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ENVIRONMENT DIRECTORATE
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Working Party on National Environmental Policies

OUTCOME PERFORMANCE MEASURES OF ENVIRONMENTAL COMPLIANCE ASSURANCE

Summary Record of the OECD Expert Workshop, Paris, 18-19 March 2010

21 May 2010, Paris, France

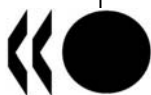
This expert workshop was part of a project on the design and implementation of outcome indicators of environmental compliance monitoring and enforcement. The participants discussed the draft project report, exchanged national experiences and views on challenges in using such indicators, and made suggestions for future work on this topic.

ACTION REQUIRED: For information

Please contact Mr. Eugene Mazur by e-mail eugene.mazur@oecd.org or phone +33 1 45 24 76 92 for any further information.

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Meeting Highlights

- The workshop participants discussed and endorsed the main conclusions and recommendations of the draft OECD report "Outcome Performance Measures of Environmental Compliance Assurance: Current Practices, Constraints and Ways Forward" and commended the Secretariat for the high quality and value of this study.
- The participants discussed the experiences of several OECD countries in developing and implementing compliance assurance outcome indicators, emphasising, among others, the following key issues:
 - The importance of focusing outcome indicators on concrete regulatory priorities (pollutants, sectors, etc.) and measuring the level of environmental risk across the regulated community;
 - The need to associate outcome indicators with time-specific targets and better incorporate them into strategic planning;
 - The value of dynamic (trends) analysis of outcome indicators, particularly in conjunction with input and output indicators of compliance assurance and more general environmental and economic indicators;
 - The desirability of systematically integrating performance measures into the process of design of new policies and regulations and reviewing them regularly to maintain their objectivity and relevance.
- The experts identified a number of priority topics for further international work on outcome measures of compliance assurance, including:
 - Improving analytical soundness of outcome indicators, including reliable correlations between compliance assurance activities and final environmental outcomes;
 - Classifying and measuring of non-compliance based on the degree of its environmental impact;
 - Measuring the preventive impact of compliance assurance activities – avoidance of pollution releases and general deterrence of non-compliance;
 - Using composite indices and weighting to characterise compliance and pollution reduction outcomes;
 - Optimising the size of a set of outcome performance measures for an environmental enforcement authority; and
 - Feasibility of developing a limited number of comparable outcome measures to track compliance with similar environmental regulatory requirements in different sub-national jurisdictions or internationally.
- The participants expressed their appreciation of the opportunity offered by the workshop to exchange best practices among environmental enforcement authorities and signalled their interest in having similar events in the future.

1. Introduction

Traditionally, government agencies in OECD countries have been using activity (output) measures to evaluate their performance. However, an increasing number of agencies responsible for environmental compliance and enforcement are working to complement output indicators by outcome measures characterising improvements in environmental conditions or behaviour of the regulated community. This process is part of the more general tendency of OECD governments to adopt result-oriented policies and work methods.

The two-day expert workshop brought together over 20 experts from 10 OECD countries, the European Commission and Israel (the list of participants is attached as Annex 1). Its key objectives were:

- To exchange experiences on the design and implementation of outcome indicators of environmental compliance assurance activities; and
- To discuss key challenges for developing and using outcome indicators and ways to improve their policy relevance, analytical soundness, and measurability.

The workshop was part of a year-long project that closely involved environmental enforcement authorities of Australia, Belgium (Flanders), Canada, the Netherlands, Switzerland, the United Kingdom (England and Wales) and the United States. The main output of this project – a report on current practices, constraints and opportunities in measuring environmental compliance assurance outcomes – served as the background document for the workshop.

The workshop objectives were introduced by *Mr. Brendan Gillespie*, Head of the Environmental Performance and Information Division of the OECD Environment Directorate, in his opening remarks. He also gave the background on the OECD work on environmental compliance assurance since 2007 and pointed out that outcome indicators of compliance assurance were confirmed to be among top priorities of environmental enforcement authorities at the 2008 OECD conference on compliance and enforcement conference. In addition, Mr. Gillespie emphasised that the OECD had been working on environmental indicators for a long time and had a well-established methodology for their assessment, which was used in the preparation of the study on outcome measures of compliance assurance.

