



Funded by  
the European Union

**EU4Environment**  
Green Economy in Eastern Partner Countries

Report on preconditions for establishing a strategic environmental  
assessment (SEA) database model in the countries of Eastern Europe  
and the Caucasus – key elements and recommendations

April 2024

Action implemented by:



The *Report* was prepared under the “European Union for Environment” (EU4Environment – Green Economy) Action by the consultants to the UNECE secretariat to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment (Protocol on SEA): Dmytro Skrylnikov and Dmytro Averin. Valuable information was provided by several countries in Eastern Europe and the Caucasus.

The publication is issued in English and Russian.

**Disclaimer**

This publication was funded by the European Union. Its contents are the sole responsibility of the secretariat of the United Nations Economic Commission for Europe (UNECE) and do not necessarily reflect the views of the European Union.

## Contents

<b>1. Digital transformation in selected countries of Eastern Europe and the Caucasus .....</b>	<b>4</b>
1.1. Introduction .....	4
1.2. Armenia .....	4
1.3. Azerbaijan.....	5
1.4. Georgia .....	6
1.5. Republic of Moldova.....	7
1.6. Ukraine .....	9
1.7. Conclusion.....	11
<b>2. Key elements for developing a model electronic SEA register .....</b>	<b>12</b>
<b>3. National SEA procedures and legal prerequisites for the launch of electronic registers... 19</b>	
3.1. Armenia .....	19
SEA legislative framework and stakeholders’ interaction within the SEA procedure.....	19
Prerequisites for launching an electronic SEA register.....	20
3.2. Azerbaijan.....	22
SEA legislative framework and stakeholders’ interaction within the SEA procedure.....	22
Prerequisites for launching an electronic SEA register.....	25
3.3. Georgia .....	26
SEA legislative framework and stakeholders’ interaction within the SEA procedure.....	26
Prerequisites for launching an electronic SEA register.....	30
3.4. Republic of Moldova.....	31
SEA legislative framework and stakeholders’ interaction within the SEA procedure.....	31
Legal preconditions for launching an electronic SEA register.....	36
3.5. Ukraine .....	37
SEA legislative framework and stakeholders’ interaction within the SEA procedure.....	37
Unified SEA Register.....	38
3.6. Conclusions .....	41
<b>4. Recommendations.....</b>	<b>41</b>
4.1. Legal recommendations.....	41
4.2. Technical recommendations .....	42
<b>Annex. Process mapping: block diagrams of processes/functions of SEA registers.....</b>	<b>44</b>

## 1. Digital transformation in selected countries of Eastern Europe and the Caucasus

### 1.1. Introduction

The Eastern Partnership Policy 2025 sets out long-term policy goals aimed at responding to new priorities, strengthening resilience to common challenges, promoting sustainable development and delivering concrete results for citizens, and one of the key objectives of this policy is to support the sustainable digital transformation of partner countries.

Over the past 10 years, Armenia, Azerbaijan, Georgia, the Republic of Moldova and Ukraine have actively sought to modernize and integrate information systems and registries to improve the efficiency of public administration, the business environment and the quality of life of the population. These countries are implementing projects to digitalize State and municipal services, introduce electronic document management and develop digital infrastructure.

The main areas of application of information systems and registries include health care, education, social security, statistics and environmental protection. The countries have various key national strategies and legislative acts for developing e-government, improving access to information and increasing transparency in the activities of government agencies, including in relation to environmental protection and environmental safety.

### 1.2. Armenia

Armenia continues to actively develop information systems and registers in public administration and environmental protection.

The Armenian e-government portal integrates e-government tools and various registries (<https://e-gov.am/>). The portal implements mechanisms for contacting government authorities, submitting applications for licences and reporting from licensees. The portal also contains links to a large number of sectoral portals of electronic services that are not combined into a single system, for example, the electronic system of government payments (<https://www.e-payments.am/>), the electronic system of real estate cadastre (<http://www.e-cadastre.am/>), the single site for publishing draft legal acts (<http://www.e-draft.am/>), the single platform for electronic requests (<http://www.e-request.am/>), the electronic registration of organizations (<http://www.e-register.am/>), the judicial information system (<http://www.datalex.am/>) and the electronic tax reporting system (<https://file-online.taxservice.am/>).

There is no open data portal in Armenia, and public information is distributed through the websites of various government bodies and is available to citizens upon request. Many government agencies publish documents in non-machine-readable formats, making such information difficult to find and use.

The country has a large number of platforms for publishing data and information about the environment.

The website of the Ministry of Ecology (<http://www.mnp.am/en>) is available in Armenian, English and Russian. The site contains environmental reports organized by topics: atmosphere, water, waste, climate change, bioresources, forest, land and environmental monitoring. Reports on each topic are published in PDF and DOCX formats. A register of organizations affecting air quality is available on the website.

The website of the Center for Hydrometeorology and Monitoring (<http://armmonitoring.am/#home>) provides environmental data on atmospheric air, surface and ground water, waste and soil. The site contains statistical data and provides access to thematic maps, tables and graphs. Part of the data from environmental quality stations is available online.

The Water Committee management website (<https://www.scws.am/>) provides access to activity reports, special reports on water resources, issued permits, and spatial data of the State Water Cadastral Information System.

The Statistical Committee portal (<https://www.armstat.am/>) publishes official statistical information. Data is posted in the form of reports in DOCX format. For the environment, only the annual report, Environment and Natural Resources of the Republic of Armenia, is available. More statistical data are available using the data visualization platform of the Statistical Committee (<https://statbank.armstat.am/>). The portal contains a considerable amount of environmental information, including UNECE (United Nations Economic Commission for Europe) indicators, environmental accounts, and mining data in machine-readable format. It also allows for cross-sectoral and time series data analysis.

Despite the large number of implemented projects in e-government, insufficient integration of systems and the lack of a uniform data quality standard and an open data portal mean limited access to information. Solving these problems will require additional efforts on the part of the State.

### 1.3. Azerbaijan

Azerbaijan is a country with a rapidly developing economy and a dynamically growing public sector. The country has made great progress in developing information systems for public administration.

To implement the Decree of the President of the Republic of Azerbaijan of 14 March 2018, No. 1885 “On measures related to the development of e-government and the transition to digital government,” the E-Government Development Center was created under the State Agency for Citizen Services and Social Innovation. The Center cooperates with other government bodies on the formation of electronic government as the coordinator of the work and carries out activities to create the necessary infrastructure.

