of non-compliance

130. Compliance with environmental requirements cannot be assured by government authorities alone. An important factor is establishing social disapproval of violators or inefficient enforcement actions. The public may choose to boycott certain products if they believe the manufacturer is harming the environment. Such disapproval can result from public awareness of regulatees' environmental performance or about the responses provided by enforcement agencies to any violations. Thus public authorities can generate broader support for environmental enforcement actions by publicizing relevant information, in particular, about violators or successful enforcement actions. They also can reduce public costs on inspection and enforcement by engaging the citizens in compliance promotion and detection of violations, as well as by providing access to justice (these are discussed in section 4.5.1 and 4.8).

131. The role of the public and their rights to influence environmental policy implementation have been expanding in EECCA and their relationship with EEAs has improved since 2003. In a number of countries, the public have rights to receive information on emissions as well as information on the results of enforcement. The EEAs report that they use a variety of mechanisms for providing information to the public, including their own information dissemination and awareness raising channels as well as work with media. For example, the EEAs in Azerbaijan, Georgia and Moldova use, for information delivery, social advertisement on TV/radio at least once in a week. The EEAs of Armenia, Azerbaijan and Kazakhstan deliver information at least once a month through Internet. The EEAs in Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova and Tajikistan say to deliver information through seminars, exhibitions and information stands at least once in a year. The worst situation concerning information delivery is reported by Georgia, where, except for printed media and TV/radio advertisement, no other direct or indirect mechanism of information delivery is used.

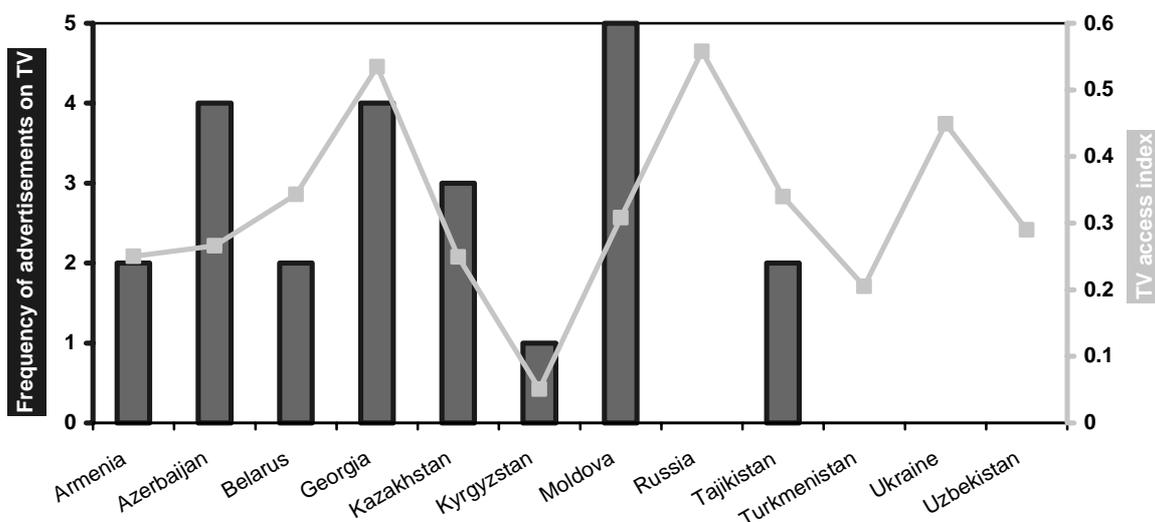
**Figure 19. The potential impact of information delivery through Internet in EECCA countries and actual communication strategies**



Frequency of web use for information delivery: 5 - several times in a week, 4 - once in a week, 3 - once in a month, 2- once in a year, 1- once in several years; 0 – never

Sources: EECCA Environmental Enforcement Authorities; *International Telecommunication Union*, 2005.

**Figure 20. The potential impact of information delivery through television and radio advertisements in EECCA countries and actual communication strategies (2006)**



Frequency of TV use for information delivery: 5 - several times in a week, 4 - once in a week, 3 - once in a month, 2 - once in a year, 1 - once in several years; 0 - never

Sources: EECCA Environmental Enforcement Authorities; *International Telecommunication Union*, 2005.

132. Where implemented, awareness raising activities have proven effective in improving compliance. In a number of countries publicising stories which expose polluters and show non-compliance cases or present the effective enforcement and non-compliance response is believed to have a greater influence than publicising successful stories of an improved behaviour of industry. At the same time, as figures above show, a certain gravitation of EEAs toward communication through Internet and TV channels is sometimes at odds with a very low access to Internet and even TV access in EECCA countries.

133. There are also still gaps in legal provisions which regulate “confidential” information and it creates problems for EEAs to obtain information from enterprises. Certainly, a proper access to information about enforcement requires the EEA to establish substantive standards balancing overall transparency with confidentiality related to commercial and trade aspects of industrial operations. Secrecy is a historically grounded issue within the EECCA as for much of the Soviet period, information on the state of environment, environmental pollution and their impact on health, was restricted. The kind of information which is defined as “confidential” or “secret” in this context is variable between countries. Overall, many of the EECCA countries have made significant progress from the original situation where access to information was strictly controlled. Now more phases of the regulatory cycle are open for public scrutiny.

134. Despite concerns about confidentiality, performance rating and disclosure programmes receive growing popularity in EECCA due to their potential to reduce emissions at a lower cost because they do not require formal enforcement action. Social pressure on regulatees and enforcement by third parties has evolved. Several countries (Russia, Kazakhstan, and Ukraine) adopted various forms of rating schemes to assess and disclose industry’s environmental performance thus promoting compliance through public pressure. In Russia, at least three different schemes exist, some of them being linked to industry’s self-regulation efforts while other schemes are being pursued by NGOs.

**Box 16. Application of the performance rating scheme in EECCA: Pilot project in Ukraine**

Adapted from Indonesia's PROPER programme, the *Performance Rating and Information Disclosure (PRIDE) scheme* rates firms' environmental performance from best to worst in five colours – green, blue, yellow, red and black – according to specially designed criteria. The scheme helps governments to: (i) assess industry's environmental performance; (ii) make information publicly available; (iii) use public and media pressure for better compliance with environmental requirements; (iv) establish dialogue between enterprises, enforcement agencies, NGOs and the public. As the scheme recognizes three performance levels for firms that comply with basic emission requirements, it provides incentives for continuous improvement. Even for non-compliant firms, the system rewards efforts to improve by recognizing two levels of performance.

The ratings system draws on four major sources of information: reports on industrial firms' polluting emissions; inspection reports on their environmental management; records of public complaints, regulatory actions and penalties; and surveys that record characteristics of the firms that are relevant for rating environmental performance. After verification with enterprises the ratings are disseminated to the public through the mass media (TV, radio, daily news). The rating is periodically reviewed (every 6, 12, 18 or 24 months) and updated which allows enterprises to be re-categorised.

The programme has several positive features. Firstly, the performance rating system is simple, so that its implications can be easily understood and accepted by firms and the public. Second, it identifies both superior and inferior performance and opens the ways for making and acknowledging progress. Finally, the ratings are colour-coded for easy communication by the broadcast and printed media.

Significant potential exist in the region of Eastern Europe, Caucasus and Central Asia for applying such an instrument taking account the need to improve compliance with environmental requirements as well as the need to reform currently used instruments for identifying and assessing environmental impacts and performance of enterprises. An important factor is a growing role of communities in environmental enforcement and compliance. The concept has been presented and discussed at two previous REPIN meetings in 2002 and 2003.

Following the discussion at the 2003 REPIN meeting in Kiev the Secretariat launched an assessment of the feasibility of implementing a PRIDE scheme in Ukraine. The results show that this new environmental management policy tool can be applied in the current legal, policy and institutional framework in Ukraine as the Ukrainian legislation provides for many lists (inventories, registers) of enterprises-polluters and for environmental monitoring. However, the criteria for their formation are based on emission or hazard indicators only and do not take into account the environmental management issues. In spite of the existence of such lists citizens are not well informed about enterprises-polluters in the regions of their residence.

The pilot project of environmental performance rating and information disclosure is being implemented in the Lviv oblast by the Regional Administration of Environment and Natural Resources in cooperation with the Regional Division of the State Sanitary Epidemiological Service and with the support of Lviv Oblast State Administration. The territorial bodies of the Ministry of Environment have necessary initial information to identify enterprises-polluters. Around 150 enterprises of Lviv oblast, which are included into the Inventory of Objects Dangerous to Environment, are involved. Most enterprises are ready to provide voluntarily the information for the environmental performance rating program and care about their reputation among the population. Some enterprises mentioned potential difficulties in the process of the project implementation, such as lack of staff time, commercial secrecy of information, accuracy of data and monitoring and financial problems to addressing environmental impacts.

