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European  
Environment  
Agency

**ENI SEIS II EAST Project**

National roundtable on Open Data and e-Government for the Environment  
Yerevan, Armenia, 10th September 2019

# The European Environment Agency and ENI SEIS II East project

**Daniela Cristiana Docan**  
*Geospatial Data Management*

# The European Environment Agency

Coordinate the

European environment information and observation network  
(Eionet)

## INSTITUTIONAL COOPERATION

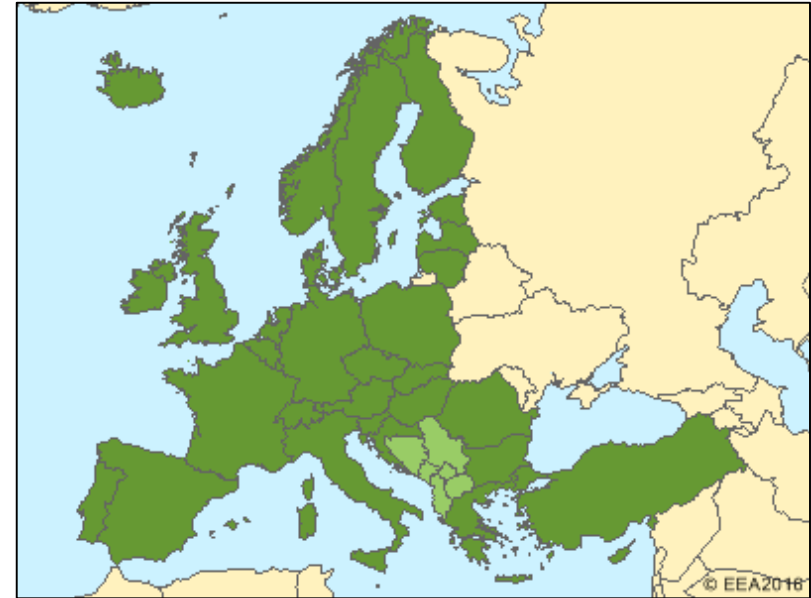
*(approx. 350 national bodies)*

## COMMON KNOWLEDGE

*(approx. 1500 experts)*

## SHARED INFRASTRUCTURE

*(Reportnet, reporting obligations, tools)*



33 Member countries (EU28+5) +  
6 Cooperating countries (West Balkan)

6 Eastern Partnership countries  
9 Southern Mediterranean countries



# The European Environment Agency

<https://www.eea.europa.eu/>

<https://www.facebook.com/European.Environment.Agency>



# The ENI SEIS II East project's expected results

Armenia - Azerbaijan - Belarus - Georgia - Moldova - Ukraine



## EEA and ENI SEIS II East project coverage

- EEA member countries
- EEA cooperating countries
- ENI SEIS II East

The map does not imply any opinion from EEA concerning the legal status of any country or territory, its area of authority or the delineation of its frontiers and boundaries.

\* Collaboration is temporally suspended

1. Implementation of **regional/international commitments** related to environmental reporting;

Data harmonisation / comparable

2. Improved capacities in the national administrations to **manage and use environmental information** to support decision-making;

Tools / information systems / indicators

3. Regular “State of the Environment” reports and **indicator-based assessments** in line with EU and EEA methodologies

Integration, key messages

<https://eni-seis.eionet.europa.eu/east>



# “State of the Environment online” - traceability of data

## 1) STORY / ASSESSMENT <http://www.eea.europa.eu/soer>

## 2) INDICATOR MANAGEMENT SYSTEM

**SOER 2015 — The European environment — state and outlook 2015**  
A comprehensive assessment of the European environment's state, trends and prospects, in a global context.

Synthesis report | Global megatrends | European briefings | Cross-country comparisons | Countries and regions

The synthesis report informs future European environmental policy in general and its implementation between 2015 and 2020 in particular. It includes a reflection on the European environment in a global context, as well as chapters summarising the state of, trends in, and prospects for the environment in Europe.

Key messages

- Foreword
- Executive summary
- 1. The changing context of European environmental policy
- 2. The European environment in a wider perspective
- 3. Protecting, conserving and enhancing natural capital
- 4. Resource efficiency and the low-carbon economy
- 5. Safeguarding people from environmental risks to health
- 6. Understanding the systemic challenges facing Europe
- 7. Responding to systemic challenges: from vision to transition
- References and bibliography
- Synthesis report contents index

Synthesis report in several languages

About SOER 2015  
For journalists  
Events  
Feedback  
Photos and videos  
Collections

Key messages

Maritime activities

Exploitation of European seas and coastal zone as new industries emerge and traditional ones move further off shore. The main pressures include: extraction of species and genetic resources, seafloor exploitation, pollution and the spread...