The open data portal (<https://opendata.az/en>) was developed in 2015 by the Ministry of Digital Development and Transport. A new version of the portal is now available, in which the presentation of data is expanded and the search capabilities are improved. The data are provided free of charge and can be used without restrictions. The portal is in Azerbaijani, English and Russian, and includes an application planning interface (API) for data exchange. In total, more than 500 data sets from five institutions have been published on the portal, including 30 data sets in the “Ecology” section. The most recent data sets are from 2022.

The electronic government portal ([www.e-gov.az](http://www.e-gov.az)) provides online services for citizens and businesses, including issuing passports, registering businesses and filing tax returns.

The portal is connected to the electronic register of public services and the State register of information resources and systems. In total, the portal supports 451 services, including 20 electronic services in environmental protection. Together with the portal, an e-government gateway was created to ensure the exchange of information among more than 40 government agencies connected to this infrastructure.

Through the “electronic government” portal, the Ministry of Ecology and Natural Resources offers electronic services for providing information about the environment and natural resources, issuing permits for emissions of pollutants into the air, using water bodies, forest lands, allocating land plots for waste placement, disposal and treatment, issuing permits for hunting and industrial fishing, mapping, and provides conclusions on objects of State environmental expertise. Electronic services for conducting environmental expertise are also available on the portal of the State Agency for Environmental Expertise (<https://eis.eco.gov.az/>)

The website of the Ministry of Ecology and Natural Resources (<http://eco.gov.az>) provides information on biodiversity, hydrometeorology, geology, forests and natural parks. Most information is available in text and graphic non-machine-readable format. In most cases, the information published by the Ministry is limited to annual environmental reports.

The website of the National Hydrometeorological Service (<http://meteo.az/>) provides access to interactive data on the state of atmospheric air and surface waters and serves as a common platform for exchanging environmental information. Based on the site, with technical support from the European Environment Agency, within the framework of the ENI SEIS II East project, the EcoPortal Water Information System was developed, providing access to data on surface waters and UNECE environmental indicators.

The website of the State Statistics Committee (<https://www.stat.gov.az/>) is the main platform for the dissemination of statistical data, including environmental data. All statistics are available for download.

Statistical data are also available through the ASIS portal (<https://www.azstat.org/portal/>). The portal currently provides access to 11 environmental data sets, which can be visualized chronologically and exported in a variety of machine-readable formats (XLS, CSV and TXT). The portal provides statistical data on national parks, water and forest resources, air pollution, waste, etc. Data on air pollution and water use are available on the interactive statistical data map (<https://www.azstat.org/webmap/>).

#### 1.4. Georgia

Georgia has a sufficient legislative framework that promotes the development of information systems and registers and regulates the main aspects of their development and use. The country continues to improve its communications infrastructure and internet access, but there are differences between levels of access in urban and rural areas.

The Open Data Portal (<https://data.gov.ge/>) was developed by the Georgian Data Exchange Agency and is a unified national platform for publishing open data owned by government agencies. The portal contains more than 250 data sets in machine-readable formats across various sectors, including 8 environmental data sets. However, environmental data sets contain mostly outdated information and outdated information on the implementation of national plans.

Georgia is developing e-government projects to improve the quality of its public services and increase the transparency of public administration. One such project is the creation of a single portal of public services (<https://my.gov.ge/>). The portal provides the opportunity to receive various government services online, including environmental services, social, medical services and payment of fines and utility bills.

Through the portal, public information from government agencies and statistical information from more than 50 government agencies can be requested. The portal provides access to the classifier of economic activities, the register of economic activities, the register of enterprises, the register of notarial actions, the electronic register of the Agency for the Development of Public Services, the electronic register of notaries, the mortgage register, the leasing register, the address register, etc.

There is no access to environmental registers and services through the portal.

The website of the Ministry of Environment and Agriculture (<http://mepa.gov.ge/>) contains public analytical information, information on the services of agencies within the system of the Ministry, reports, plans, strategic documents, environmental legislation, register of agricultural cooperatives, environmental

impact assessment (EIA) notifications, information on public hearings and air pollution monitoring data. Documents are available in non-machine-readable format only.

The Ministry's open data portal (<http://data.mepa.gov.ge/>) covers data of different categories, including land use, vegetation cover, biodiversity, risk levels and protected areas. The data are provided by a variety of organizations, including the National Forestry Agency, the Protected Areas Agency, the Department of Biodiversity and Forestry, and non-governmental organizations. Data are available in non-machine-readable format only. In total, the portal contains 52 documents, mainly in PDF. The information on the portal has not been updated since 2019.

The website of the Environmental Information and Education Center (<http://eiec.gov.ge/>) publishes national reports and annual reports on the state of the environment, action plans, newsletters and a register of environmental organizations.

The air quality portal (<http://air.gov.ge/>) provides access to information on air pollution, including real-time air quality index at air quality monitoring stations. The portal collects information on air pollution and supports decision-making on improving air quality. The portal provides information on air quality, daily, monthly and annual reports, as well as recommendations on health protection and protection from air pollution.

The portal of the National Statistics Office of Georgia (<https://www.geostat.ge/en>) provides annual and quarterly statistical information, including on environmental protection. It provides access to the register of economic entities, data from agricultural and household surveys, and sectoral registers. The portal <http://pc-axis.geostat.ge/> provides access to statistical data on air pollution, forest resources, protected areas and violations of environmental legislation. Data on UNECE environmental accounts and environmental indicators are also available in machine-readable format.

The website of the Agency of Protected Areas (<http://apa.gov.ge/>) provides general information about protected areas in Georgia, their number and categories, as well as information about the Agency itself.

The Geographic Information System portal of the Ministry of Environment Protection and Natural Resources (<https://gis.mepa.gov.ge/portal/>) provides access to thematic layers and maps of protected areas, land use, forests, geological risks and land degradation and melioration.

The Forestry and Land Use Atlas of Georgia (<https://atlas.mepa.gov.ge/>) is an online monitoring platform that allows users to view and analyse data at national and regional levels. The atlas is managed by the Ministry of Environment and Agriculture with support from the World Resources Institute (WRI) and includes data from government agencies and non-governmental organizations. Georgia is currently developing a public environmental assessment portal, which will combine EIA and SEA procedures on a single platform.