The PRIDE scheme will be used in the Lviv oblast to increase efficiency of existing instruments and provide significant incentives to increase the effectiveness for the manufacturing facilities to abate pollution, improve environmental quality, and reduce the costs of pollution on affected people. It can also respond to the public interest to monitor environmental performance of enterprises. It can utilise better the potential for increasing environmental compliance via better access to environmental information concerning individual regulates and the public and media pressure.

135. It will be important for the EECCA countries to continue their efforts to ensure widespread public support to their actions in order to promote voluntary compliance. This requires a very intensive provision of information. Such a process will be beneficial in the long-term because it opens up the work of the EEAs to greater public scrutiny. Obviously, having rights and being able to exercise them are two different aspects. If the public have rights to information from the EEAs, this presupposes that the EEAs are in a position to provide that information. Supplying information to the public can be time consuming and EEAs must ensure that the correct mechanisms are in place to meet this demand.

#### 4.4. Compliance assistance and voluntary initiatives

136. Proactive measures by EEAs towards industry are important in meeting environmental regulatory objectives and achieving improved environmental performance more generally. The EEA should support the regulated community in understanding the requirements and the repercussions of non-compliance. It should also be well equipped to show the industry examples of better environmental management or provide technical assistance, especially to small and medium size enterprises, to apply low-cost measures in order to reduce pollution.

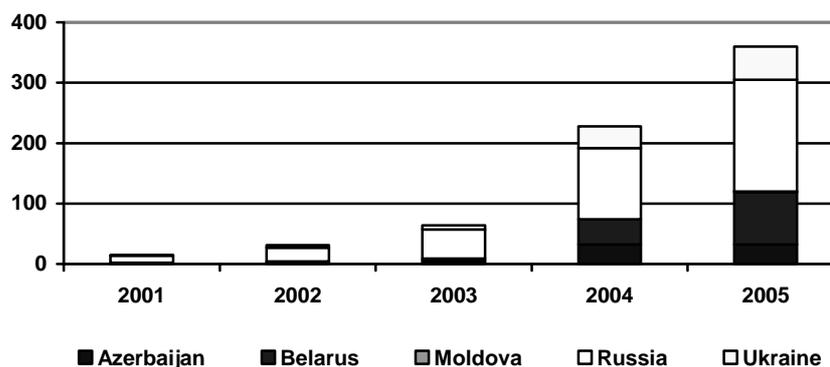
137. Compliance promotion is generally limited in the EECCA. In some countries, as in Russia, there are indeed even doubts whether an EEA should become involved in such activities. In Georgia, similar doubts were expressed by NGOs. It is believed that industry should request compliance assistance from consulting companies on a commercial basis. Overall, none of the EECCA countries have a fully functioning compliance assistance programme though various elements of such programmes do exist. At the same time, a number of EEAs do engage in various forms of information provision to the regulated community, for example:

- In Armenia, information is supplied to industry upon request;
- In Kazakhstan, the EEA staff regularly meet representatives of large industries to discuss challenges of implementation, and training to industry is provided by the training centre of the ministry of environment;
- In Moldova, the EEA does not provide information to industry, as it views the responsibility of industry to be informed about environmental requirements;
- In Tajikistan, the EEA does not produce any materials for industry, but individual inspectors participate in educational work with enterprises;
- In Ukraine, the EEA organises workshops to inform enterprises on the implications of new regulations.

138. Online availability of legal acts and regular publishing of news has become a rather common feature in EECCA. The quality of web-sites raised in Georgia, Moldova, Kazakhstan and Russia. Other countries also kept their efforts to provide information pro-actively. On-line forums and other forms of consultations are being established to receive feedback from industry.

139. Cleaner Production Centres, which were established in late 1990s in almost all EECCA countries, remained in place but their outreach did not expand very much and they still rely on external financing. The Cleaner Production Centres in Georgia, Moldova and Kazakhstan have been strengthened with donor assistance.

140. The use of other policy tools that support and promote voluntary compliance, e.g. environmental management systems and corporate environmental reporting, is more limited. Only in Russia and Ukraine a large number of enterprises possess internationally-accepted ISO 14001 certificates. In other countries the experience is still limited. At the same time, certification according to ISO 14 000 series is widening, in particular within export-oriented branches. Although a limited number of companies are ISO 14 000 certified (e.g. as of December 2005, some 200 companies obtained ISO 14 001 certificates in Russia and a similar number in other EECCA countries altogether), this constitutes a six-fold increase in comparison with 2003 thus denoting a change of attitudes. A new driving force in this process is the engagement of sectoral ministries. For instance, promotion of EMS recently appeared on the agenda of the Ministry of Industry in Kazakhstan whose employees received specialised training.

**Figure 21. Trends in the number of ISO 14001 certified companies in EECCA**

Source: The ISO Survey of Certifications 2005, [www.iso.org](http://www.iso.org), accessed on 3 January 2007

141. At the same time, EEAs may require from installations to develop some environmental improvement programmes in order to achieve goals set by permit conditions. For example, in Kazakhstan each enterprise has to develop a programme to reduce emissions and waste generation. Also in Armenia the need for such programmes was recognised, although in the context of reducing the fiscal pressure on enterprises when permit requirements are not achievable immediately.

142. Compliance promotion has become an essential part of the work of EEAs within OECD countries. It is also increasingly critical within many CEE countries. The reasons for this are the same in both cases and have two fundamental components. The first is that EEAs will never have enough resources to control all companies. The certified enterprises or those where cleaner production programmes are applied have better environmental record and do not need to be checked frequently. Allowing the regulatees to take responsibility for themselves (at least in part) helps the EEAs to concentrate resources on issues that present greater risks to the environment. Secondly, compliance promotion raises the awareness of industrial managers to environmental issues generally, so that they not only consider the bottom line of the conditions set for them in permits, but also other areas of their environmental performance. Both of these issues are important in the EECCA.

143. Summing up, it would be correct to say that many EECCA have reasonable mechanisms to provide information for industry. However, there is still a great potential for developing these mechanisms. This should be an area where improvements can be made without significant additional costs. Where compliance promotion measures have begun in the EECCA, EEAs should analyse their success and determine carefully the best means to build upon them. The use of environmental management systems should be extended wherever possible.

#### **4.5 Compliance monitoring**

144. Systematic monitoring of compliance, which implies collecting and analysing information on the compliance status of the regulated community, is essential to detect and correct violations, to provide evidence supporting enforcement actions, and evaluate progress in environmental policy and law implementation. Besides government checks (inspections), the status of compliance can be verified through ambient monitoring near a facility, results of operators' self-control programmes or citizens' compliance monitoring (mostly complaints). The advantages and disadvantages of various sources of information are summarised in Table 5.

**Table 5. Comparison between sources of information on compliance status**

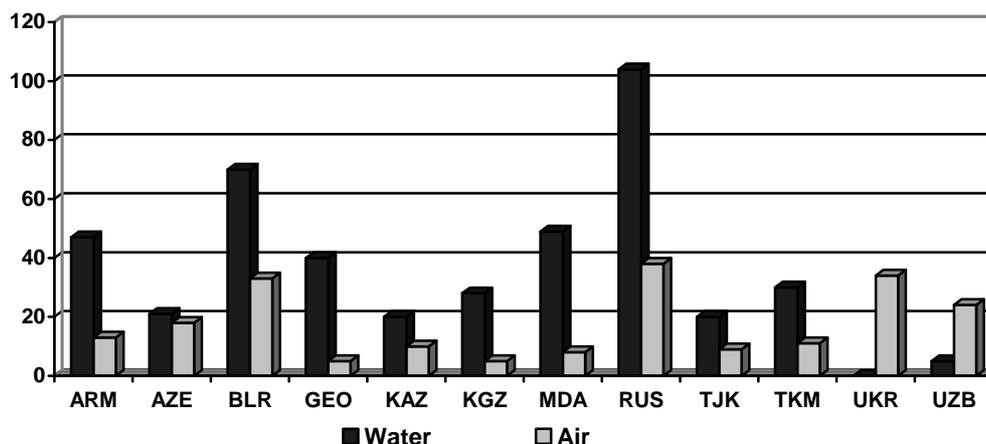
Information source	Advantages	Disadvantages
<b>Ambient monitoring</b>	Useful to detect violations without entering a facility. Give certain indication whether permit requirements are correctly set to meet environmental quality objectives. Software has been used successfully for tracking back ambient pollution to specific sources, thus offering the opportunity to target on-site inspections.	The connection of pollution with a certain facility may be difficult to establish and prove. Generally, is resource-intensive.
<b>Self-control</b>	Provide much more extensive information on compliance. Shift the financial burden of compliance monitoring to the regulated community.	Require integrity and capability of polluters to provide accurate data. Place a burden on the regulatees and increase paperwork.
<b>Complaints</b>	An additional way to detect violations.	Sporadic. Quality of data or reasons to report violations may be questionable.
<b>Inspections</b>	Potentially, provide the most relevant and reliable information.	Can be very resource-intensive; therefore, must be carefully targeted and planned.