2. Key Findings and Recommendations of the OECD Study

Mr. Eugene Mazur, the project's manager at the OECD Secretariat, reported key results of the OECD analysis of the current use of compliance assurance outcome indicators. He outlined the context of the study, characterised the main approaches to the design of outcome indicators, and reviewed the experience to-date with the design and implementation in selected countries of the following principal types of compliance assurance outcome indicators:

- Compliance rates;
- Measures of recidivism and duration of non-compliance;
- Pollution release indicators;
- Indicators of improved environmental management practices;
- Measures of effectiveness of compliance assistance; and

- Environmental quality indicators.

Mr. Mazur also presented an evaluation of the key categories of indicators according to the OECD assessment criteria – measurability, analytical soundness and policy relevance. Based on this assessment, he highlighted the draft report’s recommendations for the design of new, or the improvement of existing measures, including, but not limited to:

- Developing compliance rates by category of violation, for specific sectors and regulations;
- Using a combination of rates of recidivism and chronic non-compliance;
- Focusing pollution release indicators on priority pollutants or using the number of pollution incidents as a proxy measure;
- Measuring improved environmental management for selected segments of the regulated community; and
- Using only those environmental quality indicators that correspond to targeted, problem-oriented efforts.

The meeting participants then discussed the main conclusions and recommendations of the OECD report. They particularly emphasised the link between a country’s regulatory framework and the design of corresponding outcome indicators, the need to integrate indicators into the development of a regulatory programme from the outset and to review and revise them frequently, the importance of balancing the costs and benefits of designing and tracking outcome indicators, and the value of measuring outcomes of compliance assurance in terms of preventing, and not only reducing, pollution. There was also a suggestion to spell out in the report the key principles that should guide the use of outcome indicators.

3. Principal Approaches to the Development of Outcome Indicators

There are several approaches to the design of outcome indicators of compliance assurance, focusing either on the effectiveness of compliance assurance instruments across regulations and environmental problems or on specific priority environmental issues, or on a combination of both. This session included presentations and discussions on the experiences in the United States, United Kingdom and Canada.

Mr. Jon Silberman, Senior Attorney in the Office of Enforcement and Compliance Assurance, US Environmental Protection Agency, talked about a variety of purposes of, and audiences for, outcome indicators tracked by the compliance assurance programme, providing several examples of the current measures. He then focused on future directions and challenges in measuring compliance assurance outcomes, particularly on the use of compliance rates and indices as well as deterrence measures. He also reflected on ways to compile a set of intermediate and final outcome indicators (including measures of impact on public health and ecosystems) to characterise the effectiveness of compliance and enforcement activities.

Mr. John Russon, Head of Operations of the Environment Agency of England and Wales, and *Mr. David Pugh*, Manager in the Environment Agency’s Better Regulation Team, presented the Agency’s “balance scorecard” approach to performance measurement. It is closely tied to the Agency’s Corporate Strategy and seeks to ensure that right indicators are driving right management decisions in the general context of better regulation. By giving several examples of individual indicators, the speakers stressed the need to make performance measures an integral part of strategic planning in order to help the regulator understand what it wants to achieve and how well it is reaching its targets.

Representing Environment Canada, *Mr. Réjean de Ladurantaye*, Strategic Councillor of the Law Implementation Division, and *Ms. Lorraine Bonneville*, Manager of Compliance Analysis and Evaluation, explained the architecture of their agency's Strategic Enforcement Framework and the corresponding new system of outcome indicators. In this system, which will be implemented starting in 2010, "immediate outcome" indicators are designed to measure quantities of regulated substances "controlled" (monitored) by inspectors and reduced as a result of enforcement activities, while "intermediate" outcome measures (e.g., a pollution reduction index reflecting the pollutants' harmfulness) evaluate the environmental impact of the compliance assurance programme. Environment Canada's Compliance Analysis Data Warehouse was presented as a good mechanism to measure (for example, via multi-dimensional trends analysis) the effectiveness of environmental regulations and compliance assurance instruments.