## 1.5. Republic of Moldova

The Republic of Moldova is actively implementing information systems and registers in various fields of activity, such as public administration, healthcare, education, statistics and environmental protection. The country has a number of key national strategies and legislation aimed at developing e-government, improving access to information and increasing transparency in the activities of government agencies.

The Republic of Moldova is actively developing the infrastructure of e-government and information technology. It is implementing projects aimed at modernizing and optimizing public administration using modern technologies.

The open data portal (<https://date.gov.md/>) was launched by the Electronic Government Agency with the support of the World Bank in 2011 and updated in 2019. The portal provides access to 1,176 data sets, registers of legal entities and legislation. Through the portal, data on water use in the country, data from the national geospatial data fund, an electronic cadastre information portal, a public procurement register, a statistical data bank, a State register of legal acts and others are available. The Ministry of Environment publishes 35 data sets on the portal, including data on the quality of atmospheric air and surface water, emissions of pollutants and greenhouse gases, a register of water bodies, registers of organizations that have received permits to carry out activities causing environmental degradation and statistical data sets.

The e-government portal (<https://servicii.gov.md/en>) was launched in 2012. Today, it provides information on 715 government services, 275 of which are available electronically. It gives access to all government services related to environmental protection, but there is no separate “environment” tab on the portal. Services are available when selecting “Ministry of the Environment”. The portal provides services for obtaining permits for emissions of pollutants from stationary sources, special use of water, import, export or re-export of ozone-depleting substances, permits for waste management, logging, fishing and hunting, services for conducting EIA procedures, and obtaining the conclusion of State environmental expertise.

The Republic of Moldova has developed several thematic portals on which environmental data and information are published.

The website of the Ministry of Environment (<https://mediu.gov.md/en>) provides information about the activities of the Ministry, its programme and regulatory documents.

The automated waste management information system (<https://siamd.gov.md/portal/>) was developed by the Ministry of Environment with the support of the Slovak Development and Cooperation Agency. The system provides access to the register of waste producers who are subject to the extended producer responsibility regime, the register of institutions and enterprises exempt from compliance with permitting requirements for waste disposal and waste placement activities, registers of manufacturers of packaging, batteries and accumulators, electrical and electronic equipment, oils, vehicles, etc.

The National Bureau of Statistics (<https://statistica.gov.md/>) publishes thematic statistical reporting information, including aggregated information on environmental protection. Data of "Statbank" (<http://statbank.statistica.md/>) contains detailed tables of statistical information with time series. This tool allows selections in a variety of file formats to be created and saved, including machine-readable format. The service also provides access to data via an API for application developers. Environmental data are available in a separate section.

The Bureau also publishes data on current expenditures on environmental protection and environmental payments, data on waste management, land and forest funds, meteorology, air protection and water use.

The National Register of Emissions and Transfer of Pollutants (<https://retp.gov.md/>) provides systematic data on emissions of pollutants into the atmospheric air, water, soil from stationary and diffuse sources, as well as on emissions outside the facility and transfer of pollutants with wastewater.

The automated information system “Register of chemical products placed on the market of the Republic of Moldova” allows for managing the processes of registration of chemical products, receiving and processing annual reports from manufacturers and importers of chemical products, as well as issuing permits for placing chemical products on the market. The system includes information on chemical products on the market, health risks, urgent measures in case of emergencies, physical and chemical



properties of products, their biological activity, hygienic and environmental standards, including safety measures at the stage of production, import, export, transportation and use of chemical products.

The Automated Information System for Management and Permitting (SIA GEAP) is used to automate environmental permitting at the Environmental Protection Agency. The Agency has also developed an automated information system for issuing permits “E-fishing” (<https://e-pescuit.mediu.gov.md/>), which is intended for obtaining permits for sport, recreational and contract fishing.

The Republic of Moldova has also developed automated information systems, State Water Cadastre (<https://csa.gov.md>) and State Cadastre of Fauna (<https://am.gov.md/ro/node/590>).

The State Water Cadastre processes and stores data on water resources, hydrographic network, water bodies, hydraulic structures, protected areas, security zones and coastal water protection strips, as well as data on water intakes and water discharge sites, water balance data and information on river basin management.

The State cadastre of fauna contains data on the number of livestock, data on game species and hunting resources, endangered, vulnerable, rare species of animals and vulnerable species listed in the “Red Book”.

It is planned to create an electronic register of information on SEA, a register of Emerald Network facilities and a register of facilities subject to the requirements of Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances.

## 1.6. Ukraine

In recent years, Ukraine has been striving to modernize and integrate its information systems and registers. It is implementing projects for digitalizing State and municipal services, introducing electronic document management and developing digital infrastructure.

Digital transformation is among the country’s priority goals, and the Ministry of Digital Transformation planned to ensure full access of the population and businesses to all government services online by 2024, to provide high-speed internet access for 95 per cent of public facilities and transport infrastructure, as well as increasing the share of digital products to 10 per cent of gross domestic product.

In 2014, Ukraine launched the national open data portal (<https://data.gov.ua>) to provide access to publicly available information in the form of open data and access to information held by government agencies. Today, the portal has been modernized and contains more than 29,000 data sets, but on the topic “Environment” the portal contains only 7. Many data sets have not been updated since February 2022.

The unified electronic services portal, “Diya”, (<https://diia.gov.ua>) provides online services for legal entities and individuals, which are grouped into categories: security and law and order, transport, land, construction, real estate, certificates, environment, health, documents and citizenship, and entrepreneurship.

The national online platform “EcoSystema” (<https://eco.gov.ua>) is part of the unified portal of electronic services “Diya” and contains up-to-date information on the state of the environment, as well as providing access to environmental services and registers. A number of projects on environmental protection are being implemented on the basis of this platform.

The project for the digital transformation of waste management “e-Vidhody” involves the creation of an electronic waste inventory and monitoring system. The service provides access to administrative services

and registers, including the State register of business entities that receive and/or dismantle scrapped vehicles, the register of licences for carrying out economic activities for the management of hazardous waste, the register of conclusions on transboundary transportation of waste, the register of declarations on waste, and the register of reports on transboundary movement of waste.