**Abundance and distribution of selected European species**

Indicator Assessment — Pre-40: Pre-40: Also known as: SOER 001, CS 050 — Created 08 Jul 2019 — Published 09 Aug 2019 — Last modified 09 Aug 2019 — 13 min read

Topics: Biodiversity — Ecosystems | Agriculture

**Key messages**

Monitoring schemes show significant long term (25-year) downward trends in common birds (in particular farmland birds) and grassland butterfly population numbers, with no signs of recovery.

Between 1990 and 2016, there was a 9 % decrease in the index of common birds in the 26 EU Member States with slightly greater (11 %) if figures for Norway and Switzerland are included. The common forest bird index decreased by 11 % over the same period.

The decline in common farmland bird numbers over the same period was much more pronounced, at 32 % (EU) and 41 % (including Norway and Switzerland).

The index of grassland butterflies has declined significantly in the 15 EU countries where butterfly monitoring schemes have been running.

**Data sources**

- Butterfly Conservation Europe (Dataset URL is not available) provided by **Dutch Butterfly Conservation**
- Trends of common birds in Europe provided by **European Bird Census Council (EBCC)**

**Metadata**

Topics: Biodiversity — Ecosystems | Agriculture

Indicator codes: SCDI 001, CSI 050

Tags: all common birds, grassland butterflies, population trends, common forest birds, common farmland birds

Temporal coverage: 1990-2017

DPSIR: State

Typology: Descriptive indicator (Type A - What is happening to the environment and to humans?)

Geographic coverage: Austria, Belgium, Bulgaria, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom

Dates

First draft created: 08 Jul 2019, 11:00 AM

Published: 09 Aug 2019, 01:39 PM

Last modified: 09 Aug 2019, 01:39 PM

Frequency of updates: Updates are scheduled once per year

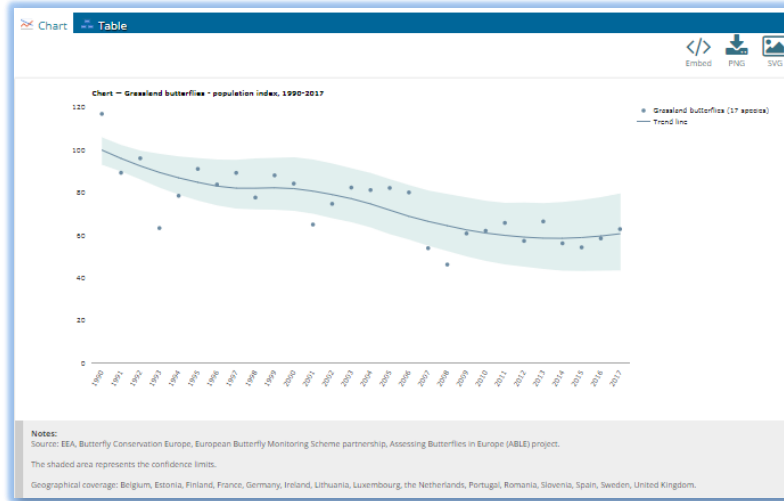
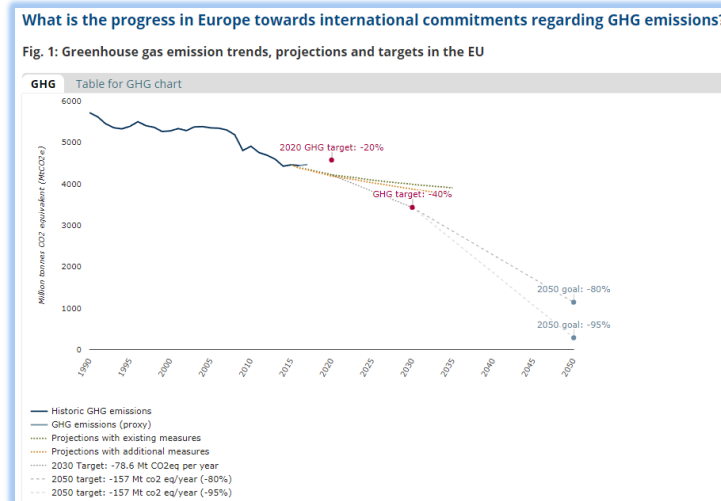
EEA Contact Info: Katarzyna Bala

