Ms. Silvia Nicolaescu | Environmental Agency | NFP
Ms. Elena Orlov | National Bureau of Statistic | NFP
Ms. Maria Tarigradean | ENI SEIS II East National assistant

Concluding event “Implementation of the Shared Environmental Information System principles and practices in the EaP countries (ENI SEIS II East) Project

Republic of Moldova: national impact and key achievements of the ENI SEIS II East project

ENI SEIS II East project areas and the key achievements in the Republic of Moldova

Improve capacities in the national administrations to manage and use environmental information to support decision-making;

Implementation of regional/international commitments related to environmental reporting;

Streamline a regular environmental assessment process (indicator-based assessments)

Key achievement 1: delivery of the pan-European set of environmental indicators based on national environmental statistics using EEA methodology Available online

Key achievement 2: finalized the pilot project CORINE Land Cover (CLC) 2018

Deployed the RAVEN open-source software for AQ data management and e-reporting

Key achievement 3: drafting the indicator-based assessment (SoER) 2015-2018, country briefing based on EEA/SEA methodology

Inter-institutional setting at national level – cooperation through the NIT

- **Established by inter-institutional Order** to effectively share and use the environmental information;
- **Members:** 17 authorities, civil society organizations = more than 33 representatives involved
- **Goal:** streamline a **regular** assessment and reporting process at the national level
- **Objective:** to apply the UNECE regional environmental indicators and SoER elaboration;
- **Coordination and secretariat:** Environmental Agency

- ✓ **On October 30, 2019:** NIT discussed and approved the list of UNECE indicator to be applied at national level
- ✓ **Approved the indicator evaluation national templates** designed on SEA's example following UNECE guidelines and elaborated within ENI SEIS II East project;
- ✓ **Agreed on cooperation set up and deadlines** for data collection, validation, indicator assessment, public consultations, make it available online for the public**;**

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Key achievement 1: National Environmental Indicators (UNECE core-set) developed and available online (1/3)

The National Implementation Team with the suport of European Environment Agency in collaboration with Slovak Environment Agency extended the indicators list from 8 to 36 indicators (UNECE core-set) majority based on the national statistics on environment.

Available online on Environment Agency website – including data time series tables for download (xls format)

http://www.mediu.gov.md/ro/content/indicatori-de-mediu

Each indicator is presented online, user-friendly and covers:

- ✓ Key questions and messages,
- ✓State and trend analysis with illustration (graphics, maps);
- ✓Detailed assessment text
- ✓Indicator specification and metadata (indicator definition, units, methodology of calculation);
- ✓Rationale (justification for indicator selection, scientific references);

Key achievement 1: National Environmental Indicators (UNECE core-set) developed and available online (2/3)