The “e-Povitria” electronic service ensures the operation of an electronic system for recording pollutant emissions, as well as the introduction of electronic services for reporting and issuing permits for pollutant emissions. The service provides access to administrative services for State registration of facilities that have or may have an adverse effect on human health and the state of atmospheric air and the issuance of reference documents on background concentration values, access to a register of business entities that have approved emission limit values (specific emissions) of pollutant substances into the atmospheric air, a register of issued reference documents on background concentration values, a register of environmental auditors and legal entities entitled to carry out environmental audits.

The “e-Lis” digital transformation project is aimed at creating an electronic system of State and public forest control. Today, the service provides access to administrative services to the population for issuing a special permit for the use of forest resources and for purchasing firewood.

The digital transformation project for handling pesticides and agrochemicals “e-Pesticidy” involves the creation of an electronic inventory system for pesticides and agrochemicals. The service provides access to the register of pesticides and agrochemicals approved for use in the country.

The “e-OVD” electronic service ensures digitalization of the issuance of conclusions on environmental impact assessment and automation of post-project monitoring. The service provides access to the unified State register for EIA (<http://eia.menr.gov.ua>), a list of types of discussions and fees for holding public discussions during the EIA process, a list of authorized territorial bodies for conducting public discussions and a register of agreements for holding public discussions during the implementation of the EIA. The service also provides access to services for issuing conclusions on EIAs and registering contracts for providing services for conducting public discussions.

The “e-Dovkillia” service involves providing automation of environmental monitoring by integrating information from various sources into a single analytical module. Today, the service (<https://ecozagroza.gov.ua>) has implemented functions for processing citizens’ requests and providing information about the impact of military operations on the environment. Interactive information about the background radiation at radiation monitoring stations is available.

On the basis of the platform, it is also planned to implement projects on the digital transformation of biological and landscape diversity “e-PZF”, State enforcement in environmental protection “e-Ecocontrol”, strategic environmental assessment “e-SEO”, water management “e-Voda”, and use of subsoil “e-Nadrokorystuvannia”.

The Ministry of Environment Protection and Natural Resources is also implementing projects to create automated reporting systems under the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, concerning long-term financing of the cooperative programme for monitoring and evaluating the long-range transmission of air pollutants in Europe (EMEP) and the Protocol on Pollutant Release and Transfer Registers to the 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), which will become part of the common platform.

Information on the state of surface waters is available on the “clean water” portal (<http://texty.org.ua/water/>). The portal is an interactive map of river pollution in Ukraine based on data from the State Water Agency. On the interactive map of river pollution indicators one can access information from more than 400 surface water quality stations on rivers including the Dnipro, the Danube and the Pivdennyi Bug.

The website of the State Statistics Service (<http://ukrstat.gov.ua>) provides statistical data on the generation and management of waste, emissions of pollutants into the air from stationary sources of pollution, environmental protection costs, as well as environmental indicators recommended by UNECE. The website provides access to environmental accounts of air emissions and expense accounts for environmental protection.

Civil society projects aimed at providing information about the state of the environment are active in Ukraine. One example of successful implementation is the SaveEcoBot System (<https://www.saveecobot.com/>), which aggregates open government data and data from public monitoring networks of air quality and background radiation in Ukraine.

The Ecodozor portal (<https://ecodozor.org/>) – developed with the support of the Zoe Environmental Network (Switzerland), the Organization for Security and Co-operation in Europe, the REACH Humanitarian Initiative and the United Nations Environment Programme – provides information on the environmental effects and risks of military operations in Ukraine, including pollution risks due to disruption of industrial enterprises and critical infrastructure, soil damage, forest and grass fires.

The Russian military invasion of Ukraine in February 2022 led to a change in information policy. Tasks related to data protection and cybersecurity took priority: modernizing personal data protection systems, ensuring the security of digital services, registries and information systems. At the same time, access to many information systems and registers, including those relating to environmental protection, was limited.

For example, the website of the Ministry of Environmental Protection and Natural Resources (<https://mepr.gov.ua/>), which publishes information on the environment and the results of the Ministry’s work, is working only intermittently. The SEIS-Ukraine system is temporarily disconnected from the network (<http://seis.menr.gov.ua/>) to publish information on the dissemination of environmental information in Ukraine, including data from CORINE Land Cover, a “DEIS” system providing information on the environmental effects and risks of military operations in eastern Ukraine from 2014 to 2022.

## 1.7. Conclusions

Despite the progress made, all countries face similar problems and challenges in the use of information systems and registries.

One of the main problems is the lack of funding for the development and maintenance of information systems and registries. Budget constraints slow the pace of adoption of new technologies and reduce the quality of services provided.

Some countries still have problems with access to the internet and the development of IT infrastructure in the regions, which make it difficult for the population to access information systems and registries, especially in remote rural areas.

The shortage of qualified personnel in information technology and data management is another challenge for development. Countries need to take measures to improve their education systems and attract highly

qualified specialists into public administration structures and attract third-party developers to implement digitalization projects.

Existing information systems and registries are often fragmented and do not provide effective interaction among different government agencies or local and central authorities. This is especially true for the integration of regional data and systems.

In some cases, imperfections in the legislative framework and standards for working with data may hinder the development of information systems and registers in public administration. To ensure compatibility with international standards, countries need to constantly improve legislation, and review data quality standards, methods of processing and presenting information.

The COVID-19 pandemic has had a mixed impact on the development of information systems and registries. On the one hand, countries were interested in information technologies to provide remote access to data; on the other hand, the pandemic in some cases led to a slowdown in economic growth and a decrease in budget revenues, which negatively affected the financing of digitalization projects.

Fighting in the territories of some countries has led to limited access to data and a slowdown in progress in the digitalization of government and municipal services and the development of digital infrastructure. For security reasons, in some cases the work of information systems and registers was suspended, and access to data, including environmental information, was limited.

Despite challenges and limitations, countries continue to develop and integrate information systems and registries for public administration and environmental protection.

To improve the effectiveness of their information systems, countries need to overcome existing problems and ensure sufficient funding, coordination between government agencies and strengthened data protection measures.

In general, all countries have a sufficient level of infrastructure development and human resources to implement projects in digitalizing the strategic environmental assessment process.

## **2. Key elements for developing a model electronic SEA register**

The UNECE Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention) was adopted in 2003 and entered into force in 2010. The Protocol defines the obligations of the Parties to evaluate likely environmental, including health, effects of certain plans and programmes, and, where possible, policies and legislation, at an early stage of their development. Article 10 of the Protocol also requires Parties to notify and consult with each other about plans and programmes that are likely to have significant transboundary environmental effects. The Protocol provides for a broad public participation in governmental decision-making, as well as early, timely and effective consultation with environmental and health authorities.