Source: Based on Principles of environmental enforcement (USEPA, 1992).

145. Although regulatory agencies have historically undertaken compliance monitoring, it is now good practice to reduce its costs by requiring operators to track and report data on their environmental performance. At the same time, inspections conducted by state authorities (or third parties sub-contracted by the government) remain the backbone of any compliance assurance programme.

#### 4.5.1 Ambient monitoring

146. In most of the EECCA countries there are a range of institutions undertaking monitoring. These include the EEAs themselves (*e.g.* in Moldova, Kazakhstan, and Ukraine) but also specialised monitoring agencies of the Ministry of Environment and the Ministry of Health. The latter are usually better equipped with measurement instruments.

**Figure 22. Number of pollutants for which ambient concentrations are monitored**

Source: EAP Task Force questionnaire, 2006.

147. All of the EEAs report problems with monitoring capacity and that this can severely affect compliance assessment and, subsequently, the ability of the EEAs to assess and impose sanctions, especially if these rely on concrete evidence which has to be presented to courts. This largely concerns financial constraints on laboratory facilities, both in the EEA and industry, leading to limitations on the number of analyses undertaken and the range of pollutants that can be monitored. Gathering information through other systems, including other government agencies, research institutes and universities, often poses the problems of payment requested for the data. In addition various monitoring systems may duplicate sampling at the same locations and use different methodologies, so making comparisons of databases difficult.

148. Currently, however, there is more variability, as compared with 2003, in the ability of EECCA countries to undertake monitoring. In some of the EECCA, such as Western parts of the region, *i.e.* in Belarus Russia and Ukraine, significant monitoring is still undertaken and capacity problems may concern only certain parameters or locations. In others, as in the Caucasus and Central Asia, capacity problems have reduced monitoring programmes to a critical minimum.

149. There is clearly a major need for enhanced monitoring capacity. Some EEAs report the need for training of staff or additional staff numbers, especially if new equipment/parameters are to be used/analysed. However, others report that staff are well trained, but that they have limited equipment with which to work. This can be solved through releasing or identifying funds to purchase laboratory equipment. The commitment by governments to such funding also varies, with countries such as Kazakhstan setting aside significant amounts, while others, such as Moldova, providing little or no financial support. In certain cases, donor countries provide support (*e.g.* Finland provided equipment to the Kyrgyz Republic, and Germany and Finland supported the development of monitoring systems in the Caucasus region). However, it is important that donor support takes account of the need for the continued calibration, reagent costs and maintenance for the use of the equipment after its purchase.

150. The significant problems of monitoring in the EECCA can only be overcome with targeted investment. This will require some risk-based assessment, focusing on improved monitoring facilities for those pollutants/facilities deemed to have the greatest risk to the environment.

#### **4.5.2 Monitoring of compliance by enterprises themselves**

151. “Environmental self-control” (also known as “self-monitoring”) can be defined as the system of organisational and technical measures, put in place and financed by regulatees subject to environmental permitting or general binding rules in the field of environmental protection, in order to ensure their own compliance with environmental requirements. The primary goal of self-control is to ensure the earliest possible response to any environmental problem occurring because of malfunctions in production processes and, at the same time, reduce public spending on governmental compliance monitoring. Self-control data can provide a basis for verification of compliance with legal requirements and enforcement, and for calculation of environmental or administrative charges. They also help to optimise national, regional, and local ambient monitoring systems, and establish priorities for inspection.

152. For the regulated community, reliable data on emissions, and the environmental impact of their production, can be significant from an economic viewpoint. Disclosure of facility-specific data and their comparison between enterprises within the same industrial sector, or with international benchmarks, can further indicate where cost-savings are possible. Furthermore, access to other companies’ facility-specific data can build trust within industries that the government is targeting to ensure a level playing field.

153. Disclosure of facility-specific data can help citizens to take individual decisions that affect not only their health but also economic well-being, such as where to buy property. In EECCA, the social relevance of self-control is growing due to higher public access to environmental information,

in particular in light of the eventual establishment of the national Pollutant Release and Transfer Register (PRTR) following the ratification of the 2003 Kiev Protocol to the Aarhus Convention.

154. While there are many other benefits of self-control, they will be harnessed only if its results are actually used by stakeholders within decision-making processes. Data collection for the sake of data will lead, most likely, to an erosion of the system's value.

155. In the EECCA region, environmental self-control has a long history at the largest industrial facilities. Although the majority of self-control programmes date back only three to five years, some of the oldest enterprises established such programmes in the mid-1970s. The design of self-control has many positive elements corresponding to good international practice, but some of its weaknesses and its poor link to the new economic and social context largely diminish its potential benefits.

156. In most EECCA countries, the obligation for industrial operators to conduct self-control is clearly spelled out in the framework Laws on Environment Protection, as well as in laws regulating air and water pollution. Also, legal stipulations exist in the Administrative and Penal Codes to minimize the possibility of fraud and negligence within self-control programme implementation. The secondary legislation, e.g. in Kazakhstan and Ukraine, gives further guidance on approaches and procedures of self-control. The regulated community (in practice, the largest facilities) is in charge of developing individual multi-media self-control programmes and of presenting them for approval to the competent authorities. The obligation to conduct self-control applies regardless of ownership; uniform self-control requirements are established for public and private companies. The frequency of control depends on the hazard of each hazardous substance. For example, in Russia, the following frequency is established for ambient air pollutants: 1<sup>st</sup> category – once a quarter; 2<sup>nd</sup> category – twice a year; 3<sup>rd</sup> category – once a year; and 4<sup>th</sup> category – once every five years. Enterprises bear full responsibility for implementing self-control programmes and provide the necessary expertise, equipment, and analytical facilities. Sometimes services are obtained on a sub-contract basis. The costs of self-control are met by the enterprise.

157. The government authorities also regulate the functioning of self-control through certification of laboratories, annual approval of programmes, inspection, etc. Competent authorities are allowed to use self-control data in law enforcement against violators (e.g. in Armenia, Kazakhstan and Ukraine); this approach is widely used, in particular due to scarce resources available to competent authorities to conduct compliance monitoring.

158. The extent of self-control varies. For example in Ukraine it is an extensive system, while it is almost non-existent in Turkmenistan. For most of the countries, self-monitoring is limited to larger enterprises that have sufficient funds for the purpose. Results of self-control are communicated to competent authorities through regular statistical reports or immediately in the case of emergency situations or accidents.

159. While potentially the self-control system could be very effective, it is undermined by a number of problems, such as:

- Gaps and conflicts in laws and regulations, including a poor definition of basic concepts;
- Lack of clarity in the mandated scope of self-control;
- Insufficient attention to quality assurance and quality control as part of self-control;
- Assessment of self-control performance, based on the existence of a specific organisational form, *i.e.* of an environmental unit within an industry, rather than on the quality of self-control programmes and outcomes of their implementation;
- Continuing low mutual trust between public authorities and industry;

- Poor laboratory facilities of both regulated industries and competent authorities;
- Lack of mechanisms to disclose facility-specific data and take into consideration the interest of the general public while designing self-control programmes;
- Limited communication and very formal coordination between different departments and sub-divisions within the Ministries of Environment due to their focus on carrying out very specific functions.

160. Competent authorities often consider that industries have to monitor the maximum possible number of parameters without balancing the scope of self-control with inherent costs. At the same time, competent authorities do not have adequate resources to keep track of, and analyze, the information received from industry. This leads to a situation when industries create a merely superficial mechanism of self-control disconnected from the overall management system and therefore of little value beyond mandatory reporting. Contrary to international practices, in order to verify compliance, the values of parameters monitored by operators are compared with historic (inventory) emission levels, rather than the permit conditions.

161. The quality of self-control data raises doubts for a number of reasons. There is no statutory procedure to ensure the integrity of sampling, sample preservation, transportation, and analysis. The robustness and reliability of calculation methods are often challenged due to a high level of uncertainty and absence of quality control and quality assurance. There is evidence of major discrepancies between the measurements made by the state analytical laboratories and enterprise laboratories. Quality problems with laboratory tests often lead to controversy, which sometimes has to be resolved in court. Consequently, both the industries and the competent authorities incur additional administrative costs.

