ENVIRONMENTAL ENFORCEMENT AND COMPLIANCE INDICATORS IN THE REPUBLIC OF KAZAKHSTAN

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1 OVERVIEW OF CURRENT PERFORMANCE ASSESSMENT SYSTEM

Kazakhstan uses “enforcement and inspection indicators” to analyse its enforcement and compliance promotion practices. Key performance indicators include the number of inspections, violations, injunctions, fines/claims, and lawsuits. These indicators are designed to reflect the performance of enforcement authorities of the Ministry of Environmental Protection (MEP) and to provide information on environmental regulatory compliance in the Republic of Kazakhstan (RK).

The results of enforcement and compliance promotion activities are shown in the background reports prepared by the Department for State Environmental Control of the MEP biannually. In addition to the information for the current period, the reports show the dynamics of indicators for the past years, which serve as an additional tool of analysis.

Despite a large number of potential users of the system, the existing set of indicators is meant mostly for internal use by the MEP, in particular for managerial purposes. If the set of indicators were more adequate, comparative analysis of time series and accurate interpretation of data could reveal changes in the compliance behaviour (intermediate outcomes) and the state of environment (outcomes), resulting from enforcement. This would make it possible to modify enforcement strategies or the regulatory requirements. The MEP leadership is interested to pursue such an improvement of the indicator system.

1.1 System Users

Key users of the performance assessment system for enforcement activities are:

- **Ministry of Environmental Protection (MEP) and its units**, including the Department for State Environmental Control (DSEC) and regional departments of environmental protection: The information is used to assess the performance of regional departments with a view to formulating the environmental policy and planning the compliance assurance activities;
- **Statistics Agency of the Republic of Kazakhstan (RK)**: Based on the received data, the Agency prepares background papers for the Government;
- **Parliament**: The information can be used to take legislative and political decisions;
- **President’s Office**: The information can be used to take organizational, political, and legislative decisions; and
- **Government**: The information can be used to take political and organizational decisions in the field of environment and budget planning.

1.2 Two Sets of Indicators

In Kazakhstan, two sets of indicators are distinguished as used by:

- The Department for State Environmental Control of the MEP;
- Statistics Agency of the RK.

Public availability of information is an important feature. While the background reports of the DSEC focus on intra-departmental objectives, those of the Statistics Agency of the RK focus to a greater extent on the needs of the Government, Parliament of the RK, and the general public (although in the latter case the reports are made available for a fee).

1.3 Indicators used by the Department for State Environmental Control of the MEP

The DSEC prepares a biannual “Report on Enforcement and Compliance Promotion Activities of Area Environmental Authorities” which aims at assessing the performance of

enforcement activities in RK, at the national and local levels. The report is prepared based on the departmental statistical form 1-6GKS.

These biannual reports comprise seven sections:

- Air protection;
- Water protection;
- Land protection;
- Waste disposal and recovery;
- Storage, transportation, use, and recovery of mineral fertilizers and pesticides; and
- Radiation safety.

1.4 Control over Flora and Fauna Protection.

Initial information comes from the regional departments and includes:

- Number of inspections;
- Number of inspections held jointly with other inspectorates;
- Number of detected violations;
- Number of issued injunctions;
- Number of suspended facilities;
- Fines (imposed/levied); and
- Claims (filed/levied).

1.5 Number of Lawsuits Referred to the Public Prosecutor (Including Criminal Ones and Through Court).

In addition, the DSEC develops derivative indicators, including:

- Average number of inspections per inspector;
- Percentage ratio of land, air, water, and fauna protection inspections.

The following information is also analysed:

- Violations of environmental legislation (detected violations, issued injunctions, executed injunctions). Time trends of violations and the number of issued and executed injunctions are presented;
- Measures taken to restrict or suspend facilities due to violation of environmental legislation;
- Main enforcement tools applied. Such analysis is carried out based on the indicators for imposed and collected fines by medium (air, water, land, and waste). Trends in fines that were imposed and collected are shown by the number of fines and collected amount (in tenge);
- Inspection quality and efficiency; and
- Reasons for which the performance of regional departments has declined or improved.

1.6 Indicators used by the Statistics Agency of the RK

The Statistics Agency of the RK publishes the ***Natural Resources and Environmental Protection*** Series with the following sections:

- Air protection;
- Main indicators of toxic waste management in the RK;
- Current environmental expenditures in the RK; and
- Environmental accidents, suspended facilities, and violations of environmental legislation.