The definition of strategic environmental assessment in the Protocol reflects the key elements of the strategic environmental assessment procedure. According to the Protocol, SEA means the evaluation of the likely environmental, including health, effects, which comprises the determination of the scope of an environmental report and its preparation, the carrying out of public participation and consultations, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme (art. 2, para. 6).

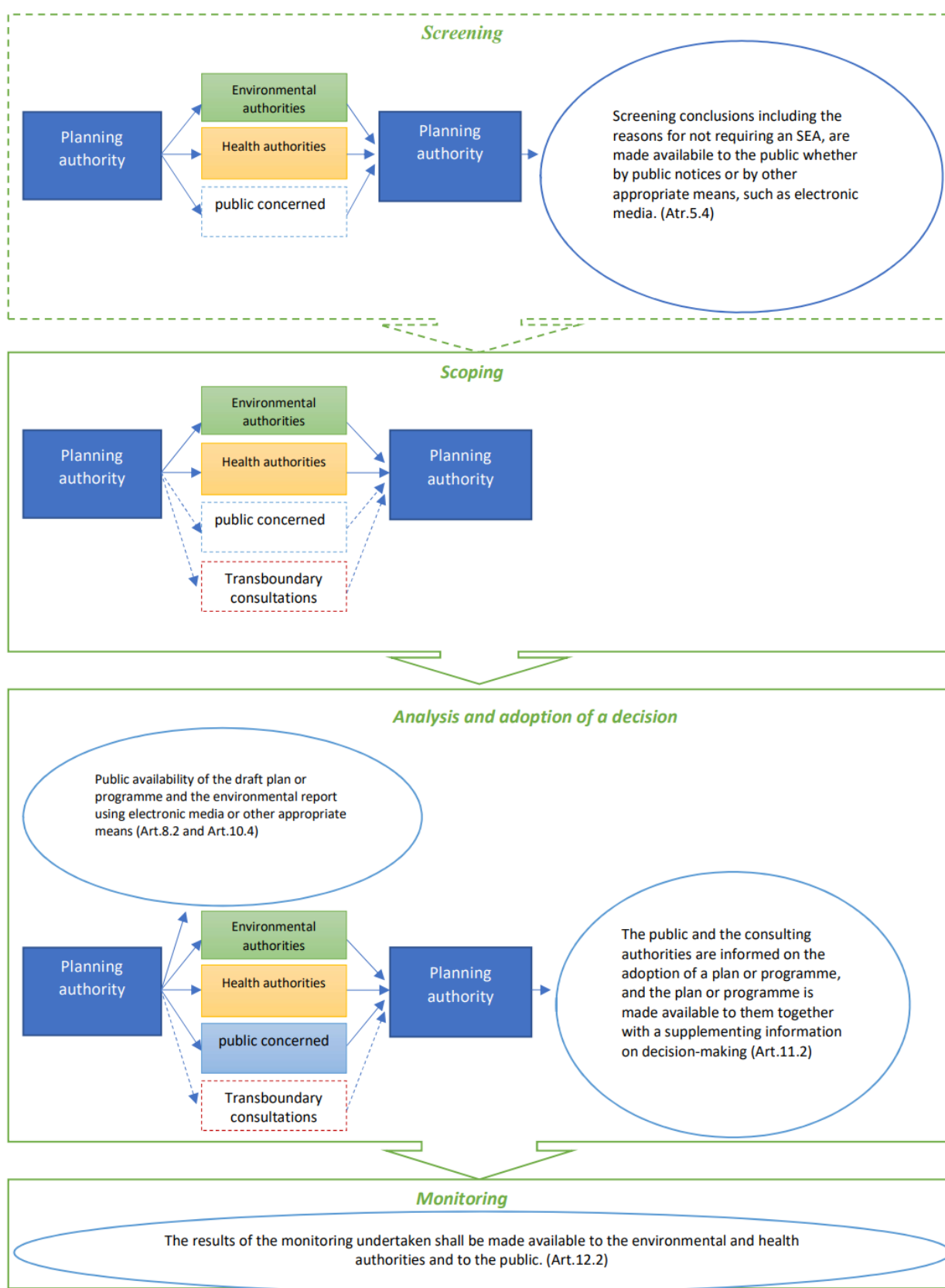
Articles 5 to 12 of the Protocol describe the process for carrying out an SEA of plans and programmes:

- Preliminary assessment (screening) (art. 5)
- Determining the scope of the SEA (scoping) to determine the content of the environmental report (art. 6)
- Environmental report (art. 7)
- Public participation (art. 8)
- Consultations with environmental and health authorities (art. 9)
- Transboundary consultations (art. 10)
- Decision to approve a plan or programme (art. 11)
- Monitoring (art. 12)

According to the SEA Protocol, at different stages of the SEA procedure an interaction occurs between various stakeholders, including authorities responsible for preparing and adopting relevant plans and programmes, authorities to be consulted with for reasons of their specific environmental or health responsibilities, the public, and, in the case of potential transboundary impact, other Parties to the Protocol.

The interaction may include notification, the exchange of documents or their publication, the provision of written comments, consultations, public hearings, various activities that ensure the monitoring of significant environmental, including health, effects of the implementation of plans and programmes and the communication of their results to the relevant authorities and the public (see figure 1).

**Figure 1. SEA stakeholders' interaction within the framework of the requirements of the SEA Protocol**



The Protocol explicitly recommends electronic media as a means of ensuring timely public access to documents (e.g. arts. 5.4 and 8.2). However, given the need to provide effective opportunities for public participation, using electronic media as a sole means of distributing documents may not be sufficient. This approach may exclude from participation important groups of the public who might not use the internet, including low-income individuals, isolated population groups (for example, in rural areas) and the elderly.<sup>1</sup>

Thus, providing access to information through electronic media does not replace or exclude the need to use other methods of informing; rather the use of various methods of disseminating information and documents, combined with informing through electronic media and ensuring the possibility of constant open access to documents on a publicly accessible electronic resource, could provide timely and most effective access to information in the public participation process within SEA.

