



**UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE**

***UNECE Working Group on Environmental Monitoring (WGEM)***

***in collaboration with Ministry of Environment of Georgia***

***and with the financial assistance of the European Community***



## ***First Workshop on Waste classifications and inventories***

***Tbilisi (Georgia), 7 and 8 July 2003***

### **Workshop Report**

1. The Workshop on Waste Classifications and Inventories took place on 7-8 July 2003 in Tbilisi (Georgia) in the Ministry of Environment of Georgia.
2. The objectives of the workshop were to:
  - Discuss the current situation in Armenia, Azerbaijan, and Georgia with waste classifications and inventories;
  - Identify gaps in data collection on most important waste streams, weaknesses in the regulatory and institutional frameworks, and needs in building national capacities in the area;
  - Inform the senior officials responsible for waste management and data collection in the three countries about approaches applied in EEA member countries to improve waste classification systems, data collection and the use of indicators;
  - Develop a plan and a time schedule for the preparation of recommendations on improving legal, regulatory and institutional frameworks related to routine data collection and reporting on wastes, and the use of indicators on waste and material flows that are compatible with those applied in EEA countries.
3. Participating in the Workshop were national experts from Armenia, Azerbaijan and Georgia, experts from UNECE, EEA and the European Topic Centre on Waste and Material Flows.
4. Nino Chkhobadze, the Minister of Environment of Georgia, opened the meeting by welcoming all participants and making introductory speech. She underlined the importance of the meeting for the entire Caucasus region, given the fact that waste management and its transboundary movement are among the most difficult environmental issues in the post-Soviet space. The Minister expressed her hope that regional cooperation and exchange of information and expertise among Caucasus countries on the one hand, and between Caucasus and other European countries on the other hand, would assist the Caucasian countries to

improve waste management in general and, in particular, to achieve success in the implementation of the Basel Convention. In addition, the Minister noted the importance of inter-agency and cross-sectoral cooperation in solving waste management issues and expressed her hope that representatives from other government agencies would join the second workshop later.

5. Givi Kalandadze, Ministry of Environment of Georgia, and Yaroslav Bulych, UNECE, chairpersons of Monday's session presented goals and objectives of the meeting and introduced the agenda. Specifically, Mr. Bulych briefed the audience about UNECE and EEA Grant Agreement "Support the activities of the UNECE Working Group on Environmental Monitoring (WGEM)" under which this very workshop was arranged.

6. Dimitrios Tsotsos, EEA, made presentation on EEA (its mandate, goals, key clients, principles, program areas, products and services) and its Topic Center on Waste and Material Flows (ETC/WMF). In particular, he mentioned that the ETC/WMF was established in 1997 and is one of five Topic Centres under the EEA. The mission of the ETC/WMF is to provide reliable and comparable data and information on waste and material flows in Europe to decision-makers and the public. The ETC/WMF is part of the European Information and Observation Network (EIONET). The EIONET is a co-operative network between the Agency and the Member Countries and was set up in order to help the Agency to retrieve information, identify special issues and produce efficient and timely information on Europe's environment. Mr. Tsotsos's speech was followed by three presentations on the experience of EU and accession countries towards adaptation of national waste legislation to EU legislation and national experiences of waste classification, inventory and reporting.

7. Fotis Kourmoussis, ETC/WMF expert presented in detail EEA/ETC-WMF indicators and national waste classification and inventory systems through case studies conducted in Greece (National inventory of industrial wastes and chemical substances) and Cyprus (VOCs inventories). The presentation covered the following issues:

- What is an indicator and fields of their application?
- The information pyramid (primary data, basic statistics/elemental indicators, core indicators and key indicators);
- Use of indicators for answering policy questions.

In particular it was mentioned that different levels of indicators are defined for different target groups:

- Primary data can be used by statisticians and local administrations to compile information at more aggregated level;
- Basic statistics and elemental indicators can provide public administrations with a detailed overview of important changes;
- Core indicators can provide decision makers and the public with aggregated information to serve as a basis of policy making. They can be also used to measure implementation of agreed quantitative targets and qualitative objectives;
- Key indicators can provide basis for decision-making by high-level decision makers and highly aggregated information to the public.