In the ensuing discussion, the workshop participants agreed that outcome indicators should only be developed after a clear management need has been identified and a plan defined for how and by whom they would be used. They also emphasised that indicators should, to the extent possible, be associated with time-specific targets in order to integrate the strategic planning and performance management processes.

4. Challenges of Measuring Effectiveness of Environmental Enforcement Authorities

The development and application of compliance assurance outcome indicators face a number of challenges, including resource limitations for data collection and treatment, difficulties in ensuring the analytical soundness of indicators, as well as interpretation and comparability issues. This session aimed at bringing in the experience of several countries not covered in the OECD study into a discussion of how to best address these challenges.

Mr. Henning Hansen of Denmark's Aarhus Municipality highlighted the challenges of measurability of intermediate and final outcome indicators, including the importance and difficulty of measuring the preventive effect of inspections (in terms of preventing both pollution releases and non-compliance). Mr. Hansen suggested that one of the ways to address these challenges is to focus outcome measures on priority environmental problems or sectors and to limit the use of aggregated indices. He also emphasised the value of dynamic (trends) analysis of outcome indicators, especially when conducted in conjunction with the competent authority's resource (input) and activity (output) indicators, as well as the need to integrate compliance assurance measures into larger scale frameworks of sustainable development indicators.

Mr. Gerard O'Leary of the Irish Environmental Protection Agency's Office of Environmental Enforcement used the Agency's ROPE approach (Recognise what you have to do, Organise it, Perform and Explain what you did) and communication tools (reports, press releases and media coverage) as examples of how to measure and present compliance assurance outcomes. His presentation reinforced the other speaker's messages on the need to link strategic planning and performance management, to focus indicators on priority environmental problems, and to try to measure avoidance of pollution (reduction and prevention of emissions) resulting from compliance monitoring and enforcement.

Mr. Dick Amesz, Industry Inspection Office Director at the regional Rijnmond (Rotterdam area) Environmental Protection Agency, the Netherlands, discussed outcome performance measures as a driver to further improve environmental performance in the chemical industry. Given the multitude of Dutch inspection authorities with environment-related competencies, he indicated his Agency's emphasis on measuring the environmental performance of priority industry sectors and considering compliance and enforcement efforts of an environmental authority as only one of the factors contributing to it.

The session's discussion focused on the analytical and policy merits of several outcome indicators, including emission reductions of individual pollutants, the number of pollution incidents, etc. There was a

consensus that focusing on priority pollutants can make the indicators more meaningful in illustrating progress in achieving environmental enforcement authority's goals.

5. Priorities for Future International Work

So far, few environmental enforcement authorities in OECD countries have developed and used outcome indicators to assess their performance. As the experience with such measures broadens, further international collaborative efforts could be valuable to facilitate the exchange of good practices in this area. This session's objective was to explore the demand and priorities for such work.

A national perspective on these priorities was presented by *Ms. Joanna Piekutowska*, Director of the Inspection and Administrative Ruling Department of Poland's Chief Inspectorate for Environmental Protection. She shared the Inspectorate's efforts to develop meaningful outcome indicators, especially the recent introduction of composite risk scores of regulated installations. Among priorities for further work, she singled out the classification of non-compliance by degree of its significance (and environmental impact) and the corresponding differentiation of compliance rate in the context of EU Directives and Regulations.

Mr. Miroslav Angelov of the Enforcement and Infringements Unit at the European Commission's DG Environment described the current debate between the Commission and the EU Member States on how to introduce an evaluation system into the forthcoming revised Recommendation on Minimum Criteria for Environmental Inspections. While it is the Commission's objective to stimulate Member States to use outcome indicators of environmental compliance assurance, their low international comparability (even under similar legal environmental requirements) represents a huge challenge in assessing the effectiveness of environmental compliance monitoring and enforcement across the EU. Other practical difficulties include the reluctance of Member States to provide information on outcome indicators in the absence of a transparent framework and guidance for their interpretation.