The Meeting of the Parties to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) at its seventh session (18–20 October 2021, Geneva) adopted *Updated recommendations on the more effective use of electronic information tools*<sup>2</sup> aiming to assist Parties, signatories and other interested States in supporting the implementation of the Aarhus Convention through the promotion of the development, maintenance, upgrade and use of electronic information tools by applying common approaches and standards. In addition, they will support efforts to implement other relevant international commitments.

In the *Updated recommendations* it is recommended to ensure where necessary through the introduction of appropriate legislative or regulatory measures, that subject to article 5 (10) of the Aarhus Convention:

(a) Public access to environmental information is provided in searchable electronic form and made available through the Internet, so that information required to be publicly available under the Aarhus Convention is to be provided in searchable electronic form where so requested and where the information exists in that form or can be readily converted to that form at reasonable cost;

(b) Documentation which is required to be drawn up and/or submitted in the context of decision-making procedures in environmental matters that are subject to the provisions of articles 6, 7 and 8 of the Aarhus Convention is required to be provided in electronic form and is progressively made accessible to the public through the Internet;

(c) A nationwide digital environmental information system supports public access to real-time and other dynamic and historical, up-to-date, accurate and quality-controlled, comprehensive, standardized and functional environmental information and this information is made discoverable and accessible through the Internet in machine-readable open forms and formats meeting the needs of different users;

(d) The following types of information are made publicly accessible, in a timely manner, through the Internet, preferably through a one-stop web access point:

...

(vii) Documentation related to strategic environmental assessment or other processes of preparing plans, programmes or policies relating to the environment subject to the provisions of article 7 of the Convention (for example, public notices, all other relevant documentation, including risk assessment and other studies, economic analysis and assumptions, comments of third parties, drafts and final decisions) where it is held in or can be readily converted to electronic form. Where it is not available in electronic form and cannot

<sup>1</sup>Information and Reference Guide for the Application of the UNECE Protocol on Strategic Environmental Assessment, ECE/MP.EIA/17, paragraph 81.

<sup>2</sup> Updated recommendations on the more effective use of electronic information tools. ECE/MP.PP/2021/2/Add.2, <https://unece.org/environment/documents/2022/02/updated-recommendations-more-effective-use-electronic-information>



be converted to electronic form at reasonable cost, a reference to where such documentation can be accessed (arts. 5 (3) (d) and 7 of the Aarhus Convention).<sup>3</sup>

One of the effective integrated solutions of using electronic media is the creation and operation of a centralized electronic SEA register. Such a register could be used to streamline SEA procedures and support access to information requirements in decision-making. It could be either a self-standing system or be integrated with other registers (e.g. EIA register) or be part of other registers or e-government systems.

The availability of documents and information online, in turn, simplifies the exchange of these documents between authorities at different stages of the SEA procedure, as well as providing access to them not only directly during the SEA procedure, but also in the future, when implementing plans and programmes, for example, for the purposes of monitoring significant environmental, including health, effects of the implementation of plans and programmes.

The use of a centralized SEA register helps to systematize SEA procedures at all levels, improve the exchange of information at the local and central levels, especially in those countries where there is a division of powers for conducting SEA at the local and national levels. Furthermore, a centralized SEA register generally contributes to the transparency of the planning system and strategic environmental decision-making processes at the national level, improves the quality of SEA, and contributes to more effective implementation of the reporting obligations under Article 14.7 of the SEA Protocol<sup>4</sup>.

Thus, as a model electronic register, it is proposed to consider a centralized electronic register, which is an electronic information or information and communication system that ensures interaction between SEA stakeholders, collection, storage, systematization of information and documents that originate in the SEA process, and during the monitoring of significant environmental, including health, effects of the implementation of plans and programmes, as well as publication and/or open access to information and documents (subject to relevant requirements and restrictions provided for by law).

The key functions of a model electronic register are the following:

- arrangement of information and documents on SEA into a single electronic structured database on SEA at all levels (local/regional and national) searchable by certain parameters
- ensuring the exchange of information and documents between the SEA stakeholders (including administering the comments and suggestions from the public and authorities)
- ensuring timely public notification
- ensuring the publication of information and documents
- constant open access to information and documents on all SEA procedures, as well as information on monitoring of significant environmental, including health, effects of the implementation of plans and programmes
- posting information within the framework of transboundary consultations (if carried out).

<sup>3</sup> Ibid, paragraph 23.

<sup>4</sup> Among the findings of the Fourth Review of the implementation of the Protocol on Strategic Environmental Assessment (2019–2021), which is to be confirmed by the Meeting of the Parties to the Protocol at its fifth session (Geneva, 12–15 December 2023), it is acknowledged that the lack of a central registry or database of national strategic environmental assessment procedures in many Parties made reporting on the number of procedures during the survey period complicated and imprecise. See <https://unece.org/environment/documents/2023/10/session-documents/fourth-review-implementation-protocol-strategic>

Depending on technical solutions and capacity, in addition to the basic functions, the electronic register could have more advanced features, including additional capabilities for searching and analysing information, supporting public discussions/hearings, integration with a cartographic framework, as well as contain links to legislation and other databases and sources of information and so on. For example, new amendments to the EIA legislation in Ukraine provide for the introduction of a direct mailing service into the Unified EIA Register. It is assumed that individuals and legal entities will be able to register in the Unified EIA Register for the purpose of targeted notification on the publication of information and documents therein.

### 3. National SEA procedures and legal prerequisites for launching electronic registers

This part examines the legislative framework for SEA in Armenia, Azerbaijan, Georgia, the Republic of Moldova and Ukraine, as well as national SEA procedures in the context of the interaction of various stakeholders, the exchange and publication of information through electronic means of communication.

This report does not aim to assess the compliance of SEA procedures in the countries covered with the SEA Protocol but is intended to identify the needs and prerequisites for the launch of electronic SEA registers in the countries concerned. In relation to Ukraine, the recently introduced Unified SEA register is being considered. The figures presented in this section are intended to illustrate the interaction of stakeholders at various stages of SEA and the publication of documents and information through electronic means of communication. The figures were developed based on the analysis of legislation and information provided by countries<sup>5</sup>, and are demonstrative in nature and may not fully describe all aspects of interaction, as well as the established practices of conducting individual procedures in the countries.

