



The Indicators of the Environmental Inspectorates' Activity Theory & Practice in Russia

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Outline

- Environmental inspection in the Russian Federation (RF)
- Basic requirements for establishing performance indicators
- Examples of task-specific indicators
- Expenditure-related indicators
- Conclusions



Compliance Assurance Service of the Ministry of Nature Resources of the Russian Federation





Rosnaturecontrol : the Federal Environmental Inspection Authority

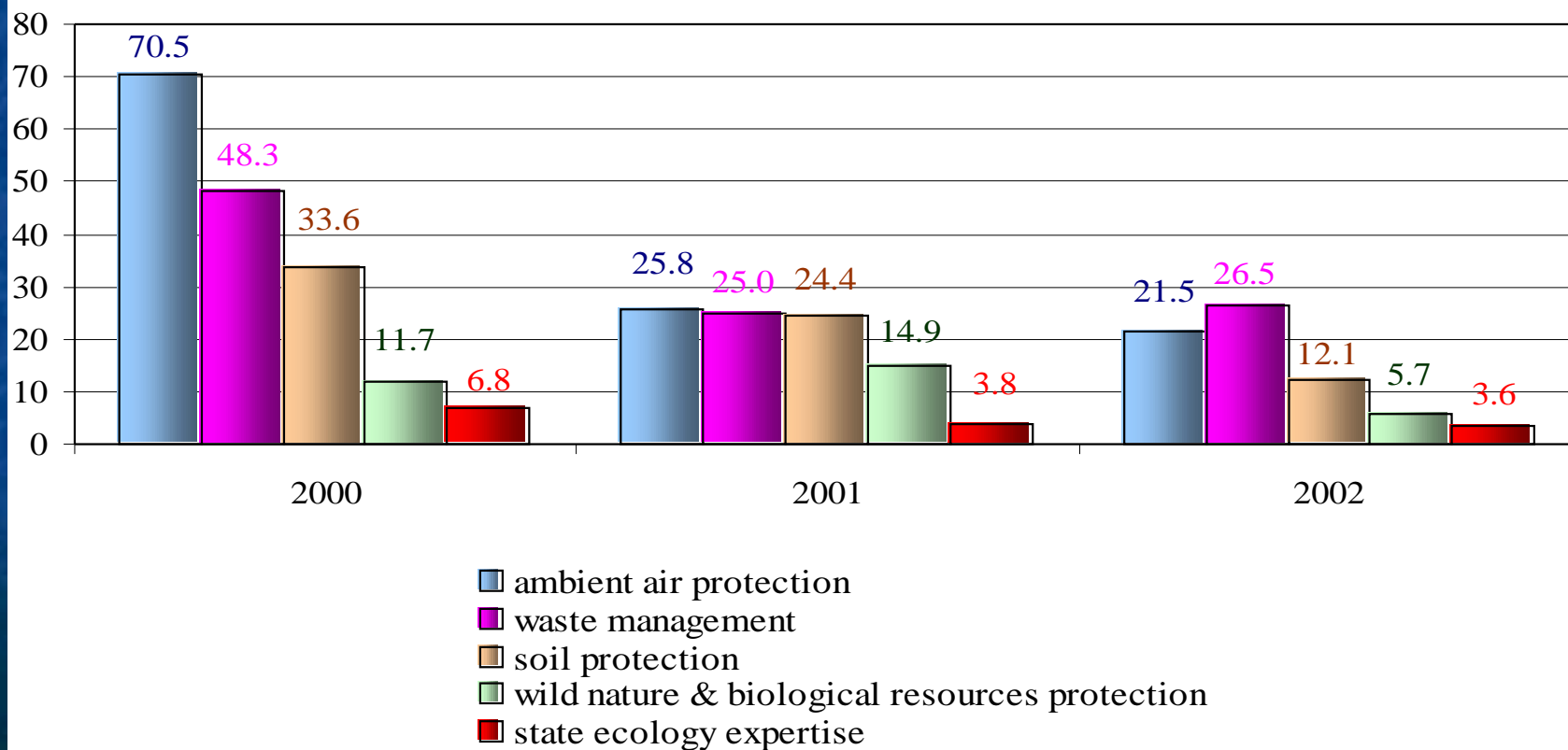
- Staffing (federal authorities) :
 - Headquarters (30 inspectors)
 - 7 regional departments + 89 oblast inspectorates (2400 inspectors)
 - 19 sea inspectorates (800 inspectors)
 - Inspection units as part of basin management authorities (70 inspectors)
- Some performance indicators (2002) :
 - 50000 inspections (27 inspection per staff member)
 - 17000 admin. penalties, app. \$1 billion
 - 1036 facilities closed down or production limited

