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EMERALD NETWORK PROGRESS AND PROSPECTS IN THE EASTERN PARTNERSHIP:

NATIONAL ROADMAPS, ACTION PLANS, AND PATHWAYS TO 2030

SUMMARY PAPER

Emerald Network Progress and Prospects in the Eastern Partnership: National Roadmaps, Action Plans, and Pathways to 2030

Summary Paper

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1. Introduction

The purpose of this paper is to summarize and analyze national action plans and road maps related to the establishment and management of the Emerald Network in the Eastern Partnership countries, specifically, Armenia, Georgia, Moldova, and Ukraine. This analysis is part of Task 1.1 under Subcomponent 4.1 of the EU4Environment Programme, which aims to support regional collaboration, information exchange, and knowledge sharing to enhance biodiversity conservation efforts.

The scope of the document covers the status of the Emerald Network as of early 2025 and presents projections and national plans toward the year 2030. It evaluates progress, identifies key challenges, and provides insights into strategic planning for effective biodiversity conservation across the countries.

Data for this analysis were gathered through extensive consultations; review of national Emerald Network roadmaps and action plans; interviews with national environmental authorities and stakeholders; and secondary sources including country reports, Emerald Barometer data, and findings from previous European Union (EU)–supported projects and initiatives.

This document is structured as follows: Section 2 presents the current status of the Emerald Network in Armenia, Georgia, Moldova, and Ukraine, including official Emerald Barometer indicators and self-assessed national updates. Section 3 presents an assessment of progress toward the 2030 Emerald Network targets, highlighting country-specific challenges and enabling factors. Section 4 concludes with key considerations critical for implementation, emphasizing priority actions required by each country. This is followed by references and resources for further information.

2. Status of the Emerald Network in the target countries: Armenia, Georgia, Moldova, and Ukraine

2.1. Armenia

In 2017, a list of candidate Emerald Network sites in Armenia was presented to the Secretariat of the Bern Convention. The submission included 23 potential sites covering over 1 million hectares (ha)—about 34.7 percent of Armenia's total territory (36.4 percent according to the Emerald Barometer).¹ However, state institutions soon recognized that designating such a large area would also entail significant obligations in terms of implementing and maintaining appropriate conservation measures.

In 2023, under the EU4Environment Programme, the Emerald Network database was thoroughly revised and optimized. The process involved extensive consultations among local and international experts, the World Bank, and the Ministry of Environment. The database was rebooted with updated biodiversity data for determining population proportions, resulting in a set of recommendations for the Armenian government. These proposals include thorough scientific justifications for changes in the boundaries of previously proposed sites, the division of several sites, and both the addition to and removal of particular species and habitats along with the proposal of entirely new sites. The potential consequences of each change for the overall network's status were assessed, and compensatory measures were proposed where necessary.

Recommendations for reviewing the candidate Emerald Network sites were formulated based on extensive expert contributions, consultations, workshops, and cooperation with the Ministry of Environment and other institutions in Armenia (World Bank, 2024f). A set of proposals to the Armenian government (specifically the Ministry of Environment) was to be circulated among key stakeholders for broad and open public engagement. Meanwhile, candidate sites were modified, boundaries corrected, and additional areas for conservation proposed. Following extensive consultations, the initially proposed 23 sites were revised into a new proposal of 30 optimized sites covering approximately 23.8 percent of Armenia's territory. This revision better aligns with updated biodiversity data and conservation requirements, ensuring the adequate representation of target species and habitats in Armenia. The Ministry of Environment is expected to finalize the update after completing stakeholder consultations. Its approval, adoption, and submission to the new Emerald database of the Bern Convention Secretariat should be a priority for the near future.

Additionally, the EU4Environment Programme developed guidelines for preparing management plans for the Emerald sites. On this basis, Armenia developed two pilot management plans for the Emerald sites (Armash [World Bank 2024d] and Ijevan [World Bank 2024e]), also with the support of the EU4Environment Programme, in 2024.

2.2. Georgia

The Emerald Network covers 18.5 percent of the territory of Georgia (66 adopted sites covering 1,306,748 ha), with a 41.2 percent sufficiency index (Emerald Barometer). Although 98 percent of the adopted Emerald Network sites are reported to have management plans, according to unofficial data of the Ministry of Environmental Protection and Agriculture, the Emerald Barometer indicates only 36.4 percent. These discrepancies between the Barometer data, which are based on the latest evaluated

¹ See the edition of the Emerald Barometer released on November 29, 2024: https://tableau-public.discomap.eea.europa.eu/views/EmeraldBarometerdashboard/Barometertable?%3AshowAppBanner=false&%3Adisplaycount=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y.

database, and estimates provided by the country, are explained by disparate methodologies² and incomplete data sets.

