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**“The Actual State and Evaluation Tendencies of
Monitoring National System”**

Distinguished Ministers, Excellencies, Ladies and Gentlemen,

During the last decade, the actions took by the Republic of Moldova in environment field, were directed namely on the protection and sustainable use of the natural resources, integration of the environment politics principles in branch politics, elaboration and improvement of legislative and normative framework, as well as its adjustment to the provisions of European Union Directives.

Up to present there were adopted nearly 50 legislative acts and 80 normative acts, as well as a range of strategies, programmes and action plans.

From this reason the ecological state in the Republic of Moldova now can be characterized as one which could offer to people a healthy and stable environmental life.

A major element in the rational and management system and that of environment supervision represent the monitoring national system whose prior objective is the extended coverage with observations regarding the quality and the environment compounds state on the entire territory of the Republic of Moldova.

In order to reach the new standard in the environment management during 50 years of monitoring national system's existence, there took place a series of changes based on the new regulatory base, programmes and national projects, which contributed to the extension of the national observation network on the environment quality, covering a big territory, involving more natural compounds and more monitoring parameters.

The prior objectives of monitoring national system there are the followings:

- ❖ The monitoring and determination of environment pollution level;
- ❖ The detecting of cases with exceptional pollution in environment compounds;
- ❖ The prevention and reduction of negative effects of the anthrop factors for the ambient environment and population,
- ❖ The urgent notification of authorities (decision makers) concerning the exceptional pollution level of the environment compounds.

For example, nowadays, the **monitoring of the surface water quality** is realized according to the monthly observations dates (approximately 409 annual samplers) on the water pollution in 49 monitoring sections, placed on 17 rivers and 9 pools in the republic. The surface water quality is being determined after 43 physic-chemical parameters, biogenic elements, petroleum products, active-anion detergents, phenol, pesticides, heavy metals etc.

In conformity with the result of analyses made in the laboratory, the pollution level of Republic's rivers, during the last years is characterized as a moderate pollution which is due to the specially biogenic elements, phenols, copper compounds, petroleum products and reduced level of dissolved oxygen content in water in warm season.

The **monitoring of the soil quality** is being realized in nearly 40 years and it was determined by the intensive exploitation of the agricultural fields and the use of damaging technologies from ecological point of view, which led to the considerable

reduction of the fertile stratum of the soil,, field productivity and a big negative impact of the soil.

In present it is carrying annual approximately 2000 analyses of soil samples collected from the 121 agricultural fields, which cover near 8000 ha of the owners from 10 districts of the republic.

The samplers are collected, especially near the stockpiles with obsolete pesticides and power energy installations, in order to determine the pesticide content, heavy metals, polychlorinated biphenyls and agrochemical indexes.

With regret, there are some still signals of soil pollution in present with DDT, organchlorinated pesticides, HCH and with PCB at a series of power energy system investigated.

The **monitoring of atmospheric air quality** is carrying out in 5 industrialized centers of the Republic of Moldova: Chisinau, Balti, Tiraspol, Ribnita, Bender which consists of 17 observations stationary posts, where annual is being collected and analyzed approximately 65000 air samplers for the basic pollutants (solid suspension, sylphur dioxide, carbon monoxide, nitrogen dioxide) and specific (phenol, soluble sylph ate, formaldehyde).

Nowadays, for the first time in the Republic of Moldova (in Mateuti locality) and in the Eastern European was established the unique automatic station of air monitoring quality which measuring continuous 17 total parameters, 12 atmospheric pollutants and 5 meteorological parameters included.





The monitoring of atmospheric air quality allows make the daily environmental forecasting (annual approximately 2500 forecasts) for the monitories localities and contribute to the air pollution level regulation in these localities.

The **radiological monitoring** made at national level is directed to the determination of radioactive contamination level of the environment compounds. The natural exposition rate of gamma radiation in atmosphere is limited in 8-20 $\mu\text{R/h}$ and they do not exceed the notifying limit (25 $\mu\text{R/h}$).

The results of observations show that the exposition level of gamma radiation during the last century correspond with the natural value of radioactive background and it does not present a radiological hazard for the environment and population health.

In order to increase the analyses correctness made in the laboratories of Monitoring Department on Environment Quality, they take an active part at the international extern laboratory control with European profile centers (Monaco, Institute of Waters in Vituki, Hungary, Qualco Danube, Romania, etc.)

The analyses of surface water quality determination, soil and atmospheric air are made at a modern equipment , based especially on the gas-liquid chromatography, spectrophotometry and spectrophotometry with atomic absorption, which most of them were purchased due to the active participation and involving the monitoring national system in the activity of the next international Conventions:

-  Convention on Cooperation for the Protection and Sustainable Use of the Danube River which is being made the integrated monitoring on the water quality Prut and Danube River
-  The Stockholm Convention on Persistent Organic Pollutants / which is carrying the integrated monitoring of pesticides remains quantities in the environment compounds,
-  Convention on the Transboundary Effects of Industrial Accidents
-  Convention on Long-range Transboundary Air Pollution which allows the reestablishment of observations regarding the transboundary pollution of the air and the implementation of those 2 levels of EMEP Programme on the territory of Republic of Moldova,

In order to be able to improve and develop the national monitoring system we need significant financial support and we are looking for partners and assistance for the following tasks:

- ➡ endowment with modern laboratory equipment;
- ➡ purchasing of automatic monitoring stations of the environment compounds;
- ➡ equip with mobile laboratories for the operative detecting of pollution cases;
- ➡ environment legislation harmonization to the European standard and norms;
- ➡ training of specialists at the based European centers,
- ➡ implementation of advanced methodologies of analyses and control;
- ➡ the laboratory international control achievement;
- ➡ increasing of technical level and human ability;
- ➡ improvement of integrated ecologic informational system;
- ➡ certification, homologation and accreditation of monitoring national system according to the international standard of conformity.