#### 3.1. Armenia

##### *SEA legislative framework and stakeholders' interaction within the SEA procedure*

The legislative framework for conducting SEA in Armenia is the 2014 Law on Environmental Impact Assessment and Expertise (hereinafter referred to as the Law on EIA and Expertise).<sup>6</sup>

According to this Law, SEA means the process of determining and evaluating the effects on the environment of the implementation of provisions of a draft fundamental document, which must include determining the scope and provisions of the SEA report, preparing a SEA report, ensuring participation of the public concerned and holding professional consultations, taking into account the provisions of the SEA report, the results of public participation and consultations in the fundamental document.

The fundamental document, in accordance with that Law, is a document that has potential effects on the environment (strategy, concept paper, scheme for the use of natural resources, project, plan, layout, urban development programme document) or any amendment to the document approved by national laws or other legal acts of State bodies or local self-government bodies.

The SEA and expertise of a draft fundamental document are carried out before the adoption of the fundamental document.

According to article 2.2 of the Law, the stages of SEA are:

- determination of the scope of SEA
- preparation of the SEA report
- incorporation of the results of SEA in the fundamental document.

At these stages, a State body or a local self-government body submitting a draft fundamental document (hereinafter referred to as “the initiator”) is obliged to:

---

<sup>5</sup> National focal points for the Espoo Convention and its SEA Protocol.

<sup>6</sup> This report examined the Law as amended on 3 May 2023.

(a) contact the authorized body<sup>7</sup> and the authorized body in the field of healthcare for consultations, as well as the authorized State bodies in the areas in which the fundamental document is being developed, or local self-government bodies;

(b) involve the public concerned, and, if necessary, carry out transboundary consultations.

The expertise of the SEA report is carried out within 80 working days from the date of submission, with a cover letter to the authorized body (except for the documents with transboundary effect, for which the timeframe for providing a conclusion may be extended). On this basis, the authorized body provides the initiator with a positive or negative expert conclusion. Approval of a fundamental document is prohibited without a positive conclusion of the State expertise.

The authorized body, local State bodies, local self-government bodies and the initiator, to ensure the participation of the public concerned in the SEA and expertise procedure:

(a) disseminate information about the right to initiate and participate in the SEA and expertise procedure;

(b) provide access to documents on SEA, expertise and other information;

(c) facilitate participation of the public concerned in hearings, inform the public concerned about a draft fundamental document, the progress of the expertise through official websites and other means of disseminating information (press, other media, notice boards of local self-government bodies, public buildings) (See figure 2).

### ***Prerequisites for launching an electronic SEA register***

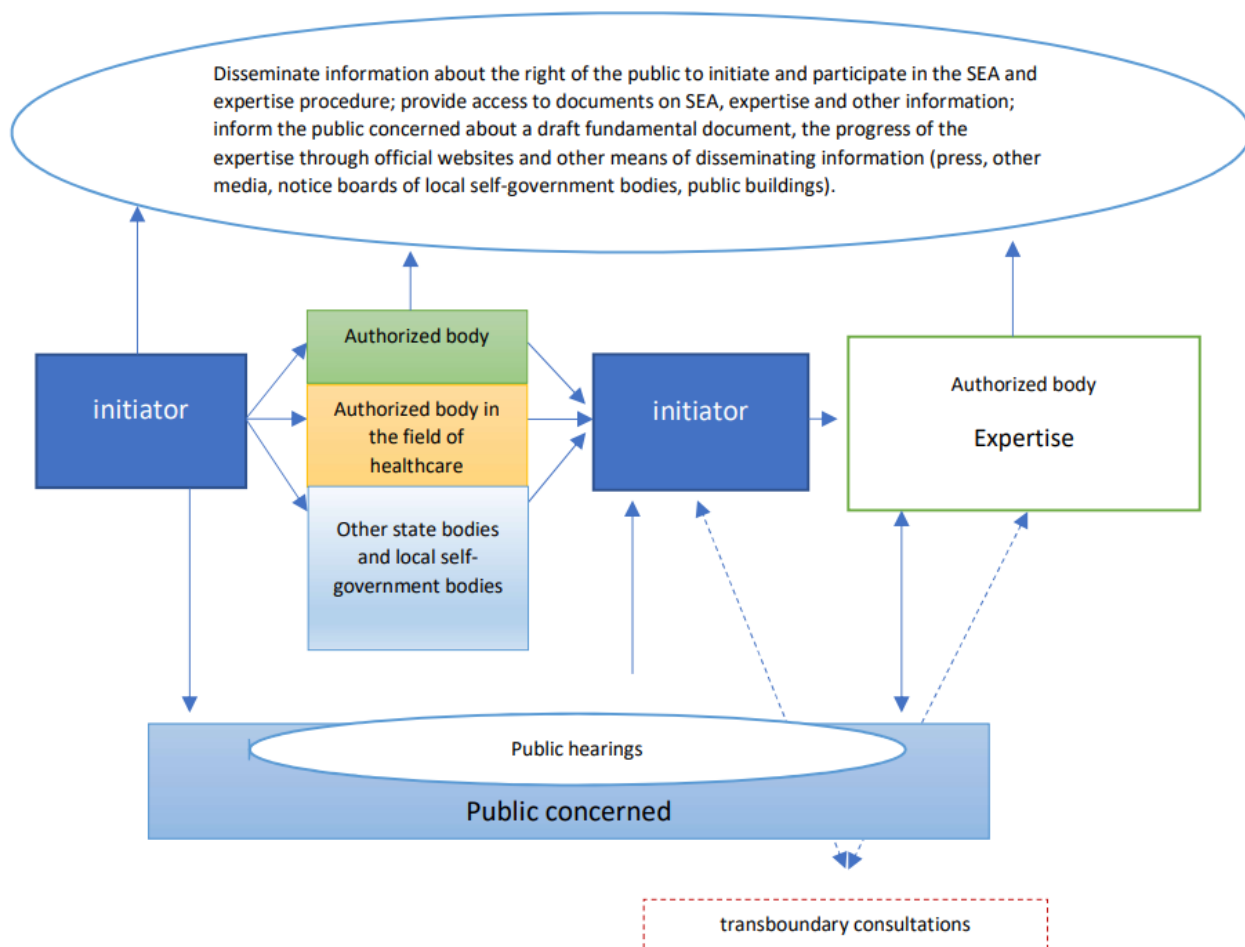
On 11 February 2021, the Government approved resolution №183-L on the Digitalization Strategy of Armenia, the Strategy Action Programme and Results Indicators, which acknowledges the need for the development of digitalization in various areas and outlines the main directions and approaches to digitalization for the period until 2025.