Statistics on Violations



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The number of the violations of the environmental laws revealed in the years of 2000, 2001 and 2002, thousand



Current Set of Performance Indicators



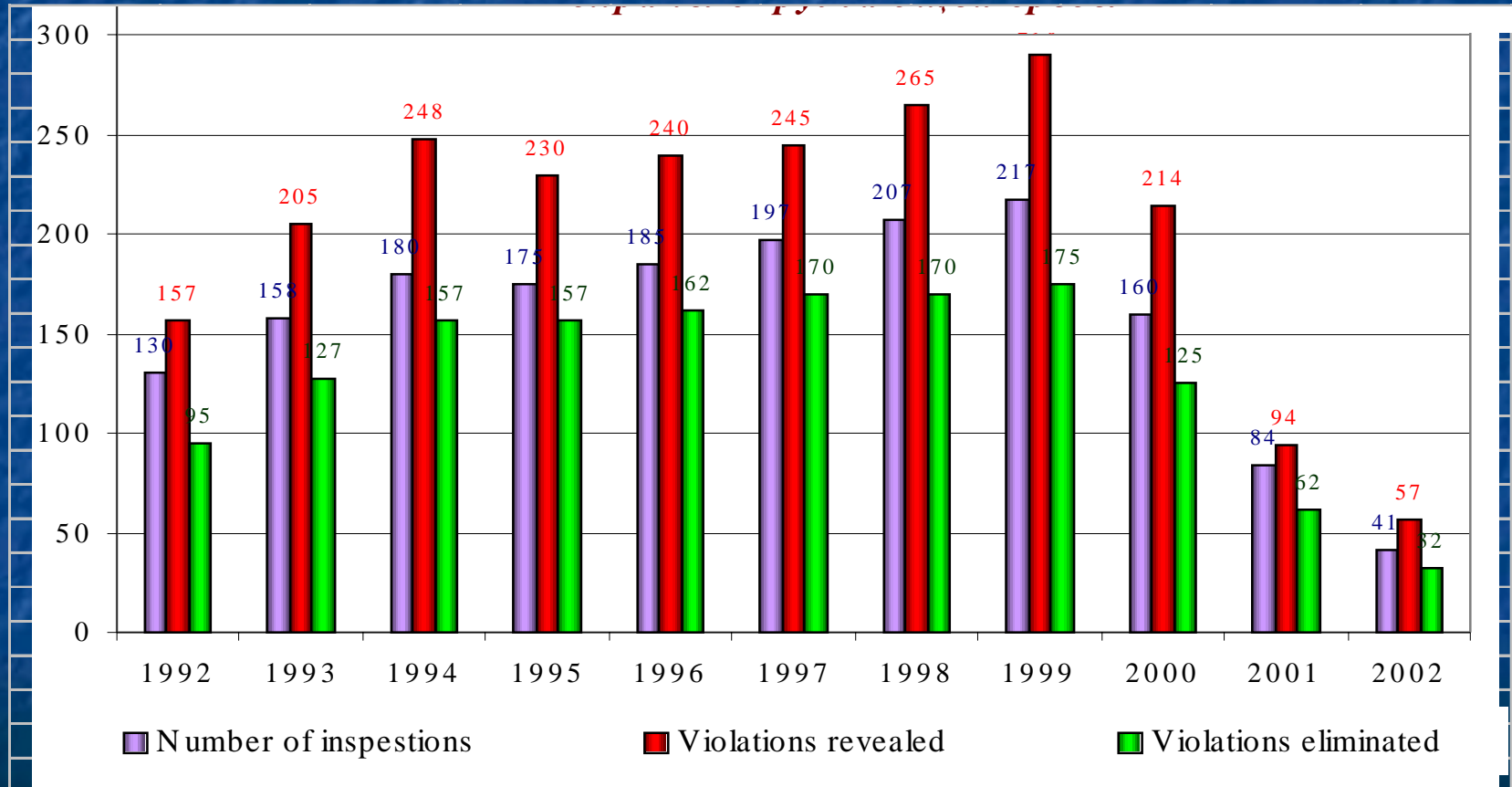
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- Around 20 [output] indicators
- One statistical form, used by all branches of the federal compliance assurance authority
- Examples of indicators
 - Regulated facilities;
 - “Control units” (permits and licences);
 - Permits and licences checked for compliance;
 - Violations revealed;
 - Number and amount of fines;
 - Damage compensations: charged and received;
 - Cases transferred to the judicial branch, etc.