Looking ahead, Georgia's immediate priority is to complete the National Report under the Bern Convention by January 2026, supported by the adoption of a draft Law on Biological Diversity and the start of its implementation. From there through 2030, the country aims to advance the Strategic Plan for the Bern Convention up to 2030³ at the national level by updating its Emerald Network databases (held and administered by the Ministry of Environmental Protection and Agriculture), conducting at least one biogeographical seminar, and establishing protected areas at sturgeon spawning sites in line with the Pan-European Action Plan for Sturgeons. According to information received from the Ministry of Environmental Protection and Agriculture in April 2025, by 2030, Georgia plans to maintain 18.7 percent coverage of the Emerald Network, raise its sufficiency index to 60 percent, and ensure that management plans are in place for 100 percent of the adopted sites. Expansion of the network is not planned in the near future, since the highest priority at this point is to start implementing management plans and support capacity-building activities for management authorities. Achieving these targets depends on donor and state funding, as well as the capacity-building efforts of relevant management bodies.

2.3. Moldova

Moldova's Ministry of Environment is finalizing a Biodiversity Programme for 2024–30⁴ that is to be developed in alignment with the Kunming-Montreal Global Biodiversity Framework for the conservation and sustainable use of terrestrial ecosystems, restoration of degraded lands, promotion of sustainable forest management, and transition to a circular economy. The program will replace the outdated National Biodiversity Strategy and Action Plan "Strategy on Biological Diversity of the Republic of Moldova for 2015–2020 and the Action Plan for Enforcing It," which dates back to 2015. It is envisioned that this program will set specific targets to extend the Emerald Network to at least 10 percent of Moldova's territory, achieve a sufficiency index of at least 50 percent (which is less ambitious than 80 percent; see Table 1), and establish a functional registry and an Integrated Biodiversity Information System. Law No. 94 of 05.04.2007 on the Ecological Network provides a basic legal framework, devoting a full chapter to the establishment and management of Emerald Network sites. Still, the current framework is not sufficiently comprehensive; the Ministry of Environment is thus considering the need to develop a new law on nature protection.

Designating new territories as Emerald sites remains one of the most challenging tasks for Moldovan authorities, hindering the Emerald Network's expansion. The previous Emerald database submitted by Moldova reported that 41.3 percent of Emerald sites had management plans. However, this figure included forest management plans as the primary technical guiding documents for all state forest enterprises, which also covered protected area categories overlapping with the Emerald sites. These plans have been developed for a specific purpose (forest management) and are not exclusively focused on conservation, as an Emerald Site Management Plan would be. In reality, only four draft management plans—developed by the Institute of Ecology and Geography—are in circulation but have not yet been officially approved. Three more management plans are being developed through the EU4Environment Programme. Local public authorities sometimes rely on municipal regulations, but their alignment with the conservation objectives of the Emerald Network has not been thoroughly assessed, and administrative hurdles and limited resources slow overall progress. The Environmental Strategy for 2024–30 (approved by Governmental Decision No. 409/2024⁵) aims to increase the share of protected areas and Emerald sites covered by approved management plans to 30 percent by 2026, from 10 percent in 2022. Meanwhile, 61 adopted Emerald sites currently host an estimated 27 habitats and 161 species, although a biodiversity data information system and detailed mapping are lacking, and knowledge of habitat and species distribution remains insufficient. More attention should be paid to

² The figure provided by the Ministry of Environmental Protection and Agriculture includes management plans for all Emerald sites except the ones in the occupied Abkhazia and South Ossetia regions and Davit Gareji (though every site but Davit Gareji already has a management plan).

³ <https://rm.coe.int/tpvs18e-2023-strategic-plan-final/1680ada084>.

⁴ https://api.cbd.int/api/v2013/documents/F0CF6487-3D54-B570-6B4A-4312E5A4E2F2/attachments/615924/Moldova_%20%20draft%20NBSAP%202014-2030%20en.docx.

⁵ https://www.legis.md/cautare/getResults?doc_id=144295&lang=ro.

mapping these species and habitats and evaluating their conservation value. Addressing these gaps, especially by creating a biodiversity data information system, will be key to meeting national conservation goals and the broader objectives of the Bern Convention's Emerald Network.