162. Self-reporting remained administratively cumbersome in all EECCA countries: Commonly, companies are required to send 3-4 different reports to a similar number of authorities in different formats and with different deadlines. For example, in Russia, enterprises are obliged to submit state statistical reports on environmental issues, including the so-called “TP” forms for air, water, waste, contaminated land, and pollution charges. The reports are to be submitted within certain timeframe (January-early February) to various public authorities: 2-TP Air to the Russian Statistics Agency; 2-TP Waste to *Rostekhnadzor*; and 2-TP Water either to *vodokanal* (for discharges into sewage network) or basin department (for discharges into surface water body). Enterprise representatives often have to file reports with a respective institution personally, where a note of their acceptance is put on the natural resource user’s copy. In contrast with licensing, this problem hardly received any attention within the “one-stop shopping” approach to regulation that has been actively promoted in EECCA.

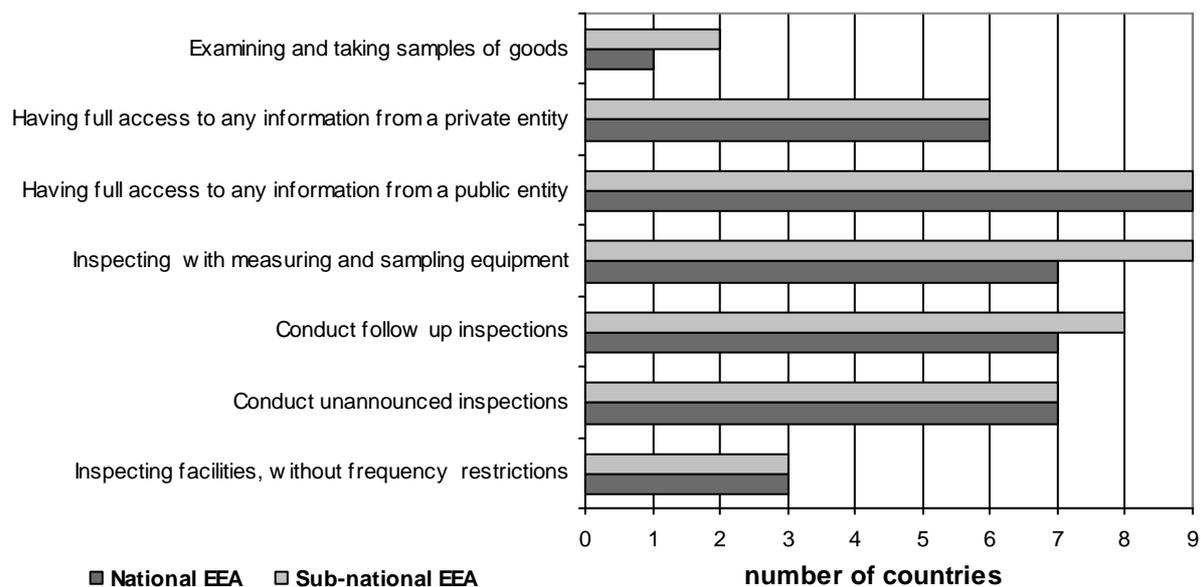
163. Self-control should be supported, even with its current problems. Clearly much depends upon the economic situation of industry. However, extending the level of such activities should be promoted wherever possible.

#### **4.5.3 On-site inspection visits**

164. Inspection of individual facilities is important in ensuring that the full range of compliance issues are checked and that personal contact is maintained with operators to discuss remaining problems. As the most forceful, effective, and sensitive tool of detection, an inspection calls for the best possible interaction in teamwork of the diverse EEA staff of inspectors. Inspections should be prepared in advance, carefully conducted on site and communicated in inspection reports. Finally, an inspection must collect sufficient and high quality evidence that can convince a court to prosecute the violator.

165. Commonly, the inspection procedures are regulated by law (as in Armenia, Kazakhstan and Russia), a regulation approved by the Ministry of Justice (as in Georgia) or internal documents of EEAs. They give a number of powers to inspectors, but these powers are quite meagre in comparison with international benchmarks (see Figure 23). For example, only three countries out of nine may inspect facilities without frequency restrictions.

**Figure 23. Inspection-related powers of environmental enforcement authorities in EECCA**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

166. In all EECCA countries, there are clear requirements that inspection be properly planned, conducted, and recorded. Inspections can be single-media oriented or integrated and the latter are reported the most common. They also can range from walk-through visits to in-depth investigations. In principle, prior to the visit, the compliance history and all permits are reviewed. However, inspectors rarely prepare individual plans of inspection or develop site-specific inspection checklists. In the majority of countries, inspection schedules are announced to the regulated community. In Moldova, the Environmental Agency of the Chisinau City posted its inspection schedule on web but this practice was used only a limited period of time in 2005.

167. Inspections can also be carried out *ad-hoc* upon the request from citizens, mass media, public prosecutors offices, regional authorities, Parliaments, etc. In many countries, particularly in Moldova, Russia, and Ukraine, practitioners shared their view that, in fact, most of on-site visits are unplanned and inspectorates work as “fire brigades”. The rate of unplanned site-visits sometimes reaches 90% that is extremely high in comparison with international benchmarks. This approach often siphons public money from solving serious pollution or serious non-compliance to cases that might be influenced by a political or personal agenda, or simply trivial requests that could be easily solved by local police or local authorities.

168. The frequency of inspections is still limited by law in several countries (*e.g.* in Moldova and Russia) but some countries, *e.g.* Armenia, already renounced such restrictions. In Georgia, Kazakhstan and Kyrgyzstan prior consents from the courts (or another authority) are required for every inspection. In Kyrgyzstan all inspections have to be co-ordinated with the Commission for Entrepreneurship Development and inspections which are not planned are not permitted. Even in the case of accidents when the EEA need to undertake an immediate inspection, it has to report to the courts in order to receive the permission. Such restrictions were often imposed in response to widespread corruption.

169. When planned inspections do occur, inspectors are supposed to check environmental documentation and actual compliance, assess environmental protection measures, verify equipment, and make sure that pollution and resources charges are calculated and paid correctly. In reality, in most cases, inspections focus on verification of relevant documentation. This happens because of limited availability of monitoring equipment. Another explanation is that neither territorial inspectors nor specialists from the central level expect real improvements in environmental performance since they believe that industries cannot afford to improve environmental performance.

170. A mandatory requirement is that every on-site visit should result in an inspection record (control act) stipulating the violation(s) revealed, the legal requirements that have been violated, the cause(s) of non-compliance, and the corrective actions prescribed (see an example of inspection-related documents from Russia). Detailed inspection reports with findings are not routinely prepared.

**Box 17. Examples of inspection documentation used in Russia**

**Record of the on-site visit:**

- Name, contact data, top manager, bank requisites of the regulatee;
- Brief characteristics of production processes (profile, sector, etc.);
- Aspects checked;
- Name, position and contact data of inspector;
- Findings (general description of relevant activities, documentation and investigated violations);
- Prescriptions;
- Information on responsibilities, timescale for improvements, etc. ;
- Signatures of Inspector(s), representatives of the regulatee, top manager (director) as a sign of preparedness to improve the situation.

**Record (protocol) of administrative violation:**

- Name, contact data, position of the official conducting the inspection;
- Name, contact data, bank requisites of the regulatee;
- Witnesses, contact data;
- People that suffered damage, contact data;
- Violation description;
- Legislation articles covering the above described violation;
- Clarifications/comments of the violator;
- Rights and responsibilities of the violator;
- Information on future steps;
- Signatures.

Source: OECD, 2005.

171. Despite many problems in the organisation of inspection, their precise characteristics are hardly known. During the review, countries were requested to provide quantitative information on the inspection types and a number of specific characteristics, but many had problems to provide answers.

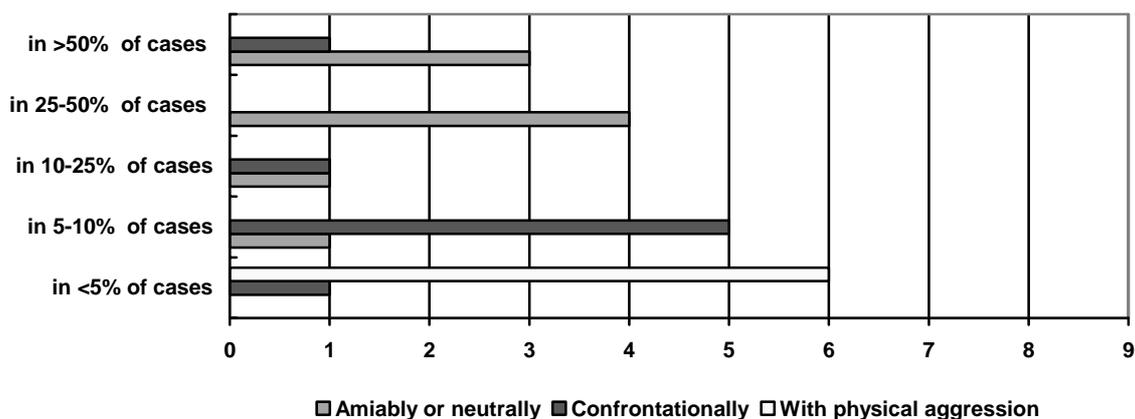
Table 6. Basic characteristics of environmental inspection of industrial facilities in EECCA

Indicator	Year												
		Armenia	Azerbaijan	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Moldova	Russia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
Total number of inspection	2000	1779		65901	840				160000				
	2003	1363	428	247898	896		7045		129000				
	2006	2030	1156	348375	725		6215						
% of single medium inspections	2000	0											
	2003	2,05											
	2006	1,62											
% of follow up on-site visit	2000	0											
	2003	0	20										
	2006	0,1	45										
% of ad-hoc on-site visits	2000	0			20								
	2003	1,75	15					25					
	2006	1,5	30										
% of unannounced on-site visits	2000	0			100								
	2003	0	20		100								
	2006	0	50		100								
% of joint inspections with other authorities	2000	0			1			24					
	2003	1	30		1			24,1					
	2006	1	50		1								
% of visits carried out of total planned in annual inspection schedules	2000	13											
	2003	15											
	2006	10											

Note: Information is being collected to complete the table.