**Has the decline in common species in Europe been halted?**

Fig. 1: Common birds - population index, 1990-2016

EU - Common birds population index - Common birds - population index, 1990-2016

## 3) INTERACTIVE GRAPHS



## 4) OPEN ACCESS TO DATA

**Download data**

Formats suitable for human consumption

- HTML
- CSV
- TSV

Formats suitable for machine-to-machine communication

- JSON
- Exhibit JSON
- XML
- XML with Schema

Year	Grassland butterflies (17 species)	Lower confidence limits	Upper confidence limits	Confidence limits
1990	100.0	100.0	100.0	100.0
1991	99.5	99.5	99.5	99.5
1992	99.0	99.0	99.0	99.0
1993	98.5	98.5	98.5	98.5
1994	98.0	98.0	98.0	98.0
1995	97.5	97.5	97.5	97.5
1996	97.0	97.0	97.0	97.0
1997	96.5	96.5	96.5	96.5
1998	96.0	96.0	96.0	96.0
1999	95.5	95.5	95.5	95.5
2000	95.0	95.0	95.0	95.0
2001	94.5	94.5	94.5	94.5
2002	94.0	94.0	94.0	94.0
2003	93.5	93.5	93.5	93.5
2004	93.0	93.0	93.0	93.0
2005	92.5	92.5	92.5	92.5
2006	92.0	92.0	92.0	92.0
2007	91.5	91.5	91.5	91.5
2008	91.0	91.0	91.0	91.0
2009	90.5	90.5	90.5	90.5
2010	90.0	90.0	90.0	90.0
2011	89.5	89.5	89.5	89.5
2012	89.0	89.0	89.0	89.0
2013	88.5	88.5	88.5	88.5
2014	88.0	88.0	88.0	88.0
2015	87.5	87.5	87.5	87.5
2016	87.0	87.0	87.0	87.0
2017	86.5	86.5	86.5	86.5





# Working with Republic of Armenia

## ENI SEIS II East

Implementation of the [Shared Environmental Information System \(SEIS\)](#) principles and practices in the [ENP East region](#)

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## ARMENIA

[UNECE ENVIRONMENTAL INDICATORS](#)[ENVIRONMENTAL ASSESSMENT REPORTS](#)

### National Focal Points:

Gayane Shahnazaryan, [Ministry of Environment](#)

Nelli Baghdasaryan, [Statistical Committee of the Republic of Armenia](#)

### National SEIS Assistant:

Yurik Poghosyan



Gayane Shahnazaryan (left), Yurik Poghosyan and Nelli Baghdasaryan

UNECE Environmental Indicator	Armenia
A. Air pollution and ozone depletion	
B. Climate change	
C. Water	
D. Biodiversity	
E. Land and soil	
F. Agriculture	
G. Energy	
H. Transport	
I. Waste	
J. Environmental financing	
Total	

0/No data

25%

50%

75%

100%

### Links:

[ENI SEIS II project in Armenia: Ministry of Environment](#) | [Armenia and the EU](#) | [Delegation of the European Union to Armenia](#) | [Fact sheet on EU-Armenia relations](#)



# The context for the actions on Open Data

## [European Commission Digital \(Data\) Strategy](#)

Digital delivery model:

- Security and Privacy by design
- Interoperability by design
- Cross-border by default
- Digital by default and Once-Only
- Open by default

## [Public access to Environmental Information](#)

[DIR 2003/4/EC](#)

and

[Aarhus Convention](#) (international)