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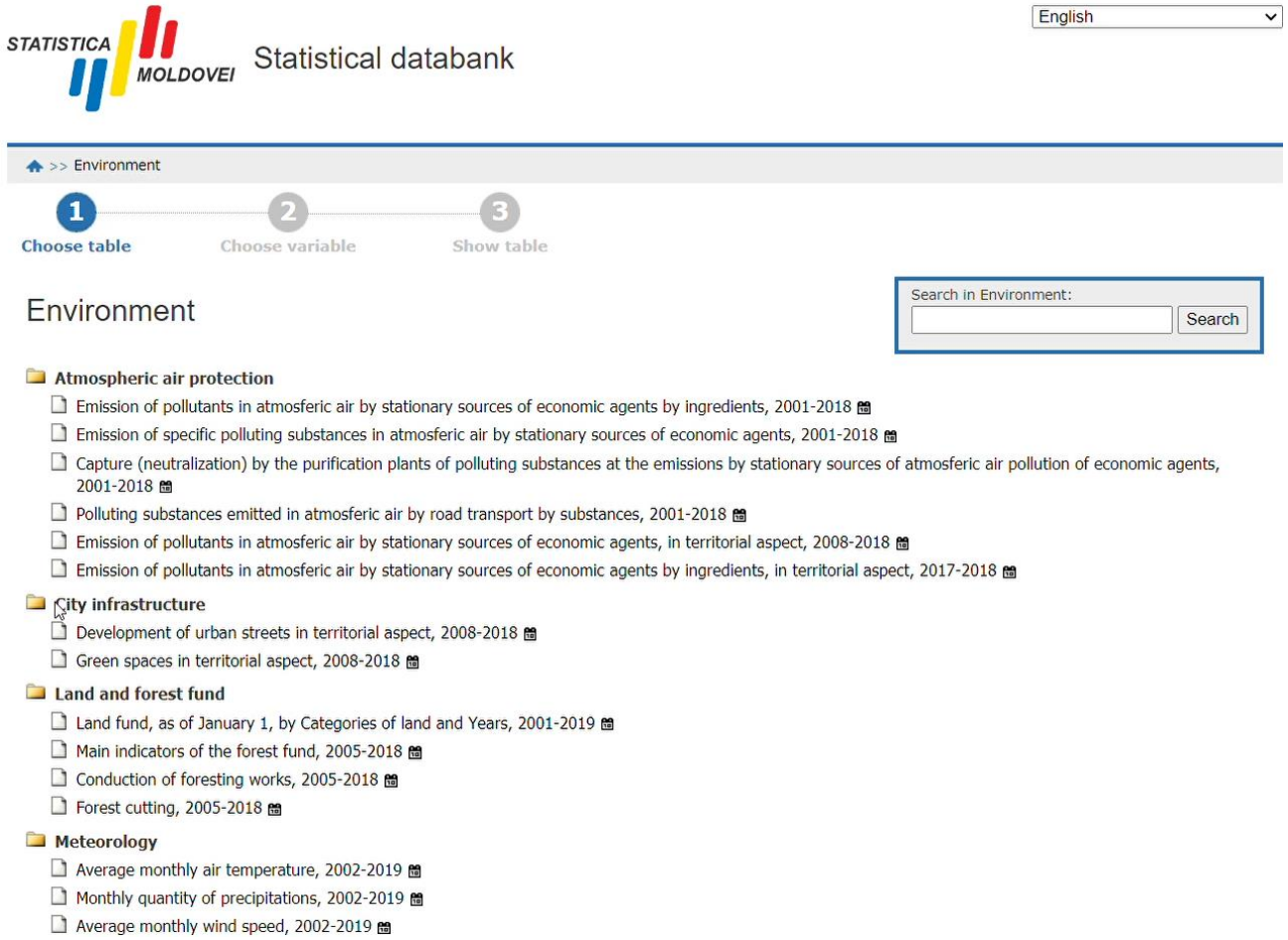
Key achievement 1: National Environmental Indicators (UNECE core-set) developed and available online (3/3)