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Results of Targeting : Trends in Inspection and Enforcement



Points System to Assess Environmental Compliance



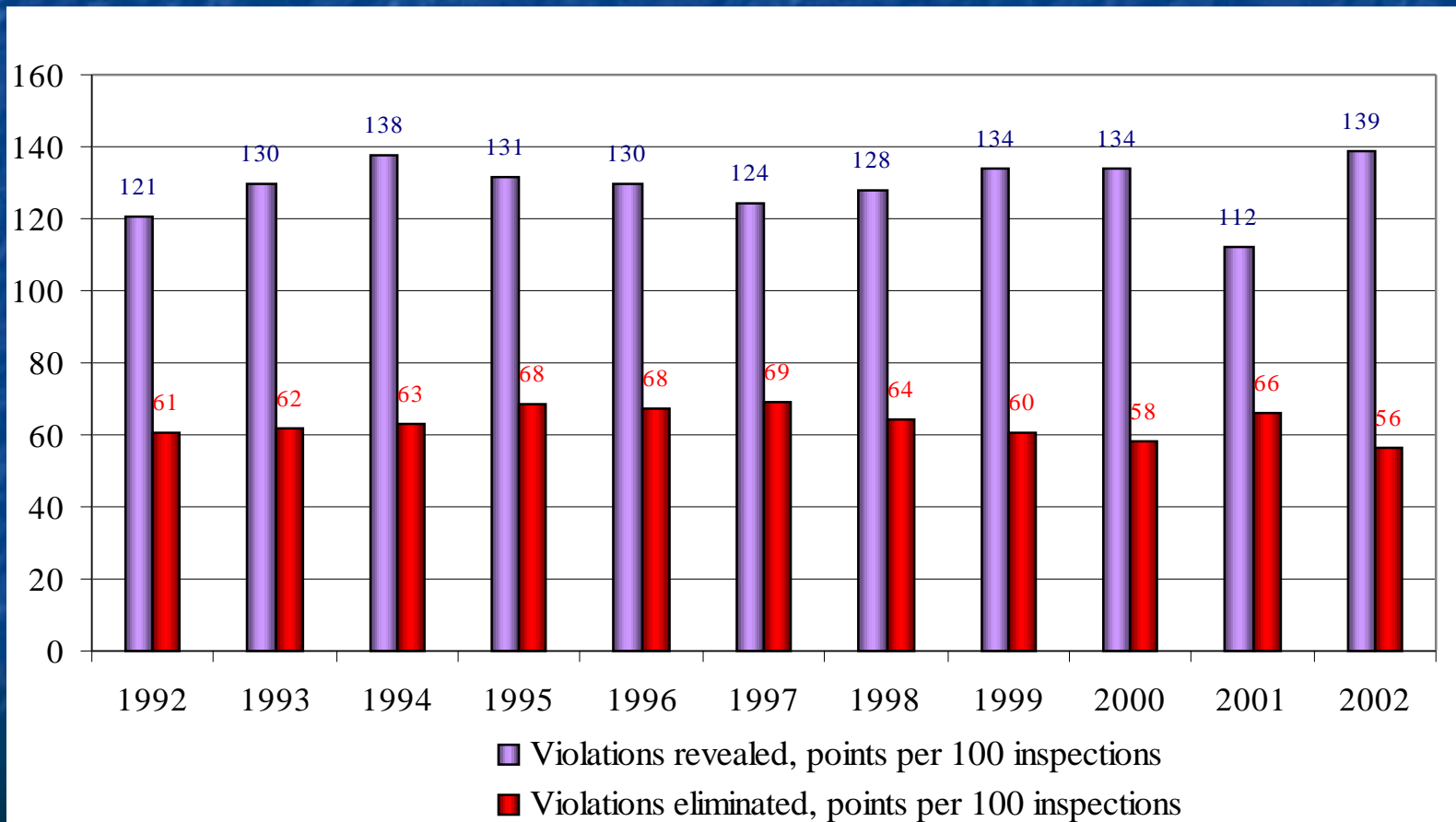
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- Violations are assessed per concrete articles of statutes, regulations or specific requirements
- A weighting factor is used to take into account the environmental significance of a certain violation
- The number of violations (per item) is multiplied by the weighting factor
- Points (or %) are summed up to assess violations revealed per one inspection

