

WP23_25: Global Observation System for Persistent Organic Pollutants

1256,176

Basic Information

Full title of the Initiative

Global Observation System for Persistent Organic Pollutants

Short Title or Acronym

GOS4POPs

Current category in the 2020-2022 GWP

GEO Initiative

Proposed category in the 2023-2025 GWP

GEO Initiative

Points of Contact

First Name	Last/Family Name	Email
Lukáš	Pokorný	lukas.pokorny@recetox.muni.cz
Kateřina	Šebková	katerina.sebkova@recetox.muni.cz
Jana	Klánová	jana.klanova@recetox.muni.cz
Richard	Hůlek	richard.hulek@recetox.muni.cz

Purpose

Objective

To further enhance functionalities of the Global Observation System for Persistent Organic Pollutants (GOS4POPs)

Please provide a short description of the Initiative

GOS4POPs is intended to further develop a global observation system for persistent organic pollutants (POPs) to support the implementation of the Stockholm Convention and the UN Economic Commission for Europe Convention on Long-range Transboundary Air Pollution (LRTAP) and of ongoing international programs, including the Global Monitoring Plan (GMP) of the Stockholm Convention on POPs and the European Monitoring and Evaluation Programme (EMEP).

Why is this Initiative needed?

The recent focus on combatting pollution by addressing the most hazardous chemicals requires the scientific

community to expand data sharing from environmental monitoring and establish modelling tools to support policy makers highly pertinent. The continuous expansion of range of chemicals in the Stockholm Convention requires major support as to the monitoring as well as visualization of these substances which substantiates further development of GOS4POPs.

What evidence is there to support this need?

On the global and regional levels, policy-makers and scientists have broadly acknowledge the need for better regulation of chemicals. In October 2020, the European Commission published the EU Chemical Strategy for Sustainability – as part of the EU Green Deal - that aims to ban the most hazardous chemicals and move the production, use and disposal of chemicals to a more sustainable level, in line with the concept of Safe and Sustainable by Design. In April 2022, United Nations Environment Assembly adopted resolution that paves the way for the establishment of a science-policy body on chemicals. These strategic priorities need not only next-generation methods and data to identify substances at risk, but also transparent dialogue and close collaboration between science, industry, politicians and the public to achieve effective changes in legislation and in protection of health of future generations.

Is this Initiative open to participation by representatives of any GEO Member, Participating Organization, and GEO Associate?

Yes

Are you aware of other projects or initiatives at a global or regional scale (both in GEO and externally) that provide similar products or services?

Yes

Please describe.

GOS4M Flagship provides similar services for the Minamata Convention on Mercury and provides information on monitoring data and models for mercury levels in the environment (globally)

How is this Initiative unique?

The initiative is the sole global observation system serving the main body on POPs, the Stockholm Convention. Its data serve the convention but also academia, governments and interested public.

Please identify the most important actual and/or intended outputs (products, services, etc.) produced by the Initiative, along with their intended and/or actual users. This list does not need to be comprehensive but should identify the outputs which are most used and are expected to have the greatest potential impact.

Output	Status	Users	Additional info
Analysis of current monitoring programmes, data infrastructures and archived information on POPs, with a special attention to newly listed POPs	Regularly updated	Stockholm Convention, Academia.	
Upgrading the GMP DWH to include new POPs;	Regularly updated	Stockholm convention	
Design, development and implementation of core services supporting adopted procedures of the 4th Global Monitoring Report (harmonized data collection)	Regularly updated	Stockholm Convention	
Design, development and implementation of tools supporting data accessibility, presentation and interpretation - knowledge hub visualizing data and levels for policy makers, experts and general public	Regularly updated	Academia, general public, policy makers	
Exploring possibilities to link GOS4POPs to the forthcoming EU Common Open Platform for Chemical Safety Data	In development	Academia, general public	
Enhancing visibility of GEO services to sectors of biodiversity: synergies between chemicals, waste and biodiversity clusters	In development	Academia, general public, policy makers	

If needed, please provide additional comments or explanation to accompany the outputs table

Comment regarding last point: reporting under SC has its own process and is guided by Conference of Parties decisions: it's not possible to upload any specific documentation.

What kinds of decisions are the outputs of this Initiative primarily intended to support?

Primarily, GOS4POPs is intended to support the implementation of the Stockholm Convention on Persistent Organic Pollutants. Its Article 16 requires that effectiveness of measures adopted by the Convention to eliminate or significantly reduce POPs releases into environment must be regularly evaluated. To that regard a Global Monitoring Plan (GMP) was established; it aims at collecting comparable, harmonized and reliable information on POP levels in core environmental matrices (air, human tissues (breast milk/blood), and water) and GOS4POPs ensures harmonization and visualization of comparable information. To date, the GOS4POPs

shows downward trends in many chemicals, but warrants further action on industrial chemicals and alternatives. Further, the GOS4POPs supports work of the Task Forces under the CLRTAP and harmonized data allow for better precision of models predicting future cycling of chemicals in the environment.

How will these decisions benefit from the outputs of this Initiative?

