## Working Group on Environmental Monitoring and Assessment

Twenty-third session, Geneva and online, 4-5 May 2021

Agenda Item 5: Reporting on the Shared Environmental Information System (SEIS) to support a regular process of environmental assessment

Final review report on the establishment of the Shared Environmental Information System in Europe and Central Asia







## **Background**



#### **Context**

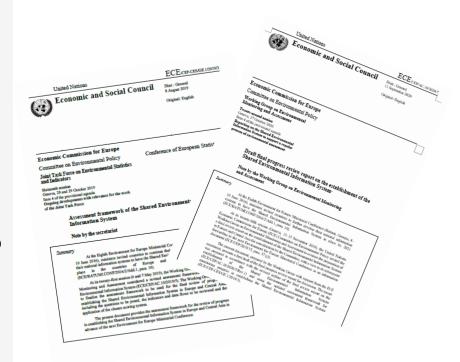
- 8<sup>th</sup> EfE Ministerial Conference (2016) Ministers invited countries to further develop their national information systems to have Shared Environmental Information System (SEIS) in place by 2021
- 24<sup>th</sup> session (January 2019) CEP requested Working Group to lead a further review of progress in establishing SEIS in Europe & Central Asia in advance of next EfE Ministerial Conference
- 22<sup>nd</sup> session of Working Group (27 October 2020):
  - Secretariat presented a first draft of final review report on SEIS establishment
  - Working Group adopted revised outline of final review report
  - Member States were invited to submit their self-assessment until 15 December 2020 (extended deadline)
  - Working Group requested secretariat to inform CEP about outcomes of 22<sup>nd</sup> session
- 26<sup>th</sup> session CEP (November 2020) invited member States to submit their assessments until 15 December 2020

## **Background Final SEIS Review**



#### **Background**

- Final review report prepared based on self-assessments submitted by member States mainly & in accordance with:
  - revised outline of the final review report on the establishment of SEIS (ECE/CEP/AC.10/2020/5/Rev.1)
  - updated assessment framework for monitoring progress in establishing the System (ECE/CEP–CES/GE.1/2019/3)
  - draft presented at the twenty-second session of the Working Group (Geneva, 27 October 2020)
- Final review report complemented through additional research (to extent possible) & results from other initiatives & projects from partners (EEA, EIONET, UNEP)
- Data collection through SEIS online tool, from May to 15 December 2020 (extended deadline)



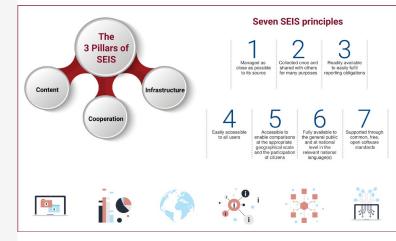
## **Background Final SEIS Review**



#### **Background**

#### Final review addresses:

- 7 quality categories associated with data production & use of UNECE environmental indicators (relevance; accuracy; timeliness and punctuality; accessibility; clarity; comparability; & institutional and organizational arrangements)
- all 3 pillars of SEIS (content, infrastructure and cooperation)
- 19 Questions + sub-questions (clustered along the 7 quality categories) to member States to assess data quality.
- Questions at macro, thematic & data flow level 22 data flows underlying 18 UNECE core environmental indicators & 9 environmental themes – see SEIS Assessment Framework



## Aim of the final progress review



#### Purpose:

- to show progress against agreed data quality criteria for countries to assess their capacities & help identify resource needs for regular environmental monitoring & assessment.
- to inform 9th EfE Ministerial Conference in 2022 on SEIS establishment in Europe & CA

#### **Envisaged key messages to ministers at the Ministerial Conference in 2022:**

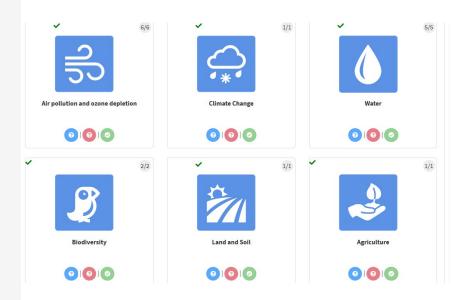
- Overall a Shared Environmental Information System has been successfully established in Europe and Central Asia.
- All member States, to varying degrees, made progress on establishment of a national system during past years & in making environmental information available & accessible. National SEIS vary in form & regularity regarding their updates & content, & gaps remain that need to be addressed.
- Due to limited number of self-assessments submitted → difficult to confirm full establishment of a national system in all countries in line with all SEIS principles & pillars