8. Matti Viisimaa, ETC/WMF expert opened evening session. He made a presentation on Estonian experience in providing data for various waste indicators. In particular, the presentation covered two main issues:

- (a) Institutional and legal steps taken by Estonia in order to set up a system of waste data collection and reporting.
- (b) Prerequisites for availability of waste data for indicators:
  - Legislative basis (regulations on statistics or environmental reporting);

- Competent authorities for waste data collection and processing (statistical, environmental information authorities);
- Clear definitions - waste, hazardous waste, municipal waste, recovery (incl recycling, energy recovery, re-use), disposal;
- Adequate classification systems (waste categories, treatment operations, economic activities etc);
- Harmonization with international tools (definitions, classifications);
- Adequate data collection systems and procedures (questionnaires, reporting obligations);
- Tools for data processing (databases, software etc);
- Data reliability proofing;
- Proper processing and interpretation of data (incl. indicators).

9. In the final presentation for Monday's session, Toomas Pallo, a UNECE consultant discussed primary reporting issues. He did present the different possible fields of use of information.

- Systematic environmental, social and economic approach;
- Dealing with different sources (industry, municipal);
- Dealing with hazards to life, property, environment (balance between those);
- Enhancing reuse and recycling (economic value);
- International cooperation.

Also in his presentation the places of reporting in the environmental policy cycle was presented. Possible use of information basis for rational environmental policy decisions, tax collection basis, control of cross border movement of materials. Practicalities of data collection, processing and reporting: who, how, when were discussed.

Finally, he talked about his preliminary findings on waste classification and inventory status in Caucasian countries.

- Priorities of waste management within national environmental strategies are very general;
- Waste strategies not developed and approved;
- Waste management is included into regional strategies;
- Legislation incomplete eg implementing regulations are missing;
- The waste management system has gaps (information exists on companies, less or lacking on municipalities);
- Waste import and export is regulated. Basel Convention adopted (eg in Georgia with specific law);
- Waste refusal is predominantly build on landfilling;
- Landfills are in large numbers and uncontrolled;
- Shortage of financial resources;
- Waste classification based on 5 classes (4 hazards and non-hazardous);
- Data inventories are not systematic;
- Associations between statistics and environment offices are weak.

10. Each presentation was followed by discussions. General comments made by national representatives referred to gaps in national waste management legislation and inadequacy of waste classification and inventory systems in their countries. All country experts expressed their concerns on the shortage of financial and technical resources to set waste inventory systems in accordance with international requirements. On these comments, Mr. Tsotsos noted that such problems exist in EU accession countries and even in EU member States.

11. General questions that were asked during discussions referred to the timeframe needed for introduction of effective waste classification and inventory systems and first steps towards the establishment of such systems. Mr. Tsotsos noted that the establishment of such systems might take some 2-3 years, if one knows the problem, needs, and has clear objectives. In this case, the country can find finances from various sources. To support his argument, Mr. Tsotsos referred to the experience of Greece in setting such systems. Specifically, waste classification and inventory system in Greece started to develop in early 1990s. About 10-year tremendous effort was made to develop technical guidelines, manuals and policy frameworks, and after getting finances only 2-3 years were spent on the establishment of effective and operational waste inventory system.

12. Georgian MoE representatives argued that the first step should be the establishment of a legal and institutional framework and setting of clear responsibilities for competent authorities. At present, there are no legally binding requirements for state agencies in waste management field. Hence, many of them simply avoid carrying out their responsibilities and do not cooperate with each other, nor do exchange data. In response to this, international experts referred to experiences of EU in setting its directives. EU encountered problems with implementation of these instruments. Hence, the need for adoption of management plans and detailed regulations was recognized. Stemming from this, waste action/management plans strategies or programs are more practical than general laws. Hence, Caucasus countries need to undertake preliminary studies to identify major issues, set priorities and develop waste management strategies/plans. Having detailed description of problems and objectives, countries could get financial assistance from donor organizations to develop and/or implement national waste management strategies/plans. The action could be initiated at pilot level e.g. waste management plan for the city of Tbilisi could be developed first.

13. The Tuesday's session was opened by country presentations (Azerbaijan, Armenia, Georgia), each followed by questions and discussions and the general discussion at the end of the meeting.