## [Infrastructure for Spatial Information in the](#)

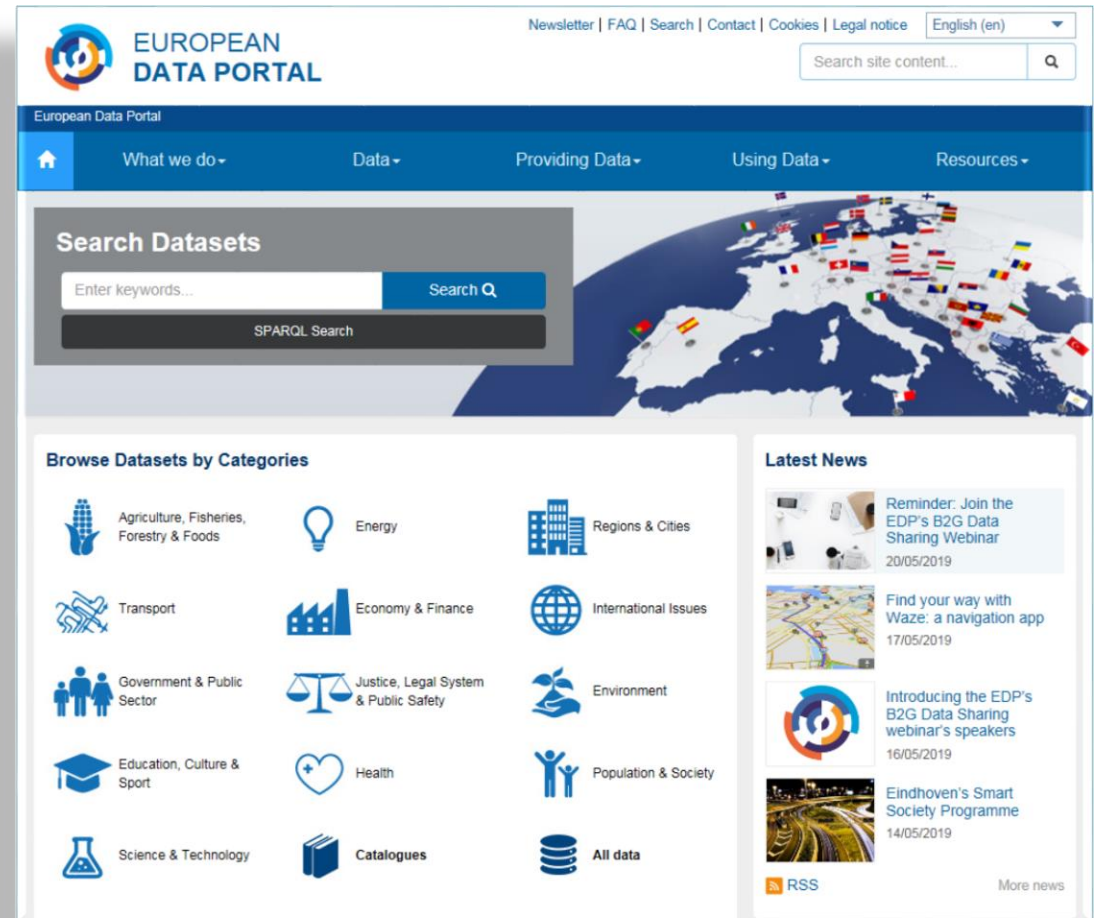
[European Community \(INSPIRE\)](#)

[DIR 2007/2/EC](#)

## [Re-use of public sector information \(PSI\)](#)

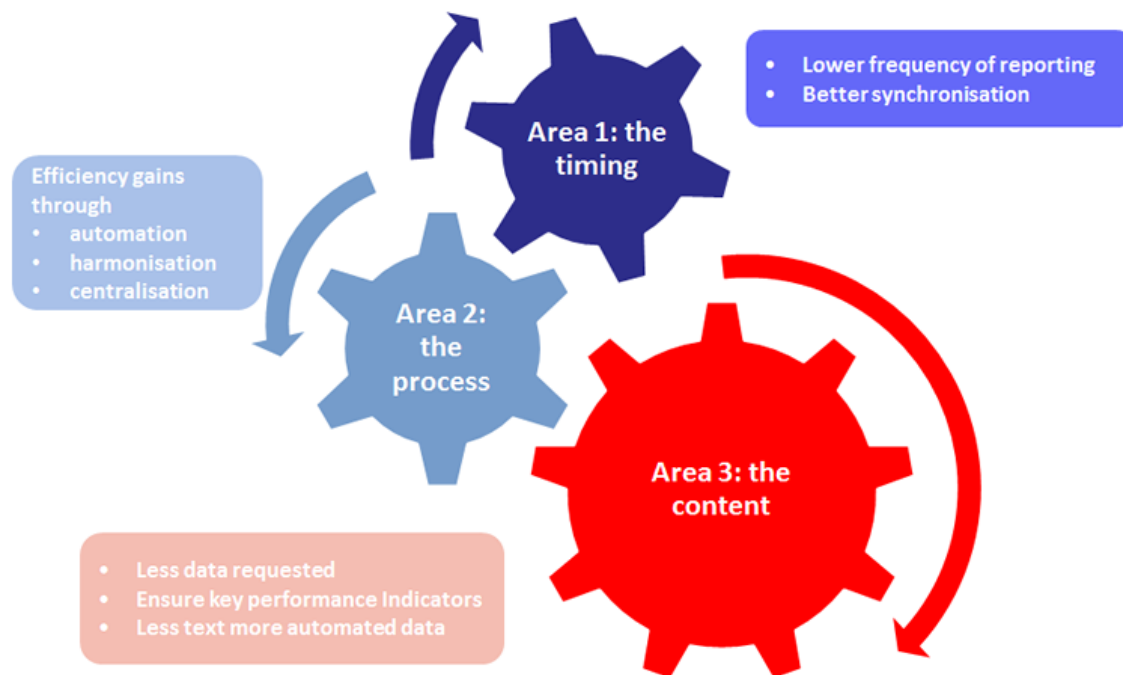
[DIR 2003/98/EC](#)