### **Final SEIS Review**



#### **Summary**

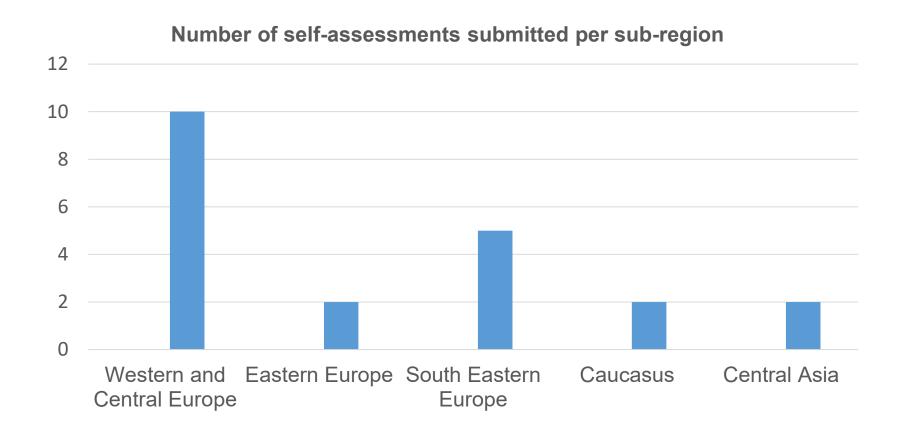
- 21 out of the 53 UNECE member States (not incl. Canada, Israel & United States of America) submitted a selfassessment by end December 2020
  - Albania, Austria, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, France, Georgia, Germany, Kazakhstan, Montenegro, North Macedonia, Republic of Moldova, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland & Uzbekistan
  - While all member States with economies in transition submitted self-assessments for the mid-term review, only moderate participation, in particular from Central Asia, in final review
  - 9 EU countries submitted a self-assessment
- 10 countries submitted results for all thematic questions under the 9 themes



The secretariat would like to thank countries for all the contributions and comments received!

### **Final SEIS Review**







#### **Overview on Findings**

Many countries continued to harmonize data flows & improve data quality since the mid-term review

#### Thematic performance

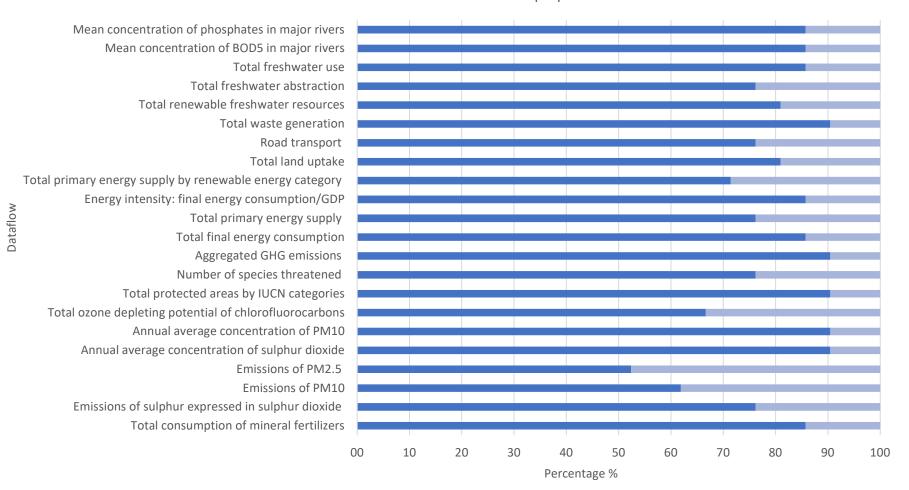
 Theme I (waste), has the highest performance scores, followed by B (climate change), G (energy), H (transport), D (biodiversity), A (air pollution and ozone depletion), C (water), F (agriculture) and E (land and soil)

#### **Data flow performance**

- "Total waste generation" performed best, followed by "Annual average concentration of SO2", "Annual average concentration of PM10", "Aggregated GHG emissions" & "Total protected areas by IUCN categories"
- Room for improvement for other data flows



#### Use of data flow for more than one purpose



## Multi-purpose use of data flows (category "relevance"

Majority of data flows (80 %) used for more than one purpose



#### Indicator-based & integrated environmental reports

- Majority (62 %) of reporting countries regularly (annually, every other year or every 4-5 years) produce an indicator-based national SoER.
- 28 % of countries do not produce an indicator-based report or not with regular frequency, and 10 % did not reply to this question.
- A very positive development is that most countries (81 %) produce integrated environmental reports covering several thematic areas.