14. Fuad Ibragimov, Hazardous Waste Management Agency of Azerbaijan, briefly introduced main provisions of the Azeri legislation on hazardous waste management currently in force and paid particular attention to those provisions that needed to be clarified. Mamed Nasibov, from the same Agency, continued with the review of the current practice of hazardous waste management in Azerbaijan focusing on two main issues: waste from oil production and other sectors of industry. Rena Lazimova, the State Committee of Statistics of Azerbaijan, presented information on the current practice of classification and reporting on waste management.

15. According to presentations by Azerbaijani experts, in particular, the main problems with waste classification and reporting include:

- The collected information on waste does not meet international standard and requirements;
- The statistical information on municipal, medical, household waste as well waste from transport vehicles is missing;

- A new manual on waste classification is needed;
- A set of legislative acts deriving from the Law “On Industrial and Household Waste” (adopted on 30 August 1998) and covering waste inventory and primary data collection issues has not been approved;
- The definition of “waste” and “hazardous waste” require improvement.

16. Irina Akopian, the Ministry of Environment of Armenia presented data on industrial waste generation, current practice of landfilling and introduced current Armenian legislation on chemical substances and hazardous waste management. Nelli Bagdasarian, the State Department of Statistics of Armenia, introduced the mechanism of primary data collection and processing responsibilities among the state authorities and shortly presented forms of reporting on waste handling.

17. According to presentations by Armenian experts, in particular, the main problems with waste classification and reporting include:

- The data are not representative;
- The responsibilities in the field of primary data collection and processing are not clearly identified among the state authorities;
- The primary statistical data are classified and cannot be transmitted to any third party without an agreement from data originator;
- The problems related to the waste management greatly result from lack of accurate data on generated waste, as well as incomplete methods of waste identification.

18. Presentations of Azerbaijani and Armenian participants were followed by discussions on waste classification practice, which in these countries is still greatly based on the old Soviet system of hazardous chemicals’ classification. The issue of illegal trade with waste in the CIS was also discussed.

19. Evening session was devoted to the presentations of Georgian participants. Alverd Chankseliani, the Ministry of Environment of Georgia, presented information on current practice of treatment of municipal, industrial, agricultural and other types of waste, as well as the limitations of the Georgian legislation regulating waste management and listed a set of recommended measures. Abesalom Archemashvili, the State Department of Statistics of Georgia, confirmed that the data on waste generation, neutralization, recycling and disposal are not collected after 1990. He shortly presented problems that the department might encounter with the collection of waste-related data. Meri Broladze, representing the same authority, briefed audience on ongoing process of elaboration of national classification of waste, emphasizing on importance of waste inventory as a precondition for elaboration of waste classification. Finally, Temur Sakuashvili, the municipality of the City of Tbilisi, presented information on the current practice of waste collection and landfilling in the city.

20. According to presentations by Georgian experts, in particular, the main problems with waste classification and reporting include:

- There is no waste statistical reporting system;
- Inventory of obsolete pesticides;
- The waste legislation system is not developed;
- Current data on waste generation, neutralization, recycling and disposal is unreliable.

21. The outcomes of the workshop on waste classification and inventories are as follows:

- Based on presentations of Azerbaijani, Armenian and Georgian experts, Mr. Pallo will prepare a review on the current situation with waste classification and inventories

systems in the Caucasian countries including legal and regulatory requirements, institutional arrangements, availability of data and their appropriateness, and the indicators used. Participants will provide Mr. Palo with necessary additional information. The report will be submitted to the UNECE Secretariat by end July 2003 and presented during the second workshop.

- Mr Palo will prepare recommendations to Governments of the three Caucasian countries and other EECCA countries (possibly in the form of model regulations) for improving national waste classification systems, routine waste data collection and inventories as well as reporting by the use of indicators on waste and material flows that are compatible with those applied in EEA countries by 15 September 2003. Participants will send their proposals on recommendations to Mr Palo (some 7-8 pages) till the end of August.
- Draft recommendations will be sent out to participants of the second workshop by 15 September for discussion at the second workshop.
- The next meeting will be held on 2-3 October 2003 in Tbilisi. The same participants and, additionally, experts from Central Asian countries will attend.