- harmonized data and information structure improve the quality of information reported from particular monitoring activities, supporting their broader comparability and use at national, regional, continental and global level. - the Initiative is designed to work with data from a wide range of heterogeneous sources, such as national monitoring programmes or large international monitoring networks, without compromising incoming information - compatible data records stored in the GMP DWH are considered by members of the respective regional organization group and validated for further use in the publication;

What kinds of impacts (for example, reduced loss of life, monetary savings, conservation of biodiversity, etc.) are anticipated as a result of the use of the outputs of this Initiative?

- reduced exposure of humans to persistent organic pollutants - reduced loss of life thanks to preventive measures based on the Initiative's data - inputs to SDG indicators

Has this Initiative been asked to provide specific information (for example, reports, data, services) on an ongoing basis to an international convention, organization, or other multilateral body?

Yes

Please identify the requesting organization.

Stockholm Convention, The UN Economic Commission for Europe Convention on Long-range Transboundary Air Pollution (LRTAP), Environmental Monitoring and Evaluation Programme (EMEP).

Describe the nature of the request.

Data for the Global/Regional Monitoring Reports on POPs. Implementation reports by national administrations.

Please provide supporting documentation of the request.

- no supporting documents provided -

Technical Synopsis

Please provide a brief description of the methods used by the Initiative to produce its (actual or planned) outputs.

The data reporting model involves compiling and archiving primary GMP data within a "regional data repository" in the GMP DWH for each of the five regional organization groups. In addition, the GMP DWH compiles and archives aggregated data, including supplementary data, in cases where no primary data is made available.

If you would like to provide further details on the technical methods, you may upload one or more documents here.

- no supporting documents provided -

Are there any significant scientific or technical challenges that need to be resolved by the Initiative during the 2023-2025 period?

No

Does the Initiative expect to complete any key new outputs, improvements to existing outputs, or improvements to the methods of producing outputs, in the 2023-2025 period?

No

Resources

Have all resources required to implement the Initiative's planned work in the 2023-2025 period been secured?

Please list all financial and non-financial contributions to the Initiative (other than in-kind, voluntary participation by individual contributors) having a value of more than USD 50,000.

- no answer given -

Lessons from the 2020-2022 Period

Were all planned activities for the 2020-2022 period implemented as expected?

Yes

Were there any key challenges faced by the Initiative in the 2020-2022 period?

No

Were there any impacts or changes to operations due to COVID-19?

No

Please describe the key changes proposed for the 2023-2025 period, for example, new projects, new areas of focus, or adjustments to the activity governance.

The Initiative will focus newly on supporting the EU Horizon project PARC and serve the SC for the 4th Global Monitoring Report.

Does the Initiative have outputs (products, services, etc.) available to users now, even if only on a pilot or testing basis?

No

Do you have evidence of any impacts that have occurred in part as a result of using the outputs of the Initiative (for example, policy decisions taken, behaviour changes by users, risks mitigated)?

Yes

Please provide examples, with evidence where available.

3rd Global/Regional Monitoring Reports
(<http://www.pops.int/Implementation/GlobalMonitoringPlan/MonitoringReports/tabid/525/Default.aspx>)

Please provide supporting documentation if available.

- no supporting documents provided -

Have there been any internal or external reviews or evaluations of the Initiative since 2019?

No

Please indicate any GEO Work Programme activities with which you have ongoing collaboration.

- EO4HEALTH - Earth Observations for Health

Please indicate any additional GEO Work Programme activities with which you would like to establish new collaborations.

Stakeholder Engagement and Capacity Building

Are there specific countries or organizations that your Initiative would like to engage?

No

Does your Initiative engage users in the work of the Initiative (for example, consultation, testing, co-design)?

Yes

Please briefly describe the Initiative's approach to engaging users.

Regular co-design consultations with respective Regional Groups

Does the Initiative have a user engagement strategy or similar kind of document?

No

Are there categories of users that are not represented at this time, but you would like to engage?

No

Does the Initiative have a documented capacity development strategy?

Yes

Please upload it.

- no supporting documents provided -

Are there any commercial sector organizations participating in this Initiative?

No

Are there opportunities for commercial sector uptake of the outputs of the Initiative?

No

Are there opportunities for further commercial sector participation in the Initiative?

No

Does the Initiative have a plan for commercial sector engagement?

No

Governance

Please describe the roles of each of the key leadership positions, as well as any team structures involved in day-to-day management.

Operational management is done by the director of the Regional Stockholm Convention Centre at the RECETOX, overseeing the project jointly with IT Team of Environment Databases. Representatives of the the governance structure consists of the Global Coordination Group, the Secretariat of the Stockholm Convention and RECETOX. This group further specifies development of GMP DWH on the basis on the decisions adopted globally. There are also linkages to individual UN Regions through members of regional organisations group designated to oversee and coordinate monitoring in their respective regions.

Is there a steering committee or other governance bodies that advise the Initiative but are not involved in day-to-day management?

Yes

Please describe the roles of each body. If there are multiple governance bodies, please describe the relationships among them (such as through a governance structure diagram).

Global Coordination Group - further specifies development of GMP DWH on the basis on the decisions adopted globally. There are also linkages to individual UN Regions through members of regional organisations group designated to oversee and coordinate monitoring in their respective regions.