The section on environmental accidents, suspended facilities, and violations of environmental legislation directly relates to the enforcement and compliance promotion system in the RK. This statistical report focuses on the following indicators:

- Accidental release of pollutants (number of cases and amount of damage claims);
- Number of suspended production processes due to violation of environmental legislation;

- Reduction in the release of pollutants due to suspension of a production process;
- Number of lawsuits referred to the public prosecutor and number of officials and natural persons held liable; and
- Amount of levied fines and claims related to environmental violations.

The indicators in this statistical report are presented by regions (totals for the RK and by region) and by environmental medium (water, air, and land).

1.7 Time Series Analysis

Comparative analysis of indicator values for different periods is an important tool for assessment of enforcement and compliance promotion activities. This tool has been used broadly by the DSEC, making it possible to compare current six-month indicators with those of the past periods.

Assessment of results related to site visits carried out by the regional departments can serve as an example of time series analysis. Thus, when the number of site visits during the first six months of 2003 was compared with the values of this indicator for the first six months of 2002, it turned out that the number of inspections went down by 27.3 percent (from 11,704 to 16,100 respectively). This led to similar trends in other indicators, including the decline in the number of detected violations by 50 percent, number of issued injunctions by 31.7 percent, and the number of executed injunctions by 27.8 percent. The report also identifies the causes for such developments:

- Freeze on the inspection of small and medium enterprises;
- Changes in the responsibilities or regional departments; and
- Cut in the number of inspectors in some regions.

1.8 Information Management

The data gathering system relies on the reporting from regional environmental departments. Information is analysed and stored at the DSEC. Regional statistics departments serve as another channel of information collection and processing. They provide data gathered by the regional environmental departments to the Statistics Agency of the RK.

1.9 Strengths and Weaknesses of Existing Set of Indicators

The strengths of the existing system of indicators are as follows:

- Coverage of various regulatory stages, which includes both compliance promotion indicators and enforcement ones;
- Reasonably clear performance indicators for inspectors and possibility to partly study the impact of the compliance promotion system on the industries' behavior (intermediate outcome indicators); and
- Reflection of the enforcement activity indicators in the general government statistical reporting and their publication by the Statistics Agency of the RK. This ensures access of the general public and decision-makers to the necessary information on enforcement activities.

The weaknesses are as follows:

- **Limited scope.** The existing indicators are of limited application and they relate mostly to the assessment of the functional responsibilities of the regional inspectorates. Using the existing indicators, it is difficult to objectively assess the main objective of inspections, which should be to ensure compliance with the regulations and the reduction of the negative environmental impact of a production process. The existing set of indicators does not reflect the environmental performance of the regulated community;
- **Poor link to the strategic planning and management process.** There are no clear criteria for efficiency assessment of the existing compliance assurance system. Achievement of specific targets set for the enforcement programmes should serve as primary assessment criteria. The background reports of the

DSEC do not include such indicators. Moreover, the number of inspections is not matched with the number of regulatees subject to inspection. No information is available about the number of scheduled inspections and those carried out as a result of accidents, complaints on the part of the general public, or the number of follow-up inspections; and

- **Inadequate feedback from the general public as "user" of inspectorates' services.** There are no criteria to reflect the public opinion (especially that at the local level) about industries' environmental performance. In particular, no information is available on how inspections were carried out over a reporting period based on the local population's complaints and applications or about the results of such inspections.

2 PROSPECTIVES FOR DEVELOPMENT

2.1 Key Directions and Objectives

In view of the good international practices in the indicator system improvement, main areas of activities in this field in Kazakhstan could include the following:

- **System optimisation and selection of a representative set of indicators.** The system of indicators should be able to reflect the effectiveness and cost efficiency of the compliance assurance system, both in terms of compliance rates and environmental quality, as well as be suitable for internal and external reporting;
- **Strengthening the link with the planning process.** Setting objectives and measurable targets of enforcement activities should serve as a reference for the assessment of performance and funds used in the implementation of the enforcement programmes;
- **Orientation of environmental information on the final users and ensuring the access to information.** Public availability of information should be a crucial factor influencing the compliance behavior of industries. Use of modern information technologies should be expanded, which will help reduce the time necessary to collect, process, and disseminate information;
- **Expansion of uses.** The indicators, or at least some of them, should be used by the inspected industries, for example, in the self-monitoring, internal audit of the environmental management systems, ISO14001, etc.; and
- **Development of independent assessment institutions** for government enforcement and compliance promotion programmes.