Practical Application of the Points System to Interpret Trends in Inspection Intensity



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Flaws of the Current Set of Indicators Used in the RF

- There is a multitude of absolute indicators (measured parameters)

BUT

- They are not providing sufficient information for performance management
- They cannot be used to compare performance between different units of the enforcement authority (horizontally or vertically)



Basic Requirements for Reforming E&C Indicators

- Comparability
 - legal frameworks and instruments
 - inspectorates' mandate
 - structure of the economy
- Two types of indicators : measured (absolute parameters) and calculated (derivate parameters)
- Reduction in numbers of measured parameters
- Key characteristics: specific, quantitative, easily verifiable indicators
- Task-oriented selection



Levels of Performance Assessment and Management

- Achievement of strategic goals
- Tactics: the choice of compliance assurance instruments and availability of resources
- Effective operations at the inspectorate level
- Inspectors' performance



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Strategic Level

- Strategic goals
 - Quality of the environment
 - Human health
 - Minimization of the risk of accidents with environmentally dangerous consequences
- Ambient monitoring – the major tool of measuring performance (outcome indicators)



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Indicators for Tactical Tasks

- Available instruments
 - inspections
 - follow-up inspections
 - sanctions
 - administrative orders /penalties
 - limiting, suspending & forbidding of activity
 - criminal enforcement (police reports)



Example 1: Indicators to Assess Institutional Capacity

- Input parameters
 - Number & structure of the regulated community
 - Number of "control units" (CU)
 - Geographic dispersion (average distance from facilities to the inspectorate)
 - Minimum period between two inspections
 - Minimum load per staff member
 - Annual number of complaints
- Output parameters
 - Staff number and inspectorate structure
 - Annual number of planned inspections
 - Required technical support



Example 2: Operational Indicators

- Real staffing/Optimal staffing
- Real workload per staff member / recommended workload
- Characteristics of available technical support (facilities & operational budget)

INDEX of CONGRUENCY
based on the operational indicators



Example 3: Inspectors' Individual Performance

- Input parameters
 - Minimum workload (inspections)
 - Number and complexity of facilities to be inspected
 - Administrative tasks
- Output parameters
 - Number of facilities and CU checked
 - individually, including follow-up inspections
 - as a member of team
 - Number of violations revealed
 - Amount of administrative penalties
 - Number of complaint-driven inspections



Example 3: Performance Assessment at the Inspectorate Level

- **Input parameters**
 - Minimum frequency of inspection
 - Total number of facilities and number of facilities to be inspected
 - Average annual number of complaints
- **Output parameters (semiannual, annual)**
 - ◆ Number of facilities and CU inspected
 - ◆ Number of violations revealed
 - ◆ Sum of administrative penalties
 - ◆ Number of complaint-driven inspections

Enforcement-Driven Expenditure on Compliance



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- Costs to be taken into account
 - Impact assessment (audit) costs
 - Permitting costs
 - Pollution abatement facilities
 - Damage compensation
 - Self-monitoring
 - Other costs
- Danger of over-regulating and imposing costly solutions !



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Summary

- The existing set of indicators is too complex but not informative enough
- An uniform set of parameters is needed
- Strategic goals -> indicators generates through state environmental monitoring
- Tactical tasks -> a set of measured parameters and derived indexes
- Operational level -> specific indicators
- Enforcement-driven expenditure on compliance as a possible indicator