

Sharing and dissemination of environmental information

Country maturity report: Azerbaijan Executive summary

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This report was produced by PricewaterhouseCoopers as part of the project for developing a roadmap and identifying feasible and practical means for integrating environmental information in national e-governance/open data processes and platforms. This action is done in the context of the ENI SEIS II East project 2016-2020. The report was built in 2018, and updated throughout 2019, including a review in March 2019 after the first regional meeting in Kyiv, and a second review after the roundtable in September 2019. The report has been commented by public authorities in Azerbaijan in January 2020.

This report contains information obtained or derived from a variety of publicly available sources described within the report in more detail and does not intended to be a comprehensive analysis of environmental information, open data and e-government in the country but a collection of the main elements shaping the national environmental information landscape.



Executive summary

The report was prepared and further updated between 2018 and 2020 as part of the EU-funded project implemented by EEA – ‘Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries (ENI SEIS II East)’. National input in preparation of the report was ensured through a broad dialogue and consultation with various institutions in Azerbaijan, in particular those related to the environment and statistics. In addition, experts across various policy domains, including IT and e-government, have been involved through participation in national and regional events. These activities allowed an exchange of views on the future of e-government and open data in the country with particular focus on the environmental domain. As a result, the document presents an overview of the national e-government framework, the maturity level of open data and dissemination of environmental information in Azerbaijan. The analysis is covering:

- a review of the policy framework to identify existing strategic directions and available tools for environmental information dissemination using open data and e-government solutions;
- review of the legal framework to determine the requirements related to e-government, open data, and dissemination of environmental data and information;
- assessment of the technological solutions to determine the existing technical capabilities and improvements that need to be implemented in future.

Based on the above, the document proposes a roadmap that includes measures focusing on the development of e-government and open data frameworks, which would greatly support the environmental domain and even beyond. The road map is designed to be a living document throughout the implementation process and serve as a benchmark in assessing progress at various stages of development.

The methodology followed to prepare the present report is based on the 2018 and 2019 European Union reports on open data maturity in Europe. Some adjustments were made to accommodate the specific situation of Eastern Partnership countries as well as the focus on environmental information.

E-government

Over the past five years, Azerbaijan has been working to improve its governance framework, to increase the efficiency of the public administration sector and improve the quality of the public services provided. In 2014, the National Strategy for the Development of the Information Society in the Republic of Azerbaijan for the period 2014-2020 (National Strategy) was adopted. The strategy sets out concrete actions and responsibilities for the public authorities, focusing primarily on ICT development and the digitalisation of public administration. As the strategic objectives were planned up to 2020, there is a need to start evaluating the progress in the area of e-government and, based on the results achieved swiftly adopt a new strategic programme for the coming decade.

The existing legal framework covers the unified governance model, as well as the procedures for development, maintenance, and integration of state information resources. However, the legal framework could be further developed to embrace the interoperability aspects with all the associated legal, technical, and operational components.



To promote the data exchange between public authorities and to ensure the delivery of e-services to the public and businesses, the country has developed core technological solutions, such as the E-government Portal and the E-government Gateway.

Azerbaijan has established an integrated e-government portal that now provides 454 public e-services. In addition, an e-government gateway was introduced in 2018 unifying the exchange of data between public authorities. Currently 42 public authorities are connected to this infrastructure. The e-government gateway also ensures data exchange that allows to make the public e-service delivery processes more efficient. It is recommended to use the E-government Portal and the E-government Gateway to improve environmental data exchange and interoperability as well as the delivery of public e-services in the area of environment.

Open data

The existing legal framework in Azerbaijan defines the main principles of public access to information. However, the legislation does not establish an open data initiative or an open data governance framework, including regulating the responsibilities of public authorities for providing access to information in the form of open data and data management. The National Strategy adopted in 2014 also does not include open data as one of the strategic priorities. Thus, the open data policy is not developed in the country. Consequently, not many public authorities disseminate public information online. Existing data and information exchange between public institutions remains a “paper-based” processes and is very labour intensive. The supporting regulatory framework setting up rules and procedures for open data preparation, collection, regular update, quality assurance-quality control and dissemination has yet to be developed.

In view of the forthcoming development of a new strategic programme for the coming decade, it is essential that the aspect of open data would figure prominently in its content and to raise it at a comparable level with other EaP countries and harness economic, social and environmental benefits such as growth and international potential of technology market as well as reduced costs for public administration. In this respect, Azerbaijan could consider developing an open data policy, setting out the main principles of open data management and priority datasets to be published. In addition, public authorities could strongly benefit from clear responsibilities and well-defined procedures for open data management and dissemination which do not currently exist.