Source: based on self-assessments from SEIS review









#### Overview of national state-of-the-environment reporting – complemented for other member States

Country	Regular production of an integrated state-of-the-environment report	Year of latest state-of- the-environment report	Regular production of an indicator- based state-of-the-environment report	Year of latest indicator-based state-of-the-environment report
Albania	Yes	2019	No	2018
Andorra	TBC	TBC	Yes	2019
Armenia	No	2011	Yes	2020
Austria	Yes	2019	Yes	2019
Azerbaijan	No	2019	No	TBC
Belarus	Yes	2019	Yes	2019
Belgium (regions)	Yes	2019	No	2012
Bosnia and Herzegovina	Yes	2012	No	TBC
Bulgaria	Yes	2020	No	2020
Croatia	No	TBC	Yes	2019
Cyprus	No	2015	No	TBC
Czechia	Yes	2018	Yes	2020
Denmark	Yes	2014	Yes	TBC
Estonia	Yes	2013	Yes	2019
Finland	Yes	2018	Yes	2020
France	Yes	2019	Yes	2020
Georgia	Yes	2017	Yes	2017
Germany	Yes	2019	Yes	2020
Greece	Yes	2019	Yes	TBC
Hungary	Yes	2017	Yes	2020
Iceland	Yes	2019	Yes	2019
Ireland	Yes	2020	Yes	2020
Israel	Yes	2019	TBC	2010
Italy	Yes	2019	Yes	2019
Kazakhstan	Yes	2019	Yes	2018
Kyrgyzstan	No	2012	TBC	TBC
Latvia	Yes	2016	Yes	2019
Liechtenstein	No	2021	Yes	2015
Lithuania	Yes	2020	Yes	2020
Luxembourg	No	2003	TBC	2018



#### Overview of national state-of-the-environment reporting – complemented for other member States

Country	Regular production of an integrated state-of-the-environment report	Year of latest state-of-	Regular production of an indicator- based state-of-the-environment report	Year of latest indicator-based
	state-of-the-environment report	the-environment report	based state-of-the-environment report	state-of-the-environment report
Malta	Yes	2018	Yes	2011
Monaco	Yes	2018	Yes	2018
Montenegro	Yes	2019	Yes	2017
Netherlands	Yes	2020	Yes	2019
North Macedonia	Yes	2020	Yes	2018
Norway	Yes	2020	Yes	2020
Poland	Yes	2018	No	2001
Portugal	Yes	2019	Yes	2011
Rep. of Moldova	Yes	2011	No	2014
Romania	Yes	2019	Yes	2018
Russian Federation	Yes	2019	Yes	2019
San Marino	TBC	TBC	Yes	2020
Serbia	Yes	2019	No	2016
Slovakia	Yes	2018	Yes	2020
Slovenia	No	2010	Yes	2020
Spain	Yes	2019	Yes	2019
Sweden	Yes	2020	Yes	2020
Switzerland	Yes	2018	Yes	2018
Tajikistan	No	TBC	TBC	TBC
Turkey	Yes	2016	Yes	2017
Turkmenistan	No	TBC	No	TBC
Ukraine	Yes	2015	No	TBC
United Kingdom	Yes	2020	Yes	TBC
Uzbekistan	No	TBC	No	TBC

Source: Self-assessment reports by countries, European Environment Agency and national websites. Abbreviations: TBC, to be confirmed.



#### **Content pillar**

- Countries reported that nearly all 22 data flows are published regularly (85 %). In most cases annually. → positive development confirming added value of SEIS as a source of quality information & data for decision makers & public.
- Data flows most often presented as complete factsheets (67 %) & used to produce different types of content such as reports & visual representations. This too is a positive development.