<https://www.europeandataportal.eu/>



# Fitness check on environmental reporting

- [Fitness Check of Reporting and Monitoring of EU Environment Policy \(2017\)](#)
- [Actions to Streamline Environmental Reporting](#)



Source: [http://ec.europa.eu/environment/legal/reporting/fc\\_overview\\_en.htm](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm)



# Actions to streamline reporting

Action	EEA involvement
1 Amend legislation	-
2 Change reporting obligations	Support through rolling work programme
3 Modernise e-Reporting	Core of Reportnet 3.0 project
4 Develop test tools for harvesting	Share of experiences
5 Guidance for national information systems	Steering Committee DG ENV project
6 Promote INSPIRE	Through INSPIRE IG and Reportnet 3.0
7 Better use of Copernicus data	Share of experiences
8 Promote citizen science data	Support on guidelines
9 Cooperate with other thematic areas	Linked to Reportnet 3.0 project
10 Wider international streamlining	Trilateral UNECE, UNEP, EEA

Source: SWD (2017)230

[http://ec.europa.eu/environment/legal/reporting/pdf/action\\_plan\\_env\\_issues.pdf](http://ec.europa.eu/environment/legal/reporting/pdf/action_plan_env_issues.pdf)



# Open data on environment – going beyond EU

EU: [Fitness Check on Reporting and Monitoring](#)

ENI SEIS II East: [Open Data and e-Government for Environment](#)

ENI SEIS II East project activity “*Develop a roadmap and identify feasible and practical means for integrating environmental information in national e-Governance/Open Data processes and platforms*”



EU: [Open Data Maturity in Europe](#)

ENI SEIS II East: [Country Maturity Report on dissemination of environmental Information](#)

EU: **Promote best practices for European and national Environmental Information Systems**  
(Action 5): <http://www.eis-data.eu/>