Nevertheless, the country made progress in developing open data infrastructure and launched the Open Data Portal in 2017 as a single access point to the open data. All datasets on the Open Data Portal are machine-readable and accessible for use and reuse. There are about 700 datasets available on the Portal and most of them have not been updated since 2017, thus limiting the potential and usability of open data.

Environmental information sharing and dissemination

The Law on Access to Environmental Information adopted in 2002 defines the main principles of access to environmental information. It regulates the obligation of public authorities involved in environmental monitoring and reporting to publish a national state of environment report once every 3 years and to provide other relevant environmental information managed by public authorities upon public request. The present legal framework should be further updated by including an obligation to publish environmental data or define the procedures for environmental data and information exchange and dissemination; provisions related to the use of common metadata standards in order to ensure discoverability and use/reuse of the data and information. Further work in these areas is recommended in order to enlarge the existing



regulatory framework and ensure coherent procedures between various public authorities, as well as gradual alignment to international and EU standards.

In 2020, Azerbaijan developed the EcoPortal with the EU technical and financial support provided by EEA in the framework of the ENI SEIS II East project. Currently, the EcoPortal provides a single access point for the dissemination of data and information on water but it is designed as a flexible tool to promote the exchange and dissemination of any other type of environmental information. It is foreseen that the EcoPortal is expanded to other thematic areas of environmental data and information.

Suggested recommendations

Following the analysis of the current situation, a proposed roadmap outlines key areas for future development in the field of e-government, open data, and dissemination of environmental information, and provides concrete measures for improvement. Additionally, to facilitate the implementation of the roadmap, a number of examples and practical recommendations are provided in the report “Open data and e-government good practices for fostering environmental information sharing and dissemination”.

The success and rapid advancement of the country in this challenging domain remain strongly dependent on clear priority-setting, multidisciplinary teamwork, and regular monitoring of progress. Furthermore, once progress is made in one or several areas proposed for consideration, readjustments and amendments of the roadmap will be needed to keep it relevant and focused on the key priorities for the country.

The measures recommended for Azerbaijan in the context of the roadmap have been grouped into the following categories: policy-related, legal, and technical measures. They cover, in particular, the following issues:

- Policy measures: referring, among others, to the adoption of a new e-government strategy as well as the development and adoption of open data and environmental data policies by public authorities holding environmental information;
- Legal measures: covering, among others, the revision of responsibilities of public authorities for environmental data management and dissemination, adoption of international standards for interoperability and metadata description, developing/updating licencing terms and conditions to promote open data access, use and reuse;
- Technical measures: addressing, among others, the further development and population of the EcoPortal, building capacity of public officials for integrated environmental data and information management and dissemination, preparation of metadata description and enhancing the multilingual aspect of web portals and websites in the area of the environment.

All of the measures need to be seen as strongly connected with and interdependent of each other and the impact of their gradual implementation needs to be closely monitored, as their synergies may bring systemic improvements across the whole data and information chain.

To ensure successful sustainable development the future work requires national policy commitment and resource mobilisation. To address these measures a multidisciplinary team should be put in place to address and oversee the implementation of all the proposed measures.



Based on the findings of the report three specific recommendations should be considered as a priority for the country: (1) putting in place a regular state of environment reporting process, (2) digitalisation of current “paper” based environmental data management and dissemination processes, and (3) the further development and population of EcoPortal including other thematic areas of the environmental domain and interoperability with Open Data and Statistical portals. In practice these recommendations could be achieved by implementing relevant actions set out in the roadmap and summarised below:

- Specific policy measures, which could cover setting obligations for public authorities to ensure timely and regular environment reporting process, setting up priorities in the National Strategy for the upcoming decade for the digitalisation of environmental data management and dissemination process as well as the extension of EcoPortal to other thematic areas of the environmental domain;
- Specific legal measures, which could refer to the development and adoption of regulatory acts defining the responsibilities of public authorities in the environment reporting process and formalising the use of EcoPortal as the core information system in the area of environment, including legal obligations for public authorities to use it in environmental data management, exchange and dissemination process;
- Specific technical measures, which could target building technical competences of the specialists could also be further developed through training programmes and international cooperation in joint projects and experience sharing events. Technical competencies could be oriented to sustainable environment reporting, population of environmental data and enhanced knowledge of environmental data management and dissemination process.

This report depicts the current status of e-government, open data and environmental information management and dissemination in Azerbaijan. Given the exponential development of this area and its recognition as a top policy priority for the near future, regular update and analysis of the situation is strongly recommended. All the measures proposed need to be seen in strong interaction and interdependence with each other and the impact of their gradual implementation closely monitored, as it might bring systemic changes across the whole data and information chain.