172. Almost all of the EEAs report a negative attitude towards inspection activity by enterprise managers which is usually due to the problems in achieving compliance and pressures from inspectors to impose sanctions. Such a negative attitude is aggravated by the fact that the requirements are in many cases unfeasible and inspectors are usually blamed for this. In comparison with 2003, no changes in the attitude toward inspectors were reported by the EECCA countries, except for Armenia and Kyrgyzstan. In Kyrgyzstan, environmental inspectors face confrontations more frequently during on-site visits. On the contrary, in Armenia inspectors are lately treated more amiably.

**Figure 24. Attitude towards inspectors by enterprise personnel, based on inspector opinion, in EECCA (2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

173. In the future, it will be important that EECCA countries improve the ways of conducting site visits. First and foremost, attention should be dedicated to checking environmental performance, including the technical state of facilities, rather than the current focus on verifying documents. Furthermore, the evidence of (non)compliance should be better recorded and the structure of inspection reports should be amended and contain more extensive information on observed phenomena, interviews carried out on site, samples taken, etc. These improvements should be reflected in internal guidance documents for inspectors on the procedure of sector-specific environmental inspections.

174. The legal limitations on inspection activity should be reviewed. The need for sufficient number or announced inspections should not be regarded as an attack on industry, but an essential element in ensuring the implementation of the law and protecting citizens and the wider environment. EEAs might discuss this issue with NGOs which might assist in lobbying for change.

175. On the other hand some countries report a high number of inspections per year. In those cases safeguards should be in place not to put unnecessary burden on enterprises and not to create an atmosphere of lack of trust between inspectors and managers.

176. Although a wide variety of inspection types are employed in the EECCA countries, there was insufficient information to determine whether they are used appropriately. There is a need for flexibility and this should be allowed. However, further use of detailed integrated inspections may also be beneficial in encouraging general improved environmental performance and may be linked to the introduction of other tools such as environmental management systems.

#### **4.5.4 Role of the general public in compliance monitoring**

177. Also citizens can contribute to compliance monitoring by tracking the performance of industrial facilities through independently compiled emission data or independently assessed compliance/state of environment information. Many inspectorates find that clearly communicating their information needs to citizen monitors provides for collection of information that is more useful in the identification of potential environmental violators.

178. Many EECCA countries (Belarus, Moldova, Russia, Ukraine, etc.) allow citizens to participate in compliance inspections conducted by government officials. Usually, the citizen must have been involved in the complaint process prior to the inspection although cases exist where citizens can receive the status of a “public inspector” and the mandate to write protocols about certain types of violations. Inevitably there will be legal limitations to public inspections. In enforcement

investigations, public citizens including NGOs as “volunteer inspectors” cannot force access to a site to gather evidence, as may an enforcement authority when it conducts an official inspection.

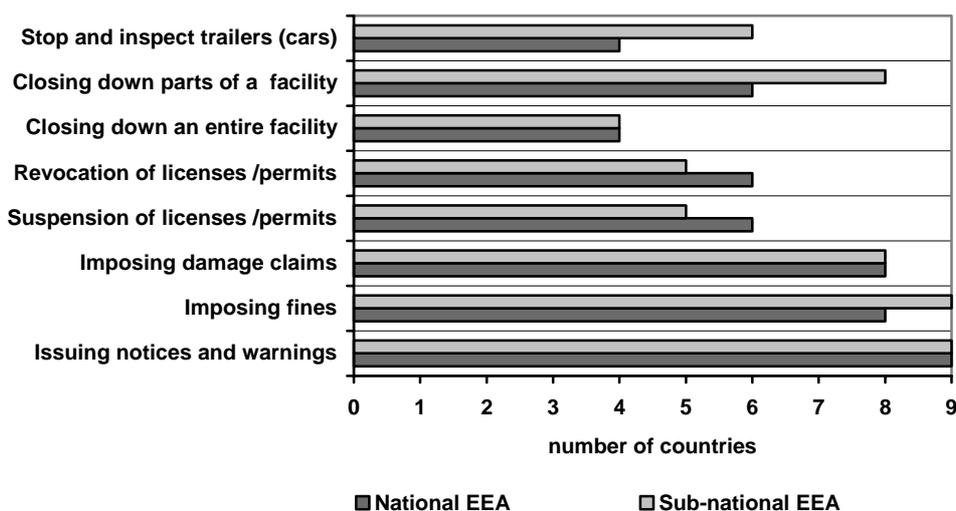
179. Complaints of citizens, but also of (neighbouring) companies can be important indicators for inspectors in the preparation of their site visits. In EECCA, the statistics on complaints are not reliable but practitioners often mention that citizen complaints sometimes lead to a sort of “fire brigade approach”, already mentioned above, meaning that every complaint is followed by a reaction of the inspectorate by carrying out a site visit. This approach can, in spite of the (temporarily) positive radiation towards the public, be rather risky for several reasons: not all complaints reflect a situation of non-compliance; not all situations of non-compliance indicated by a complaint are equally relevant; complaints can be “revenge-driven” or “competition-driven”. Finally, complaints often will not reflect the real environmental priorities and can draw limited resources away from strategic approaches.

180. Therefore complaints should not be a main driver in carrying out inspections. However, they should be carefully used for inspection planning and preparation purposes. In general, this aspect of compliance monitoring need be better quantified, including in terms of costs and benefits, and guidance elaborated on how to treat them.

#### 4.6 Administrative enforcement and damage claims

181. After revealing a violation and recording it in the “control act”, the EEAs report to enter the dialogue with the offender. In some countries (e.g. Armenia and Belarus), if the violation is not serious and the offender is ready to implement corrective measures, the EEA would limit the response to an administrative order indicating the deadline for implementing the corrective measures. In other countries, e.g. in Kazakhstan, inspectors must impose a fine and many believe that the high number of fines shows high performance of the inspectorate (which is definitely not the case). Where there are violations involving serious negative impacts on the environment, the damages are evaluated and a claim for compensation is made. If the offender voluntarily pays the damage claim, the problem is considered to be resolved. If it does not, a court action may be initiated. Some other tools of administrative enforcement exist, but not all countries have access to them (Figure 25).