2.4. Ukraine

Ukraine began establishing its Emerald Network more than 15 years ago. By 2016, the first phase had incorporated existing protected areas and the cascade of Dnipro reservoirs. Since then, the Permanent Committee of the Bern Convention has officially adopted 377 sites, covering more than 8 million ha (13.4 percent of Ukraine's territory). In 2021, Ukraine submitted an updated database proposing 161 additional sites, spanning more than 4 million ha. If approved, it is expected that the sufficiency index of the Emerald Network would increase from 45 percent to approximately 50 or even 60 percent.

Despite this progress, management planning remains limited: currently, only the Pyriatyn National Nature Park has a functioning Emerald Network site management plan. Ongoing World Bank–supported initiatives under the EU4Environment Programme will create recommendations for additional plans and develop methodological guidelines for management aligned with EU standards. However, the war has exacerbated institutional and financial constraints, slowing broader efforts to establish site-specific strategies, such as threat assessments, clearly defined objectives, and monitoring to ensure the conservation of each designated species and habitat.

Recent information indicates that large parts of Ukraine have been severely damaged by the war, both as a direct result of combat operations and from the related activities they have triggered (Conflict and Environment Observatory and Zoï 2024; Filho et al. 2024; Kvach et al. 2025). The full consequences for target species, habitats, and Emerald sites can only be assessed once the war has ended, but even early estimates reflect damage to approximately 30 percent of Emerald sites nationwide.⁶

A significant step toward modernizing the regulatory framework was the drafting of a law on Emerald Network sites, registered in the Verkhovna Rada in 2020 but still awaiting adoption. Initiated by 59 members of parliament with support from environmental organizations, experts, and the Ministry of Environmental Protection and Natural Resources, this bill seeks to shift focus from static “territory preservation” to the active “conservation of habitats and species.” It would create a National Register of Emerald Network Sites, mandate management plans, enable impact assessments, and lay out clear criteria for site selection.

As Ukraine progresses toward EU membership, it will have to convert the Emerald Network to NATURA 2000. Support for this transition includes the LIFE23-PRE-CZ-ConNaturLIFE Ukraine project (2024–26), to assist Ukraine with the legal establishment of the Emerald Network, develop a set of guidelines to better protect species and habitats, bolster national governance structures, build expert capacity, and further align Ukraine's conservation measures with European best practices.

Table 1 presents the current status of four Emerald indicators for the Eastern Partnership countries and their projections by the end of 2030. Data are presented across four Emerald Barometer indicators.

⁶ http://flowpaper.com/flipbook/Info_Smarahdova_UAs/?wp-hosted=1.

Table 1. Status of Emerald Network indicators for Armenia, Georgia, Moldova, and Ukraine (2024 and 2030)

Country	Emerald Barometer indicators							
	National coverage (%) of all types of Emerald Network sites		Sufficiency index (% of sufficiency conclusions versus all conclusions)		National coverage (%) of adopted Emerald Network sites		Proportion (%) of all Emerald Network sites with management plans	
	End 2024	End 2030	End 2024	End 2030	End 2024	End 2030	End 2024	End 2030
Armenia	36.4	23.8	91.8	100.0	0	No data	13.0	80.0
	34.7 ^a							
Georgia	18.5	18.7	41.2	60.0	18.5	18.7	36.4	100.0
	18.7 ^b				18.7		98.0	
Moldova	8.1	11.0	35.2	80.0	8.1	No data	44.3	80.0
							11.5 ^c	
Ukraine	15.8	15.8 ^e	44.9	60.0 ^d	11.4	15.8 ^e	8.6	No data

Note: Bold values from 2024 are those taken from official Emerald Barometer information (https://tableau-public.discomap.eea.europa.eu/views/EmeraldBarometerdashboard/Barometertable?%3AshowAppBanner=false&%3Adisplay_count=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y). Non-bold values may differ from original Barometer values, as they represent country self-evaluation exercises and alternative opinions, obtained from interviews with national environmental authorities and, when relevant, other stakeholders.

a. World Bank (2024f) and information provided by the Ministry of Environment in January 2025.

b. Information on Georgia provided by the Ministry of Environmental Protection and Agriculture in January 2025. Georgia did not develop an Emerald implementation road map under the EU4Environment Programme.

c. Interview with Veronica Josu (only four plans completed and three in the making contain all necessary elements) (January 2025).

d. Informal opinion of the Ministry of Environmental Protection and Natural Resources. Ukraine did not develop an Emerald implementation road map under the EU4Environment Programme.

e. The figure is based on the estimate that all candidate sites will be adopted. Emerald Barometer figures are used.