The participants expressed interest in a continued international exchange of experience among environmental regulators and enforcers on outcome performance measurement as the national systems evaluate and improve. In particular, the following issues were emphasised for further analysis:

- Improving analytical soundness of outcome indicators, including reliable correlations between compliance assurance activities and final environmental outcomes;
- Classifying and measuring of non-compliance based on the degree of its environmental impact;
- Measuring the preventive impact of compliance assurance activities – avoidance of pollution releases (e.g., by using baseline scenarios) and general deterrence of non-compliance;
- Using composite indices and weighting to characterise compliance and pollution reduction outcomes;
- Optimising the size of an environmental enforcement authority's suite of outcome performance measures from the cost efficiency perspective; and
- Feasibility of developing a limited number of comparable outcome measures to track compliance with similar environmental regulatory requirements in different sub-national jurisdictions (in decentralised systems of environmental governance) or internationally (for example, in the context of European Union Directives).

The workshop's highlights were summarised by *Mr. Eugene Mazur* of the OECD Secretariat. He reiterated the key messages that had come out of the presentations and discussions during the meeting and outlined the OECD's next steps in finalising and publishing the project report as well as defining the Secretariat's activities on environmental compliance assurance for 2011-2012. He emphasised the key role of the OECD Working Party on National Environmental Policies in these processes and suggested possible linkages with the work of the recently created OECD Regulatory Policy Committee.

Annex 1: List of Participants

- BELGIUM** **Ms. Inge DELVAUX** Tel.: +32 2 553 81 98
 Head of Service, Environmental Inspectorate Fax: +32 2 553 80 85
 Flemish Government E-mail: inge.delvaux@lne.vlaanderen.be

 Koning Albert II-laan 20, B8, B-1000 Brussels, Belgium
- CANADA** **Ms. Lorraine BONNEVILLE** Tel.: +1 819 953 9365
 Manager, Compliance Analysis and Evaluation, Fax: +1 819 934 6217
 Environmental Protection Operations Directorate, E-mail: Lorraine.bonneville@ec.gc.ca
 Environment Canada

 351 St. Joseph Blvd, Gatineau, Québec, K1A 0H3 Canada
- Mr. Réjean de LADURANTAYE** Tel.: +1 450 922 2001
 Strategic Councillor, Law Implementation Division, E-mail: réjean.deladurantaye@ec.gc.ca
 Environment Canada

 8 boul. des Hauts-bois, Ste-Julie, Québec, Canada
- DENMARK** **Ms. Signe KRARUP** Tel.: +45 72 54 40 00
 Chief Adviser, Environment Technology Division, Danish Fax: +45 33 32 22 28
 Environmental Protection Agency E-mail: sikra@mst.dk

 Strandgade 29, DK-1401, Copenhagen K, Denmark
- Mr. Henning HANSEN** Tel.: +45 8940 4535
 Engineer, Environment and Nature, Fax: +45 8940 4520
 Aarhus Municipality E-mail: hih@aarhus.dk

 Valdemarsgade 18, 8000 Århus C, Denmark
- FINLAND** **Mr. Markku HIETAMÄKI** Tel.: +358 50 361 6392
 Environmental Counsellor, Department of Environmental Fax: +358 91 603 9388
 Protection, Ministry of the Environment E-mail: markku.hietamaki@ymparisto.fi

 P.O Box 35 00023 Valtioneuvosto, Helsinki, Finland
- FRANCE** **Mr. Benjamin HUTEAU** Tel.: +33 6 82 82 30 96
 Head of Environmental Inspectorate, Fax: +33 5 62 14 90 01
 DREAL Midi-Pyrénées E-mail:
 benjamin.huteau@developpement-
 2 bd. Armand Duportal, BP 80002 durable.gouv.fr
 31074 Toulouse Cedex 9, France
- IRELAND** **Mr. Gerard O'LEARY** Tel.: +353 539160600
 Programme Manager, Office of Environmental E-mail: g.oleary@epa.ie
 Enforcement, Environmental Protection Agency

 P.O. Box 3000, Johnstown Castle Estate, Wexford, Ireland

Ms. Valerie DOYLE Tel.: +353 539 160 600
Senior Inspector, Office of Environmental Enforcement, E-mail: v.doyle@epa.ie
Environmental Protection Agency

P.O. Box 3000, Johnstown Castle Estate, Wexford, Ireland

ISRAEL **Ms. Iris SHALIT** Tel.: +972 2 655 3734
Lawyer, Legal Division, Fax: +972 2 655 3744
Ministry of Environmental Protection E-mail: irishh@sviva.gov.il
5, Kanfei Nesharim St., Tel Aviv, Israel