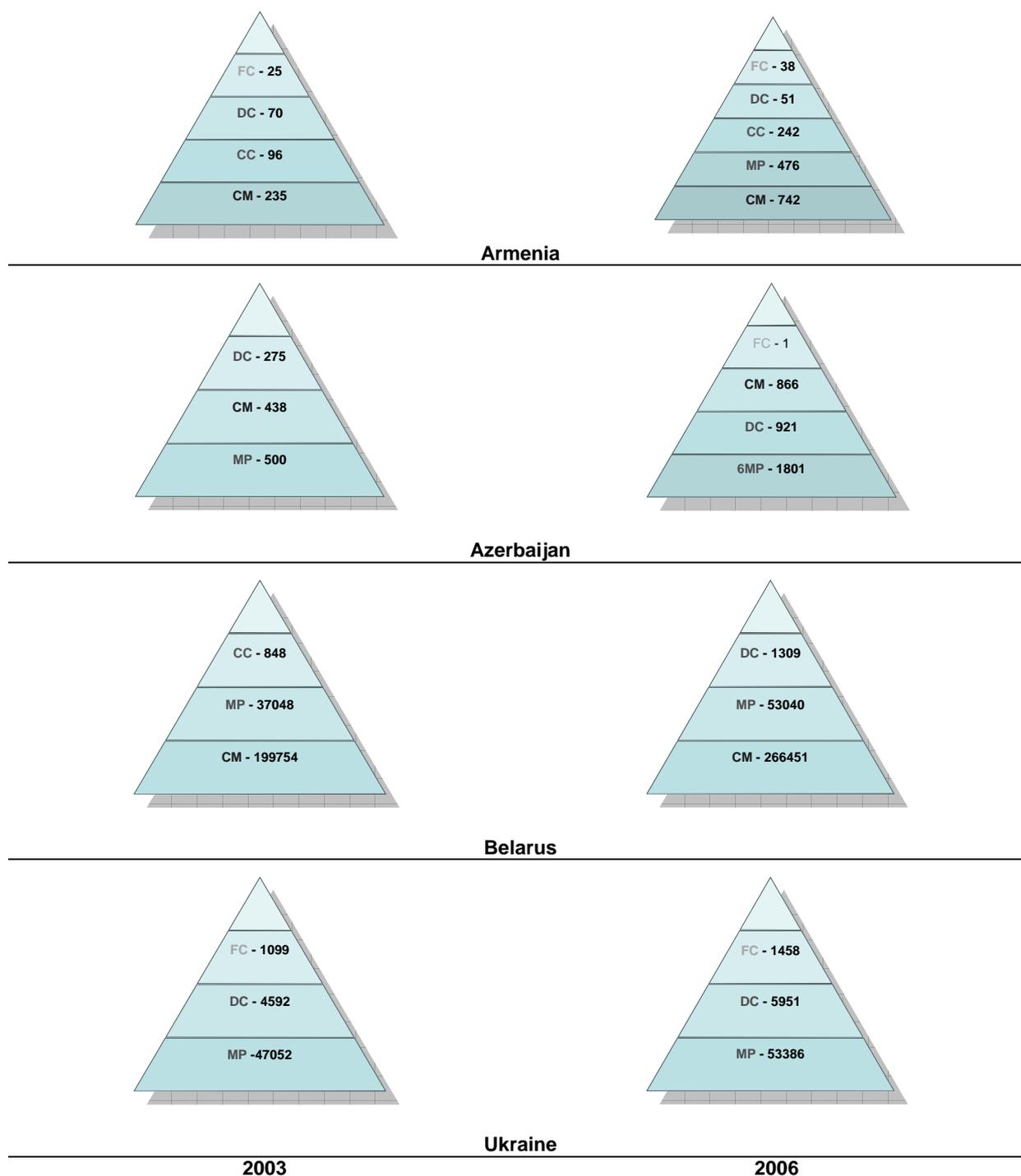
**Figure 25. Administrative enforcement powers of the environmental enforcement authorities at the national and sub-national level in EECCA (2006)**



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan and Uzbekistan.

182. Although the list of tools seems to be extensive, in practice prescriptions for corrective measures and administrative penalties are the most frequently used responses. The most common punitive action is financial – through fees and fines.

Figure 26. Examples of enforcement pyramid from selected EECCA countries



**CM** - Prescriptions for corrective measures; **MP** - Monetary penalties; **FC** - Number of facilities temporarily closed; **DC** - Damage compensation claims; **CC** - Cases transmitted to the courts

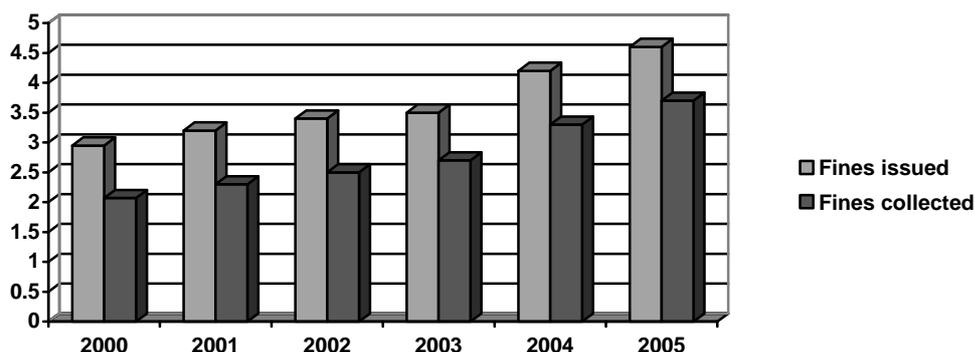
Source: EECCA Environmental Enforcement Authorities.

183. More severe tools are used not so often, although many inspectors believe that the most effective tools is production closure as fines are too small for being sufficient to act as deterrence, with many operators preferring to pay the fines as a sort of “tax”. Besides, EEAs still face political pressures to allow a facility to continue operation even though it should be closed for environmental

reasons. Analytical tools to estimate illegal financial gains from non-compliance and the affordability of fines are missing. Therefore the application of fines often lacks proportionality.

184. Fine collection rates increased over the last few years. The sharpest increase was recorded in Georgia – from 6% in 2000 to 72% in 2006, and in Azerbaijan – from 20% in 2000 to 80% in 2006. In other countries, with higher rates in 2003, improvements were less spectacular but steady – as in Ukraine (Figure 27), where the fines collection rates increased from 70.2% in 2000, to 77.1% in 2003, and reached 80.4% in 2005. This increase generally improved the deterrence effect of sanctions.

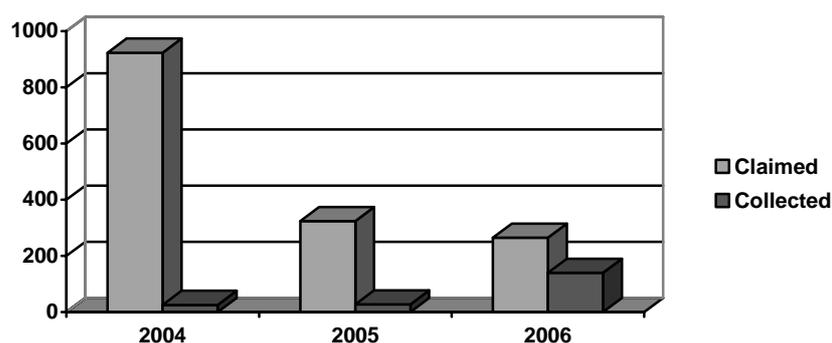
**Figure 27. The amount of fines issued and collected in Ukraine n 2000-2005 (million Ukrainian Hrivna).**



Source: State Environmental Inspectorate of Ukraine, 2006.

185. Unlike the fine collection rates, the rates of compensations for damages (CFD) are microscopic. In Ukraine, where the fine collection rates reach some 80%, the rate of CFD collection in 2003 was only 0.02% reaching some 50% in 2006. This is linked to a poor evidence of damage and flawed methods of damage calculation that are simply rejected by courts.

**Figure 28. The amount of damage compensation sums claimed and collected in Ukraine in 2004-2006 (billion Ukrainian Hrivna).**



Source: State Environmental Inspectorate of Ukraine, 2006.

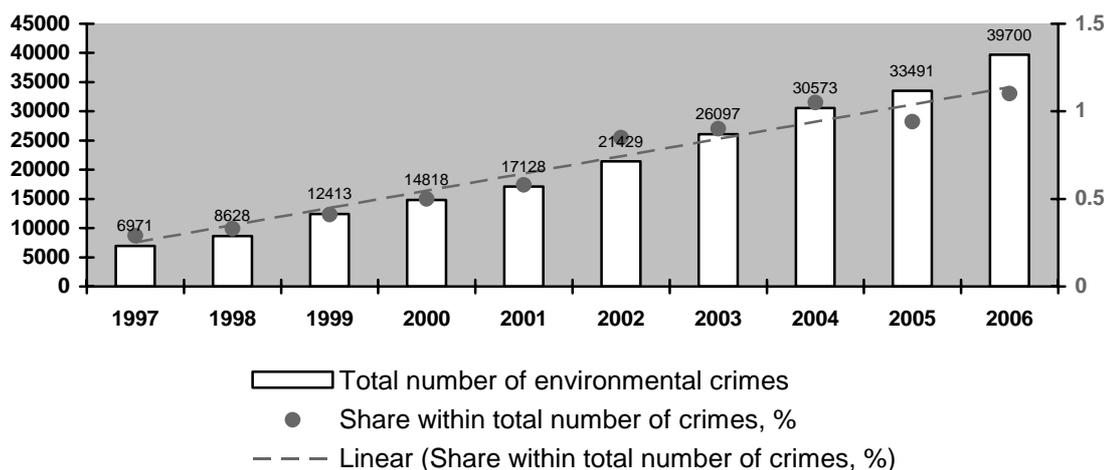
186. The range of tools available in OECD countries is similar, but their swift and coherent application tends to create a major deterrence to non-compliance. In CEE countries there are also problems with the deterrence value of some fines, and, therefore, efforts are being made to address this. An increased use of alternative measures (such as actions directed at owners and managers) might be a useful companion to the more commonly used enforcement tools.