2.2 Incentives to Improve the Existing System

There are a number of incentives to improve the existing system, including:

- **Need to better manage the compliance assurance programmes.** The system of indicators should serve as a strategic and operational management tool, and ensure uniform quality of inspection and enforcement activities across regions, especially as major functions are delegated from the central to the local level. Performance indicators should help objectively assess and secure budget funding of the inspectorates at the national and local levels;
- **Need to enhance confidence in the system and its authority.** There is a need for understandable and credible information about the environmental efficiency of enforcement activities in the RK in order to enhance public confidence and gain recognition from other public authorities. Awareness raising and public involvement in compliance assurance, in particular, involvement of most active non-governmental organizations, could be leveraged to influence the decision-making at the public authorities' and industry level, and promote the improvement of the system of indicators and reporting. Experience of other countries, for example, the US, has shown that enhanced interest in the inspectorates'

activities on the part of the legislative branch could be one of the most effective incentives to improve the system of indicators.

- **Need to encourage responsible industry behaviour.** Indicators should be beneficial for those industries who seek to show environmentally-responsible behaviour. Conversely, bad performers will demonstrate their irresponsible behaviour to the general public. An improved set of publicly available indicators will help considerably raise the impact of public opinion, including NGOs, on the industries' behaviour.

2.3 Reform Approaches and Phases

Development of a comprehensive programme to reform the whole systems of enforcement and compliance promotion, with a special focus on the performance indicators, would be a realistic and efficient scenario for the indicator system improvement. In order to develop the reform elements, coordination and consultation with various stakeholders is necessary. In addition to public authorities, these should also include industries, concerned general public and NGOs.

Several issues should be taken into account when improving indicators in Kazakhstan, e.g.:

- **Opinion of stakeholders, particularly that of the general public.** The implementation of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters depends largely on the availability of objective and reliable information about economic activities' impact on the environment and human health. At the same time, enforcement authorities should pay adequate attention to the impact of public opinion on industries' behaviour.
- **Possibility to get reliable and clear information about industry**, behaviour patterns of companies, their environmental performance, and efficiency of environmental policy tools.
- **Possibility to assess the efficiency and effectiveness using both qualitative and quantitative indicators.** In particular, it would be desirable to assess the influence of the citizen's compliance monitoring and enforcement on compliance rates, environmental investment, development of efficient industrial environmental self-monitoring systems, design and construction work in industrial ecology, and development of environmental management and audit systems at industry level.
- **Reasonable level of costs of getting necessary information** about the indicators, *i.e.* financial feasibility. To this end, the number of indicators should be limited, and data gathering, handling and analysis methods should be optimised.

The reform process can consist of the following phases:

- Analysis of limitations of the existing set of indicators;
- Development of an improved set of indicators, taking into consideration the opinion of all the stakeholders;
- Formulation of the strategy to improve the system of indicators, if possible – as part of a comprehensive reform of the compliance assurance system in the RK;
- Implementation of projects in pilot regions, then nation-wide reform; and
- Ex-post assessment of results and adjustment of the system, if necessary.

The optimised set of indicators could be tested as part of a pilot project. This will allow avoiding and/or correcting possible flaws of the planning stage. It is crucial to ensure the training and involvement in the reform process of regional environmental inspectorates, and the development and dissemination of a guide on the application of indicators.

Possible impediments

The blueprint for reform will depend to a great extent on the restrictions imposed by the organizational and legal framework, and technical capacity of the inspectorates. The following factors should be taken into account:

- Low reliability of ambient monitoring data and of self-monitoring results provided by the regulated community;
- Limited financial capacity of the inspectorates and their poor logistic support (laboratory facilities, guidelines, etc.);
- Declining competence of the inspectorates' staff and shortage of staff members in some regions of Kazakhstan;
- Shortage of legal documents, research, and background papers on environmental protection issues; and
- Inadequate operational procedures, for example: (a) integrated inspections may only be held annually; (b) ban of unannounced on-site visits; (c) need to coordinate on-site visits with the regulatees and, in some events, restricted access to facilities.