NETHERLANDS **Mr. Dick AMESZ** Tel.: +31 10 2468203
Director, Office for Inspection of Industry, Fax: +31 10 2468283
Rijnmond Environmental Protection Agency (DCMR) E-mail: Dick.amesz@dcmr.nl
P.O. Box 843, 3100 AV Schiedam, the Netherlands

POLAND **Ms. Joanna PIEKUTOWSKA** Tel.: +48 22 825 15 24
Director, Inspection and Administrative Ruling Fax: +48 22 825 15 09
Department, Chief Inspectorate for Environmental E-mail: j.piekutowska@gios.gov.pl
Protection
Wawelska 52/54; 00-922 Warsaw, Poland

UNITED KINGDOM **Mr. John RUSSON** Tel.: +44 1454 624418
Head of National Operations, Environment Agency of Fax:
England and Wales E-mail: john.russon@environment-
agency.gov.uk
Rio House, Waterside Drive, Aztec West
Almondsbury, Bristol, BS32 4UD, UK

Mr. David PUGH Tel.: +44 117 9152537
Manager, Better Regulation, Environment Agency of Fax: +44 117 9152150
England and Wales E-mail: david.pugh@environment-
agency.gov.uk
Block 1, Government Buildings, Burghill Road, Westbury
on Trym, Bristol BS10 6BF, UK

Mr. Simon BINGHAM Tel.: +44 1786 452564
Specialist, Regulatory Framework, Environmental Fax: +44 1786 479305
Protection and Improvement Directorate, Scottish E-mail: sbingham@sepa.org.uk
Environment Protection Agency
Erskine Court, Castle Business Park, Stirling FK9 4TR,
Scotland, UK

UNITED STATES **Mr. Jon SILBERMAN** Tel.: +1 202 564 2429
Senior Attorney, Office of Enforcement and Compliance Fax: +1 202 564 0034
Assurance, Environmental Protection Agency E-mail: silberman.jon@epa.gov

12th St. & Constitution Ave., NW (m.c. 2221A)
Washington, D.C. 20460, USA

EUROPEAN **Mr. Miroslav ANGELOV** Tel.: +32 2 296 7189
COMMISSION Policy Officer, Unit of Enforcement, Infringements E-mail: miroslav.angelov@ec.europa.eu
Coordination and Legal Issues, DG Environment,
European Commission

Avenue de Beaulieu 9, 1160 Brussels, Belgium

OECD **Mr. Brendan GILLESPIE** Tel.: +33 1 45 24 93 02
Head, Environmental Performance and Information Fax: +33 1 45 24 96 71
Division, Environment Directorate, OECD E-mail: Brendan.Gillespie@oecd.org

2, rue André-Pascal, 75775 Paris Cedex 16, France

Mr. Eugene MAZUR Tel.: +33 1 45 24 76 92
Project Manager, Environmental Performance and Fax: +33 1 44 30 61 83
Information Division, Environment Directorate, OECD E-mail: eugene.mazur@oecd.org

2, rue André Pascal, 75775 Paris Cedex 16, France

Mr. Krzysztof MICHALAK Tel.: +33 1 45 24 96 00
Project Manager, Environmental Performance and Fax: +33 1 44 30 61 83
Information Division, Environment Directorate, OECD E-mail : krzysztof.michalak@oecd.org

2, rue André Pascal, 75775 Paris Cedex 16, France

Ms. Christiane ARNDT Tel.: +33 1 45 24 76 56
Economist, Regulatory Policy Division, Public Fax: +33 1 45 24 16 68
Governance and Territorial Development Directorate, E-mail: christiane.arndt@oecd.org
OECD

2, rue André Pascal, 75775 Paris Cedex 16, France

Mr. Shukhrat ZIYAVIDDINOV Tel.: +33 1 45 24 93 03
Assistant, Environmental Performance and Information Fax: +33 1 44 30 61 83
Division, Environment Directorate, OECD E-mail:
Shukhrat.Ziyaviddinov@oecd.org

2, rue André-Pascal, 75775 Paris Cedex 16, France