187. Seriousness of offence determines this escalation. The "appropriate" response should be proportionate to the violation and take into consideration aggravating or mitigating factors. In addition, the timeliness of the response should be guaranteed: case-opening decisions must occur at defined intervals after inspections, and without undue delay. Whatever remedies are available to the EEA, guidelines should define the criteria for selecting one path to justice over another.

#### 4.7 Criminal enforcement

188. In EECCA, environmental crime is gaining ground, *e.g.* in Russia the number of recorded crimes more than doubled in between 2001-2006. Increasingly it has taken the form of organised crime. For example, the Volga Inter-Regional Environmental Prosecutor's Office investigated the criminal case regarding ten persons who formed organized criminal groups and had been engaged in illegal logging for two years. Distinctive features of organized criminal activities were manifest clearly, namely – distribution of roles and securing the infrastructure for safe and unimpeded committal of crimes. In the Far East region, it was detected that the auxiliary courts of the armed forces in the north-east of Russia had been involved in the unlawful extraction of marine biological resources. Another present-day specificity of environmental crime is its link to unlawful entrepreneurship using forged licenses, often those for hazardous waste treatment (industrial waste, as well as past due and reject medicines, pharmaceutical waste, acids, chemical reagents, etc.).

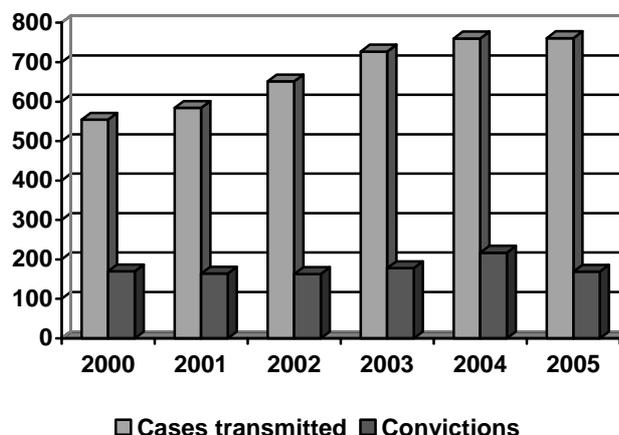
**Figure 29. A decade of steady increase in the number of environmental crimes in Russia**



Source: State of the Environment Reports of the Russian Federation, [www.mnr.gov.ru](http://www.mnr.gov.ru) (1997-2005); data for 2006 reflect only 11 months ([http://www.gks.ru/free\\_doc/2006/b06\\_01/3-4.htm](http://www.gks.ru/free_doc/2006/b06_01/3-4.htm)).

189. Some Inspectorates initiate court action in cases of criminal behaviour, but the courts are not always supportive of the EEA in its enforcement actions: in Ukraine, only 20% of cases come to the phase of pronouncing the conviction. Sometimes crime is recorded but cases are not resolved: for example, the Russian Ministry of Internal Affairs reports that only 4.9% of environmental criminals were discovered in 2003, 27.3% in 2004 and 10.2% in 2005.

**Figure 30. The number of cases transmitted for criminal prosecution in comparison with the number of convictions in Ukraine in 2000-2005**



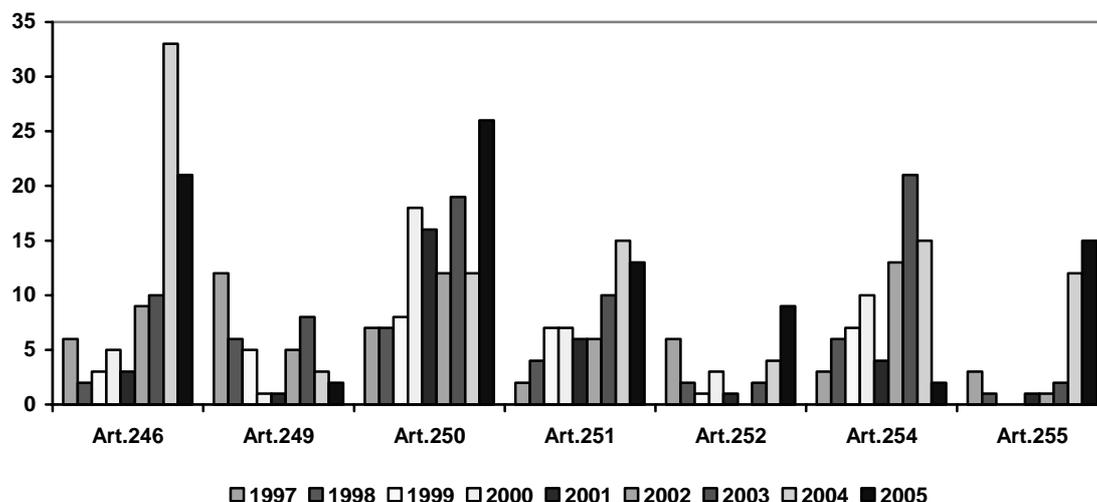
Source: State Environmental Inspectorate of Ukraine, 2006.

190. Also analysis conducted in Russia shows that punishments for the persons convicted of environmental crimes are mostly unrelated to the deprivation of liberty (conditional and fines). Out of the total number of persons (5,881) convicted of environmental crimes during the first six months of 2005, 137 persons (2.4 percent) were sentenced to the deprivation of liberty, of which 45 percent, for less than one year and another 37.2 percent, for up to two years. Such practices of the fight against environmental crime do not have any deterrent effect.

191. Convictions largely depend upon the way specific articles of Criminal Codes are formulated. A case study from Russia shows that there is a large gap between the number of recorded crimes under Art. 247 of the Criminal Code, *Violation of the Rules of Shipment of Environmentally Hazardous Substances and Waste* and other articles setting criminal liability for the pollution of water, soils, etc. Article 47 – the only one in the environmental chapter of the code – provides for the criminal liability for posing a threat to environment. This means that it is easier to prove the threat of causing environmental damage than to establish (and assess correctly) the actual damage. Also there are major annual fluctuations in the level of environmental crime by article. They suggest that, despite significant modification of the law, law enforcement authorities are not prone to hold criminally liable violators of environmental standards and rules.

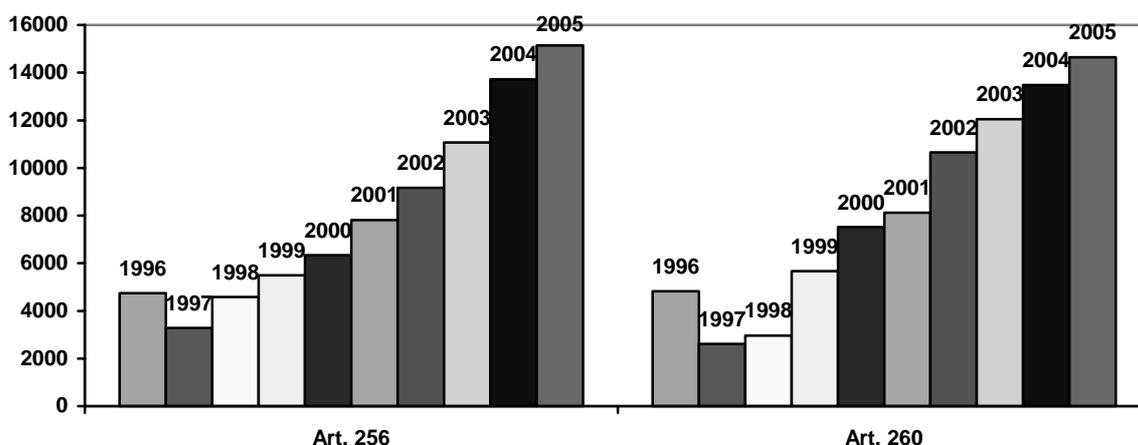
192. A different picture emerges from the analysis of the so-called “classic environmental crimes”, *i.e.* poaching where there has been a steady increase in the crime rate. The data adduced in this case also reflect more clearly the significance of the adaptation period. At the same time, it is clear that the priorities of the fight against unlawful extraction of natural resources prevail at the expense of the fight against environmental pollution. Environmental pollution crimes are often recorded only in connection with major technological accidents.

**Figure 31. Annual oscillations in the number of recorded environmental crimes by pollution-related articles of the Criminal Code in Russia, 1997-2005**



Source: State reports "On the State and Protection of Environment in the Russian Federation".

**Figure 32. Trends of recorded "green crimes" in Russia by article of the Criminal Code, 1996-2005**



Source: State reports "On the State and Protection of Environment in the Russian Federation".