NATIONAL BUREAU OF STATISTICS: AVAILABLE ENVIRONMNETAL INFORMATION

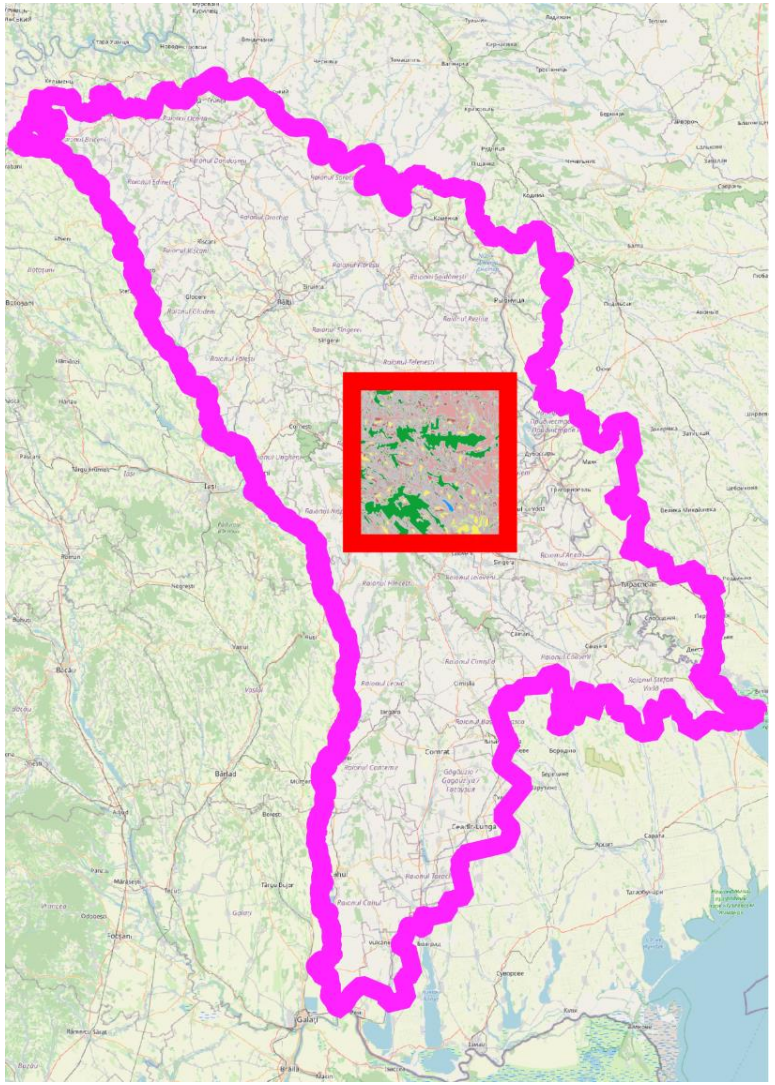


Key achievement 2: Corine Land Cover and AQ data management (through RAVEN+) 1/3

CLC pilot project area: Chisinau urban area and its surroundings - **3158 km²** (10% out of the total country area);

Databases used:

1. **CLC2000_MD** dataset;
2. **Satellite imagery:** four high resolution (HR) satellite image coverage IMAGE2018 taken by the ESA Sentinel-2 satellite in 2017 and 2018, selected and prepared by ETC-ULS partner BFKH were available for the project to cover the pilot area;
3. **In-situ data:** Topographic maps (2000-2012) and ortho-photos 2007/2016.



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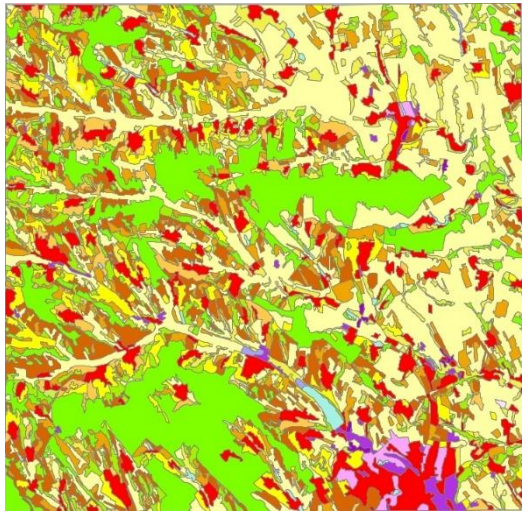
Key achievement 2: Corine Land Cover and AQ data management (through RAVEN+) 2/3

RESULTS

√ CLC_2000 (revised/corrected);

√ CLC-Change layer

√ CLC_2018



Revised CLC2000

CLC-Change (2000-2018

code	No of polygons	Area ha	Percent of total
112	185	33115,77	10,49%
121	36	3126,82	0,99%
131	8	536,99	0,17%
141	10	2380,73	0,75%
142	1	62,64	0,02%
211	226	95087,49	30,11%
221	224	29993,98	9,50%
222	298	23644,19	7,49%
231	207	17039,33	5,40%
242	157	19681,66	6,23%
243	111	11027,67	3,49%
311	101	57730,27	18,28%
313	1	58,91	0,02%
321	9	856,31	0,27%
324	221	18560,72	5,88%
333	6	246,68	0,08%
411	8	474,71	0,15%
512	36	2154,42	0,68%
Sum	1845	315779,26	100,00%

CLC2018 statistics

Plans for continuation of CLC mapping:

- **CLC mapping for the whole territory:**

- National dialogue with the main stakeholders (potential users and the National Implementation Team) to finalise a project proposal for CLC extension for the entire country area with the support of the European Topic Centre of Urban, Land and Soil Systems (ETC-ULS);

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Key achievement 2: Corine Land Cover and AQ data management (through RAVEN+) 3/3

√ Evaluated the status of AQ monitoring and use of data (Country Fact Sheet);

√ National experts trained on AQ monitoring&reporting

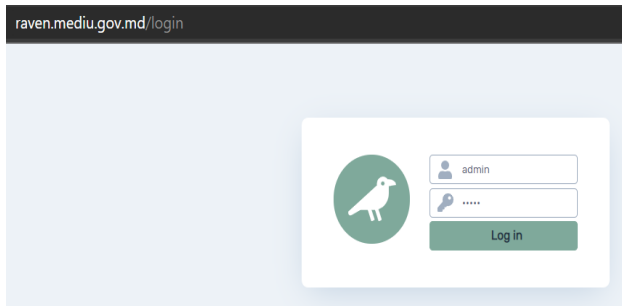
√ RAVEN+ application successfully installed and deployed on the server of the Environment Agency of Moldova;

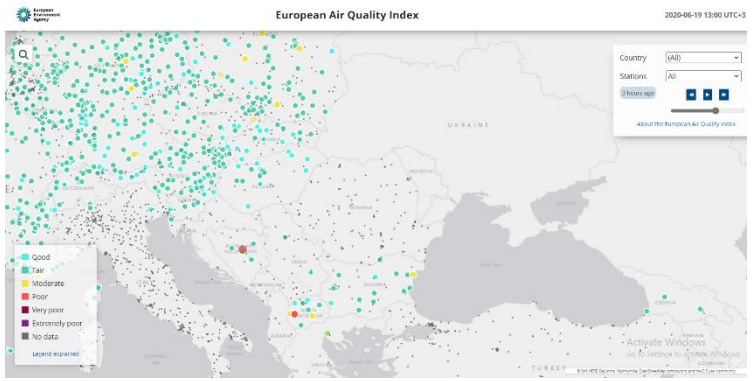
√ Created the meta-data for Chisinau stations and uploaded to RAVEN (2018)

RAVEN+ activities in progress:

EEA+NILU+4sfera continues to provide support for the national expert on:

- **creating the meta-data for the rest of the stations (cities) and Upload Raven with historical data ;**
- **making the link between DOS database (existing database) and Raven (script)**
- **e-report – ensure data visualisation on EU AQ Index**





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Key achievement 3: Environmental Assessment – integrated indicator-based assessment (SoER)

Currently, the Environmental Agency with the NIT support is drafting the:

1. **National Report on the State of Environment 2015-2018 (SoER)** (Romanian version), indicator-based report; using the methodology developed by Slovak Environmental Agency;
2. Executive summary in Romanian;
3. **Country brief** covering:
   - main themes and sectors addressed in the report
   - key findings and messages of the state of the environment
   - main policy responses to key environmental challenges and concerns.

SoER 2015-2018 approved structure:

Introduction
General information about Republic of Moldova
Executive summary
State of Environment
(Air, Water, Biodiversity, Soil and Land)
Economic impact on Environment
(Transport, Energy))
Waste Management
Climate Change
Environmental Expenditure
Environmental Care
Environmental policy, institutional cooperation

The report is planned to be available in the following formats:
- Digital version (online)/chapters;
- On paper

European Environment Agency

National impact, future steps and support needed for the SEIS implementation

- **Implement** the legal **obligations, methods, tools, procedures** and **standards** for **environmental information /data** management responsibilities amongst institutions;

- **Develop** the Integrated Environmental **Information** Management **System** to connect all the existent databases; digitalise databases stored on paper; share information between databases of different institutions; and to collect data electronically/digitally (*interoperability standards);*

- **Further improve** the institutional collaboration and share of information through clearly stated **legal, organizational and technological** measures

European Environment Agency

Thank you for attention and cooperation!

Ministerul Agriculturii, Dezvoltării Regionale și Mediului
Agenția de Mediu

STATISTICA MOLDOVEI

European Environment Agency