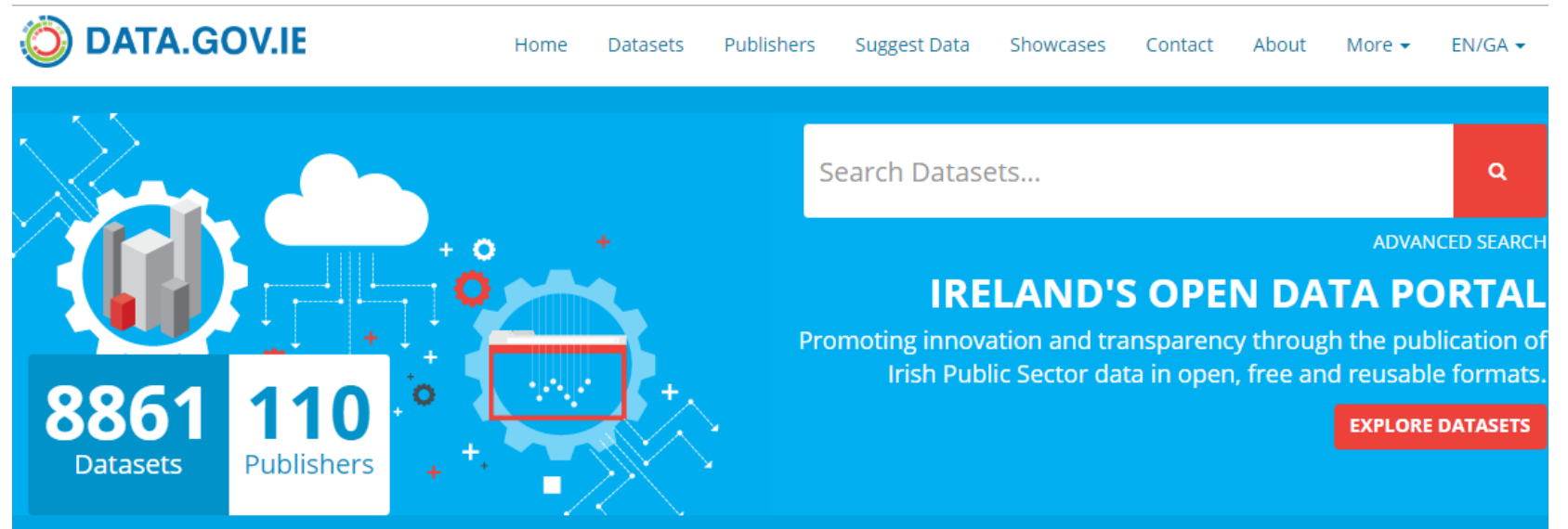
ENI SEIS II East: [Open data and e-government good practices for fostering environmental information sharing and dissemination: SEIS II East project](#)



# Open Data Maturity in Europe 2018

Four Open Data dimensions:

1. Open Data Policy (policy framework, national coordination, licencing norms)
2. Open Data Portal (portal features, usage and sustainability, data provision)
3. Open Data Impact (strategies awareness, political, social, economic and environmental impact)
4. Open Data Quality (e.g. machine readable format for data and metadata, metadata compliance, harvest automatically)



Source: <https://www.europeandataportal.eu> ,  
[Open Data best practices in Europe's Top Three Performers](#) Ireland, Spain and France,

# SEIS principles and pillars



“ ... to continue their **efforts** and to further **develop** their national information systems to have **SEIS in place** in the countries of Europe and Central Asia **by 2021**”



Source: <https://environmentlive.unep.org>

# The way forward ...

The Open Data component under the ENI SEIS II East project aims at:

- **Sustainability of the invested efforts** – building on results from the project thematic activities (biodiversity, air, water, land, and waste) and bringing together relevant information in support of regular environmental assessments
- **Ownership by the partner countries** in advancing the open data initiatives at national and regional level
- **Close connection with the Aarhus Convention** activities to increase the environmental information availability and multiple use, in line with SEIS principles
- Next events:
  - [National roundtable on open data and e-government for the environment in Ukraine](#)
  - [2<sup>nd</sup> Regional workshop on Open Data and e-Government for the Environment](#)



**Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP East region to Eastern Partnership Countries**

Regional View | Country Perspectives | Upcoming Events

EN RU

**Regional View****Renewed commitment to share environmental information across pan-European region**

Geneva, 30 January 2019

The executive heads of the United Nations Economic Commission for Europe, the European Office of the United Nations Environment Programme and the European Environment Agency met to discuss opportunities in environmental monitoring, reporting, assessment and strengthening networks.

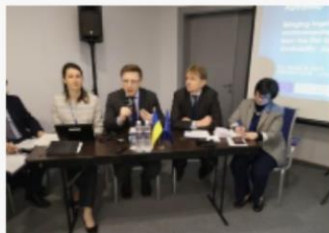
[Read more](#)

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**Integration of environmental information into national e-governance, open data frameworks and platforms**

Kyiv, 5-6 March 2019

The regional seminar kicked off discussions to find practical ways of integrating environmental information in national e-governance/open data frameworks and platforms, in particular the accessibility and role of these in sharing information and providing additional environmental, social and economic benefits.

[Read more](#)

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**Country Perspectives****» Spotlight on the national focal points from Armenia**

'We significantly improved the quality of provision of environmental indicators in Armenia.'

Interview with the national focal points who ensure national coordination and project implementation, Gayane Shahnazaryan and Nelli Baghdasaryanli, on actions implemented and key learning points.

[Read the interview](#)© Statistical Committee of the  
Republic of Armenia*THANK YOU,*

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<https://eni-seis.eionet.europa.eu/east>