#### 4.8 Citizens' enforcement

193. Government programmes are not the only means of enforcement. In some countries, citizens and private groups are empowered by law to bring enforcement actions against violators through lawsuits. Citizen participation can be very effective when political leaders paralyse inspectorates from challenging powerful enterprises. It is to prevent such intermittent paralysis of an inspectorate that civil society representatives may act as "watchdogs" for non-compliance. Exposure in the mass media of the inspectorate's failure to enforce can put pressure on it to improve performance.

194. While most of the EEAs indicate the right of the public/NGOs to take court action, in only a few does it happen (see Box 18 for a recent example from Ukraine). In general, many citizens still, as in the Soviet period, seek to redress violations through official state bodies, *i.e.* the EEA, rather than launching public suits.

**Box 18. Use of international and domestic dispute resolution mechanisms in the Danube Delta case**

In 2003, The Government of Ukraine approved a project to dig a deep-water navigation channel through Ukraine's portion of the Danube Delta Bilateral Biosphere Reserve. Ecopravo-Lviv (EPL), a Ukrainian public interest environmental law NGO, challenged this decision on both environmental and procedural grounds (including a lack of public participation in the EIA process).

First of all, EPL filed cases against the Government of Ukraine challenging the Government's decision to dig a deep-water navigation channel through Ukraine's portion of the Danube Delta Bilateral Biosphere Reserve. On February 10, 2004, the Commercial Court of Kyiv rendered a decision to sustain the suit by EPL against the Ministry of Environment Protection of Ukraine. The court based EPL's *locus standi* on the Aarhus Convention, which Ukraine had ratified, even though the State had not yet adopted implementing legislation to guarantee *locus standi* to ensure access to justice. The court held that the public was not given a possibility to participate in EIA and, thus, their rights were violated. Thus, the court ruled that the consent by the Ministry of Environment regarding construction of the canal was illegal and the decision was invalid.

In addition to seeking remedies in national courts, EPL filed complaints with a variety of relevant international bodies in late 2003 and early 2004. These included:

- The Compliance Committee of the Aarhus Convention (on access to information, public participation in decision-making and access to justice in environmental matters). Romania also subsequently filed a complaint with the Compliance Committee;
- The Implementation Committee of the Espoo Convention (on EIA in a transboundary context). [The Implementation Committee refused, by a vote of 4-3 in 2004, to consider the complaint.] Romania subsequently filed a complaint with the Implementation Committee;
- A Letter of Emergency Notification filed with the Executive Secretary of the Convention on the Conservation of Migratory Species;
- An Emergency Complaint filed with the Permanent Secretariat of the International Commission for the Protection of the Danube River; and
- A Letter of Notification filed with the Secretariat of the African-Eurasian Waterbird Agreement (AEWA).

Also, EPL has raised the issue with the Ramsar Convention and the UNESCO Man and Biosphere Programme, and both institutions have expressed concern about the channel. This strategy of seeking relief through multiple domestic courts and international dispute resolution mechanisms can be resource intensive. Also non-state actors that seek recourse from an international mechanism may — but not necessarily — be required to exhaust domestic remedies first. Exhaustion of remedies depends on the terms of the particular MEA or institution, and there often are exceptions for specific instances (e.g., emergency or futility).

Source: [www.epl.org.ua/files/Danube/Danube\\_EPL\\_actions.doc](http://www.epl.org.ua/files/Danube/Danube_EPL_actions.doc), Communication with Mr. Andriy Andrushevych

195. Because of litigation-related costs, citizens in EECCA have a limited ability to exercise their right of access to justice. Mechanisms exist to address this problem. In some countries, citizen suit provisions in environmental laws contain fee-shifting that allow citizens who win to recover the cost of litigation, including reasonable fees for attorneys and experts. Citizen enforcers are not responsible for the fees of the opposing side if the citizens do not win. There are also so-called “public advocacy centres” that provide free of charge litigation services to the general public. Such centres were active in Armenia, Belarus, Moldova, Ukraine, and in a number of other EECCA countries, but discontinued financing paralyzed their work.

## 5. RECOMMENDATIONS FOR FUTURE REFORM

196. Overall, the countries' responses to environmental non-compliance are more systematic nowadays than in 2003. At the same time, profound changes in regulatory frameworks and compliance assurance strategies are still required. Possible priority actions for the period after the Belgrade Ministerial Conference include:

- **Enhance the law-making process and move toward performance-oriented regulation.** In order to increase the effectiveness of regulation, EECCA countries may consider taking the following actions: (i) better link law-making with environmental policy development and practical implementation of laws; (ii) systematically apply the Regulatory Impact Analysis and conduct stakeholder consultations to ensure, among other things, the feasibility of requirements; (iii) make legal frameworks in EECCA more coherent; (iv) decrease the number of primary and secondary legal acts through their integration; (v) ensure that legal requirements and non-compliance responses are proportionate to the risks and compliance behaviour that they address; (vi) modernise the structure and language of laws.
- **Conduct better analysis to support the development of compliance assurance strategies:** In EECCA, more empirical analysis concerning roots of non-compliance and the incentive framework for businesses to improve environmental performance is needed. Further work is also needed on quantification of compliance rates, including sector-specific rates.
- **Improve compliance assurance strategies and performance management.** Environmental authorities will need to identify and profile the regulated community in order to develop risk-based compliance assurance strategies, taking full account of incentives for the regulated community to comply and their actual compliance behaviour. Compliance assurance strategies should target prevention of non-compliance. For cases when preventative actions fail, sanctions with sufficient deterrent effect will need to be designed and applied in a proportionate, consistent, stepwise and transparent manner. These need be supplemented by a higher accountability of EEAs. To enable strategic enforcement, an improved system of environmental compliance and enforcement indicators is needed, as well as better planning approaches, both strategic and operational; sound tools to set priorities, and adequate data collection and information management systems.
- **Make a better use of preventative instruments to re-orient regulatees' priorities on compliance.** There is a role for governments to increase at least the adherence within firms to financially viable environmental improvements leading to both public (environmental) and private (economic) benefits. This role lies in quantifying and explaining to businesses and other market players the economic and social gains of environmental regulation and compliance assurance (as well as losses from their absence), raising firms' environmental awareness, encouraging sector-specific benchmarking of environmental behaviour and performance, etc., thus raising the level of corporate environmental responsibility. Technical assistance programmes are needed for SMEs that do not have the internal resources and expertise to identify and implement win/win solutions;

- **Further empower stakeholders to act as indirect regulators and enforcers.** The environmental authorities will need to assume the role of catalysing and facilitating the participation of commercial and non-commercial parties, which may act as indirect enforcers. These range from industry associations through financial institutions to citizens' environmental and other pressure groups. To this end, it will be important to raise the transparency of regulation and enforcement.

197. Continued institutional strengthening is also necessary in such areas as development of better procedures and technical guidance, staff training and infrastructure improvement, as well as staffing and budget allocation.

198. Progress toward the rule of law and environmental performance requires changes in the incentives structure for both regulators and the regulated community. "The stringency of our laws is tempered by the total laxity in complying with them", says a Russian dictum that reflects well the compliance culture not only in Russia, but in the whole region both during and after the Soviet period. Indeed, for several decades, EECCA has been marked by pervasive environmental non-compliance. Today, EECCA countries stand at a point when integration into the global economy, the legacy of past pollution (*e.g.* almost one million environmental migrants), pressure from the general public, and international cooperation could provide a better incentive framework thus promoting the rule of law and environmental performance. Harnessing this opportunity is crucial in order to avoid social and economic costs of environmental pollution and degradation, and to ensure a level playing field for businesses.

## GLOSSARY

The following key terminology is used in this report:

- A **Regulatee** (also referred to as the **regulated community**) can be a natural person or legal entity, including governments and their subsidiary bodies that are subject to legally-defined environmental requirements. The definition of «regulatee» extends to privately or publicly-owned enterprises in all their possible forms. It includes both owners and facility operators;
- **Compliance** is a response to regulatory requirements manifested through the state of technical and behavioural conformity with the law;
- **Compliance assurance (or “enforcement in a wide sense)** is defined as the application of all available tools to induce compliance and includes:
  - **Compliance promotion**, which is any activity that facilitates or encourages voluntary compliance with environmental requirements;
  - **Compliance monitoring**, which is the collection and analysis of information on compliance status (through pre-inspection and inspection activities, ambient and emission monitoring, when needed, and other kinds of data gathering);
  - **Enforcement**, which can be defined as the set of actions that governments or others take to correct or halt behaviour that fails to conform with environmental requirements;
- An **Environmental Enforcement Agency (EEA)** is defined as any part of the government structure, whose primary responsibility is to identify, monitor, prevent or take action to correct non-compliance with environmental requirements. The EEA can be a sub-division of the main competent authority for environmental protection, an autonomous institution (called usually an «environmental inspectorate») or any other unit of public administration that has relevant responsibilities.

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