- no supporting documents provided -

What methods does the Initiative use to communicate with its participants?

- Regular conference calls
- Website
- Regular events

Please describe the key risks that could delay or obstruct the completion of the planned activities and outputs of the Initiative, along with any actions taken to mitigate these risks.

Description of the hazard	Description of the possible impacts	Scale of impact	Likelihood of occurrence	Mitigation measures
Harmonization process and metadata compilation very time consuming	Delay in meeting deadlines regarding data publication	Moderate	Possible	
The schedule of international meetings that we have to comply with is making it difficult to comply with strict deadlines.	Delay in fulfilling planned tasks	Severe	Very likely	

What methods are used by the Initiative to monitor its effectiveness?

- Evaluations

Would the Initiative be interested in assistance from the GEO Secretariat for developing an impact plan?

Yes

How are the results of the monitoring and evaluation activities shared with participants and the wider GEO community?

Participation at various euroGEO meetings, webinars organised by EARSC and under the framework of the e-shape project. Linked to GEOSS

Are any monitoring or evaluation activities required by funders/contributors?

No

Participants

Please list the active individual participants in the Initiative

First name	Last name	Email address	Member	Org
Sara	Broomhall	sara.broomhall@environment.gov.au	Australia	- Department of the Environment and Water Resources
Sandra	De Souza Hacón	shacon@ensp.fiocruz.br	Brazil	- Escola Nacional de Saúde Pública
Gilberto	Fillmann	gfillmann@furg.br	Brazil	- Federal University of Rio Grande
Martin Benoit	Ngassoum	ngassoum@yahoo.fr	Cameroon	- ENSAI Université de Ngaoundéré
Minghui	Zheng	zhengmh@rcees.ac.cn	China	CAS - Chinese Academy of Science
Rigoberto	Blanco Saenz	rblancos@ccss.cacr	Costa Rica	- Universidad de Costa Rica
Tom	Harner	tom.harner@ec.gc.ca	Czech Republic	EC - Environment Canada
Jana	Borůvková	jana.boruvkova@recetox.muni.cz		
Petra	Přibyllová	petra.pribylova@recetox.muni.cz		
Andreas	Massling	anma@envs.au.dk	Denmark	AU - Aarhus Universitet
Evangelos	Gerasopoulos	egeera@noa.gr	Greece	NOA - National Observatory of Athens

Nicola	Pirrone	nicola.pirrone@iia.cnr.it	Italy	
Sergio	Cinnirella	s.cinnirella@iia.cnr.it	Italy	CNR - National Research Council, Italy
Yasuyuki	Shibata	yshibata@nies.go.jp	Japan	NIES - National Institute for Environmental Studies, Japan
Vincent	Madadi	vmadadi@uonbi.ac.ke	Kenya	- University of Nairobi
Anas	Otmani	otmani.anas@gmail.com	Morocco	- Laboratoire National des Etudes et de Surveillance de la Pollution
Pernilla	Bohlin Nizzetto	pernilla.bohlin.nizzetto@nilu.no	Norway	NILU - Norwegian Institute for Air Research
Luca	Nizzetto	luca.nizzetto@niva.no	Norway	- Norwegian Institute for Water Research
Zarema	Amirova	z.amirova2014@yandex.ru	Russian Federation	- State Department for Analytical Control of the Republic of Bashkortostan
Milena	Horvat	milena.horvat@ijs.si	Slovenia	IJS - Institut Jožef Stefan
Ramon	Guardans	ramon.guardans@souandplots.com	Spain	- Ministerio de Agricultura, Alimentación y Medio Ambiente
John	Munthe	john.munthe@ivl.se	Sweden	- IVL Swedish Environmental Research Institute
Alejandra	Torre	atorre@latu.org.uy	Uruguay	- Laboratorio Tecnológico del Uruguay
Johann	Poinapen	johann.poinapen@usp.ac.fj		- University of the South Pacific, Fiji Islands
Trajče	Stafilov	trajcest@iunona.pmf.ukim.edu.mk		- Sts. Cyril and Methodius University, Northern Macedonia
Hayley	Hung	hayley.hung@canada.ca		AMAP - Arctic Monitoring and

				Assessment Programme
Jana	Klanova	jana.klanova@recetox.muni.cz	Czech Republic	- Masaryk University
Richard	Hulek	hulek@iba.muni.cz	Czech Republic	RECETOX - Research Centre for Toxic Compounds in the Environment
Kateřina	Šebková	katerina.sebkova@recetox.muni.cz	Czech Republic	- Masaryk University
Lukáš	Pokorný	lukas.pokorny@recetox.muni.cz	Czech Republic	RECETOX - Research Centre for Toxic Compounds in the Environment
Abiola	Olanipekun	abiola.olanipekun@un.org		
Kei Ohno	Woodall	kei.ohno@un.org		

Other information

Please provide any other comments or information that was not included in the previous sections, but you would like to appear in the Implementation Plan.

- no answer given -

- no supporting documents provided -

Co-Editor Management

List of co-editors for this initiative

- no answer given -