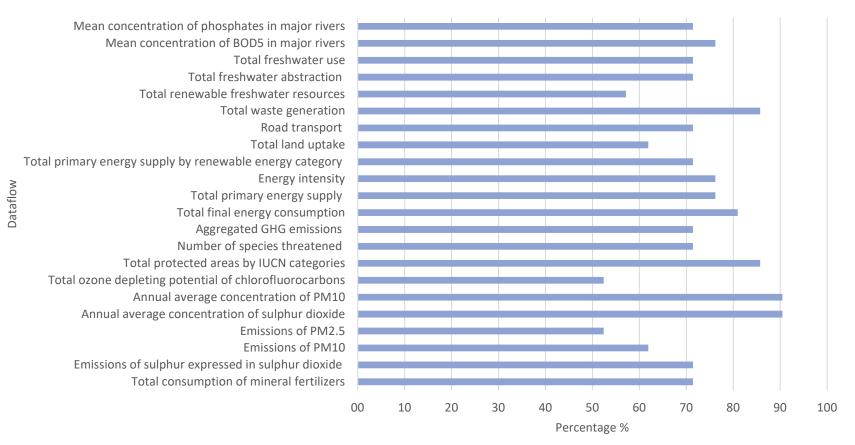
#### Infrastructure pillar

- 72 % of the 22 data flows readily available & accessible online for users on national platforms
- In most cases, the 22 data flows readily available & accessible on integrated platforms, with remaining limitations for some data flows (still inconsistencies regarding links provided for individual data flows)
- Most countries established procedures for data validation & revision for all 22 data flows. For 69 % of data flows, validation procedures were reported, & for 58 % of data flows procedures for data revision in place.
- Metadata available for 71 % of 22 data flows → ensuring greater clarity & quality of the information provided.





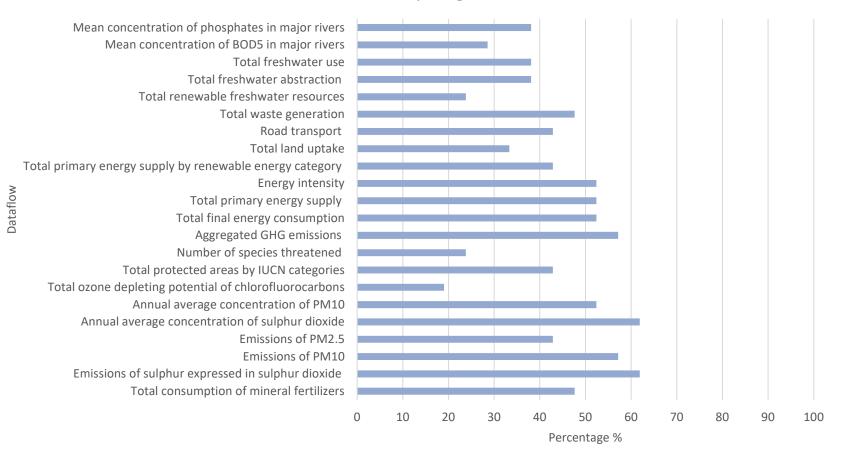
#### Data flow readily available and accessible



category "accessibility"



#### Limitations in comparing data flows

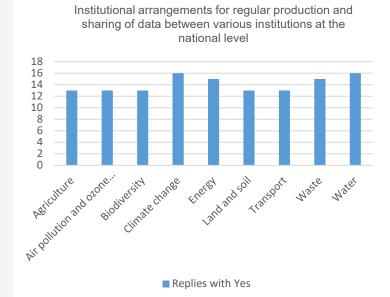


category "comparability"



#### **Cooperation pillar**

- Institutional arrangements in place for regular production & sharing of data between various institutions at national level (67 %).
- Mid-term review highlighted need to improve institutional cooperation between fragmented data producers & users.
- Continued process of SEIS establishment, selfassessment questionnaire & final progress review facilitated further interaction between data producers who normally do not share or exchange information.
- This work should continue to ensure efficient interaction between stakeholders.



## **Developments since MTR in 2018**



- 16 of 21 member States reported steps taken since 2018 mid-term review to further SEIS, 3 reported that no steps had been taken & 2 did not reply
- Several countries in EU Eastern Neighbourhood highlighted that SEIS establishment enhanced through ENI SEIS II East project (EEA).
- Others listed projects such as the project "Development of Environmental Monitoring & Information System" (funded by EU IPA II programme in North Macedonia or UNDP projects "Establishing Albania's Environmental Information Management and Monitoring System Aligned with the Global Reporting".