3. Progress and outlook toward 2030 for Emerald Network targets

This section presents a consolidated assessment of planned progress across Armenia, Georgia, Moldova, and Ukraine toward meeting their individual Emerald Network objectives by 2030. It integrates target evaluation, implementation status, country-specific challenges, and enabling conditions—based on national documents, stakeholder interviews, and ongoing project results. The focus is on three key indicators: network coverage, sufficiency index, and the proportion of sites with approved management plans. The analysis also considers the institutional, legal, technical, and financial factors influencing delivery capacity in each country.

3.1. Armenia

Armenia has taken meaningful steps toward its Emerald Network targets by revising its database, improving data quality, redefining site boundaries, and proposing new candidate sites. However, the 23 sites remain in candidate status pending finalization of national consultations and submission to the Bern Convention Secretariat. While the coverage target appears realistic, achieving full sufficiency and management planning goals will require sustained action. Pilot management plans developed for two sites with the EU4Environment Programme's support establish a template for future replication, but institutional capacity, cross-sector coordination, and formalization of planning standards remain key gaps. Integrating the updated site proposals into the national biodiversity policy and securing adequate financial resources are necessary next steps to advance toward the objectives for 2030.

3.2. Georgia

Georgia has demonstrated strong political will, with Emerald sites covering 18.7 percent of its territory and a target to increase the sufficiency index from 41.2 percent to 60 percent by 2030. The goal of reaching 100 percent coverage of the management plan is also ambitious. However, discrepancies in reported figures—98 percent according to the Ministry of Environmental Protection and Agriculture versus 36.4 percent per the Emerald Barometer—reflect certain inconsistencies in data management and highlight a need for a unified information system and standardized evaluation methods. Progress toward national targets is closely tied to the adoption of the Draft Law on Biological Diversity, which would strengthen the legal basis for implementation. Further efforts are needed to translate existing management plans into enforceable, operational tools, supported by stakeholder engagement and institutional strengthening, particularly for site-level governance.

3.3. Moldova

Moldova's 2030 targets—reaching 11 percent network coverage, 80 percent sufficiency, and 80 percent management plan coverage—represent a substantial increase from current levels. While policy commitments are in place, structural obstacles hinder actual implementation. The designation of new protected areas continues to face institutional inertia and lack of technical resources. Management plan figures are often overstated due to the inclusion of forest management plans that do not meet Emerald Network standards. Only a few formally developed plans exist, and most lack official endorsement or detailed conservation actions. Progress toward the interim 2026 target of 30 percent management plan coverage appears feasible, but realizing the full 2030 target will require accelerated plan development, clearer regulatory guidance, and improved integration of Emerald objectives into land-use governance.

3.4. Ukraine

Ukraine's Emerald Network has grown significantly in extent, yet its management systems remain underdeveloped. The sufficiency index is targeted to rise to 60 percent, and management plan coverage is also likely to increase by 2030. However, these goals are currently out of reach, with only one management plan in place and limited capacity to produce and implement plans. The EU4Environment Programme is addressing this gap by developing methodological recommendations based on three

pilot sites, laying a foundation for standardized planning. Additional support from the LIFE23-PRE-CZ-ConNaturLIFE Ukraine project is expected to strengthen legal and institutional systems, develop national monitoring tools, and expand technical capacity for managing biodiversity. While the broader reform framework (including the adoption of the 2020 draft law) remains important, immediate progress depends on stabilizing operational capacity, scaling pilot initiatives, and mobilizing international assistance.

4. Conclusions and key considerations for implementation

Across all four countries, the gap between targets and delivery capacity is most pronounced in management planning. Although legal and strategic frameworks are improving, practical implementation remains uneven due to weak institutional coordination, lack of technical standards, outdated or inconsistent data, and limited financial resources. Regional and donor-supported initiatives—such as the EU-funded EU4Environment and LIFE programs—are playing a critical role in supporting data improvement, methodology development, and pilot site implementation. Moving forward, countries will have to:

- Finalize and formally adopt revised site lists and submit new versions of the Emerald database to the Bern Convention Secretariat.
- Implement common standards and approaches for management planning for Emerald sites.
- Standardize and consolidate site-level data, including boundaries, species, and habitats.
- Align legal instruments to support enforcement and monitoring.
- Strengthen institutional mandates and build professional capacity for biodiversity planning.
- Prioritize a phased approach to the development of a management plan, focusing first on the most ecologically significant or vulnerable sites.

A coordinated regional effort to address shared knowledge gaps and promote good practices will further enhance the coherence and impact of Emerald Network implementation across the region.

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