Source: UNEP, Zoi Environment
Network

IMPLEMENTATION OF THE PRINCIPLES AND PRACTICES OF THE SHARED ENVIRONMENTAL INFORMATION SYSTEM (SES) IN THE EASTERN PARTIESHIP COUNTRIES FUNDED BY THE EUROPEAN NEIGHBOURHOOD INSTRUMENT (EN) AND IMPLEMENTED BY THE URDENAN EASTERN PARTIESHIP COUNTRIES FUNDED BY THE EUROPEAN NEIGHBOURHOOD INSTRUMENT (EN) AND IMPLEMENTED BY THE URDENAN ENVIRONMENT AGENCY

ENI SEIS II East Project 2016-2020



Source: European Environment Agency

# Working Group - Policy Recommendations



#### **Making Data Meaningful**

- Improve national legislation & close legislative gaps (for 13 % of thematic areas) on monitoring & reporting
- Continue work on integration & harmonization of data flows in line with SEIS principles beyond 2021
- Enhance regular data production & publication of information online
- Enhance digitalization of environmental data to enhance availability & accessibility incl.
   through use of new technologies in environmental monitoring
- Establish or improve institutional arrangements for regular production & sharing of data between various institutions at national level
- Better align data collection processes with national policy targets & improve use of indicators in environmental assessments & reports including for pan-European environmental assessment

# Working Group - Policy Recommendations



#### **Making Data Meaningful**

- Improve use of relevant environmental assessments & reports to measure progress against policy targets
- Regularly revise indicators & data flows to inform latest global policies & support decisionmaking
- Address remaining gaps in SEIS implementation, covering all pillars, thematic categories & data flows
- Ensure sufficient financial resources for establishment, operation & maintenance of environmental monitoring & information systems (national budgets + international support)
- Continue effective cooperation between UNECE, UNEP & EEA on information systems in the region & support countries in regular reviews of environmental information systems & their digitalization efforts

### **Lessons Learned**

## UNECE

- Provision of timely, relevant & reliable information & indicators to public & policymakers remains crucial for Working Group & future EfE Conferences
- Regular self-assessments help countries to implement measures to address gaps in SEIS establishment → Assessment framework a tool for countries to monitor progress & identify needed resources & gaps
- Any future reviews (beyond 2021) to better assess use of data in policymaking, monitoring progress towards policy targets & streamlining reporting processes
- Further steps needed to motivate countries to contribute to similar reviews incl. through collaborative efforts between EEA, UNEP, UNECE
- Present report shows still inconsistencies in information provided → any future reviews may consider gaps identified
- SEIS not static & may evolve over time into fully integrated & open data systems based on SEIS principles to inform policies in a holistic manner → digitalization of environmental data & new technologies will be key

## **Further steps**





- Further assistance needed to fully implement SEIS in all member States beyond 2021 →
- Fundraising to continue for new projects
- Establishment of System & production of indicators to be harmonized & aligned with revised UNECE environmental indicators to enhance policy relevance
- Agree on whether regular SEIS reviews should be conducted beyond 2021 & in which format?

# Timeline up to 9<sup>th</sup> EfE Ministerial Conference





## Thank you!







## Working Group on Environmental Monitoring and Assessment

Twenty-third session, Geneva & online, 4-5 May 2021

Agenda Item 5: Reporting on the Shared Environmental Information System (SEIS) to support a regular process of environmental assessment

Reflections on the reporting exercise by member States







## **Plenary Discussion**



## Questions to guide a discussion on the SEIS progress review and the future of SEIS:

- What are the benefits of the SEIS progress review & regular reporting?
- What were the obstacles & challenges for reporting?
- How can more countries be motivated to report in support of enhancing their environmental information systems?
- What might be the benefits of regular SEIS self-assessments beyond 2021?
- Would you suggest to use the SEIS online tool for possible future reviews?
- Reporting on selected number of data flows (annually, every second year ....?) once UNECE indicator revision completed by using SEIS Assessment Framework?

## **Questions & Comments**



Comments and/or questions?

## **Proposed Decisions**



#### **Proposed Decision:**

#### The Working Group:

- a) The Working Group adopts the final progress review report on the establishment of SEIS in Europe and Central Asia as contained in document ECE/CEP/AC.10/2021/6
- b) The Working Group suggests continuing to use the SEIS reporting tool and assessment framework for upcoming reviews for selected indicators and in support of pan-European environmental assessments.
- c) The Working Group requests the secretariat to inform the Committee on Environmental Policy on the outcomes of this agenda item

## Thank you!