In terms of SEA legislation, the establishment of a centralized electronic register on SEA or a unified electronic database/portal of documents on SEA is not provided for by the Law on EIA and Expertise. That Law provides for the exchange of information and the submission of comments both on paper and in electronic format. Informing the public and providing access to documentation is provided through the websites of the authorized body, local State bodies, local self-government bodies and the initiator.

---

<sup>7</sup> Authorized body - a public authority developing and implementing the Government policy in the field of ensuring the State environmental expertise.

**Figure 2. Stakeholders' interactions in the SEA and expertise procedure**



### 3.2. Azerbaijan

#### *SEA legislative framework and stakeholders' interaction within the SEA procedure*

The legislative basis for conducting SEA in Azerbaijan is the 2018 Law on Environmental Impact Assessment as well as by-laws adopted for the purpose of its implementation, including the Regulation on conducting the State and public environmental assessments, approved by a resolution of the Cabinet of Ministers No. 184 dated 21 May 2020, as well as the Procedure for conducting the strategic environmental assessment, approved by a resolution of the Cabinet of Ministers No. 354 dated 15 September 2022, which directly regulates the SEA procedure.

The Law on Environmental Impact Assessment defines SEA as a systematic assessment of strategic documents, territorial planning documents from the point of view of environmental safety to identify and prevent potential effects on the environment and human health and ensure the effective use of the environment. An SEA is carried out by government authorities, government agencies and municipalities that prepare strategic documents (hereinafter referred to as “planning authorities”) at the stage of preparation of strategic documents. The Law considers plans, programmes, strategies and concepts in the areas of agriculture, forestry, fisheries, energy, industry, transport, waste and water management, land use, tourism and telecommunications to be strategic documents.

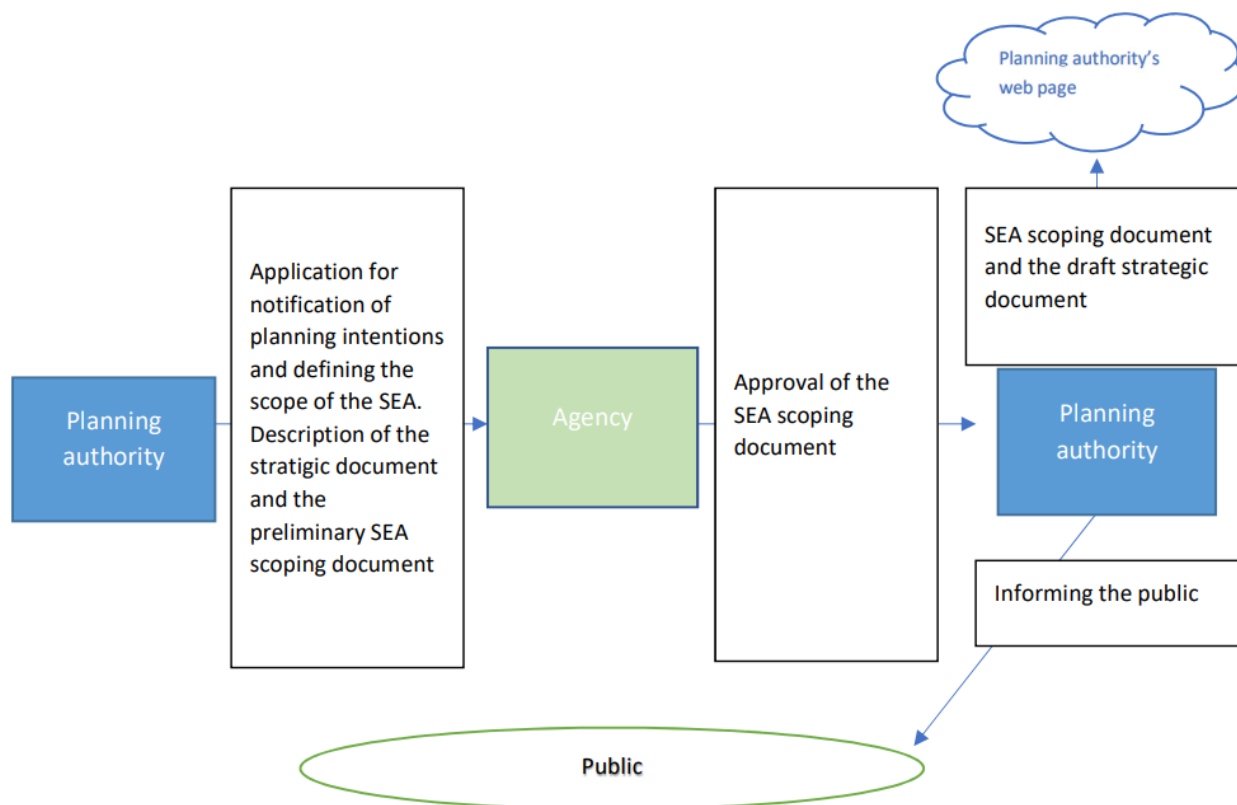
The SEA process commences when one contacts the State Agency for Environmental Expertise under the Ministry of Environment and Natural Resources for preliminary consultations and concludes with the issuance of a conclusion of environmental expertise.

The legislation of Azerbaijan establishes the following stages of a SEA:

- identification of the scope of the SEA and preliminary consultations with the Agency
- analysis and assessment of possible effects in accordance with the requirements of normative legal acts
- specification of environmental protection measures according to the collected data
- development of the SEA report
- organization of public consultations
- preparation of appropriate final justification for the findings of the planning authorities
- approval of the strategic document by the Ministry of Environment and Natural Resources
- monitoring of SEA results.

At the stage of preliminary consultations on SEA and determining the scope of the SEA, the planning authority carries out preliminary consultations with the Agency in order to determine the content, scope and methods of the SEA and to ensure the completeness and accuracy of the information to be included in the SEA report. Preliminary consultations are initiated by the planning authority at the stage of preparation of the strategic document by submitting an application to the Agency for notification of planning intentions and defining the scope of the SEA. Once the Agency approves the SEA scoping document, the planning authority posts the document on its website along with the draft strategic document and informs the public (see figure 3).

#### **Figure 3. Preliminary consultations on SEA and determination of the scope of SEA**



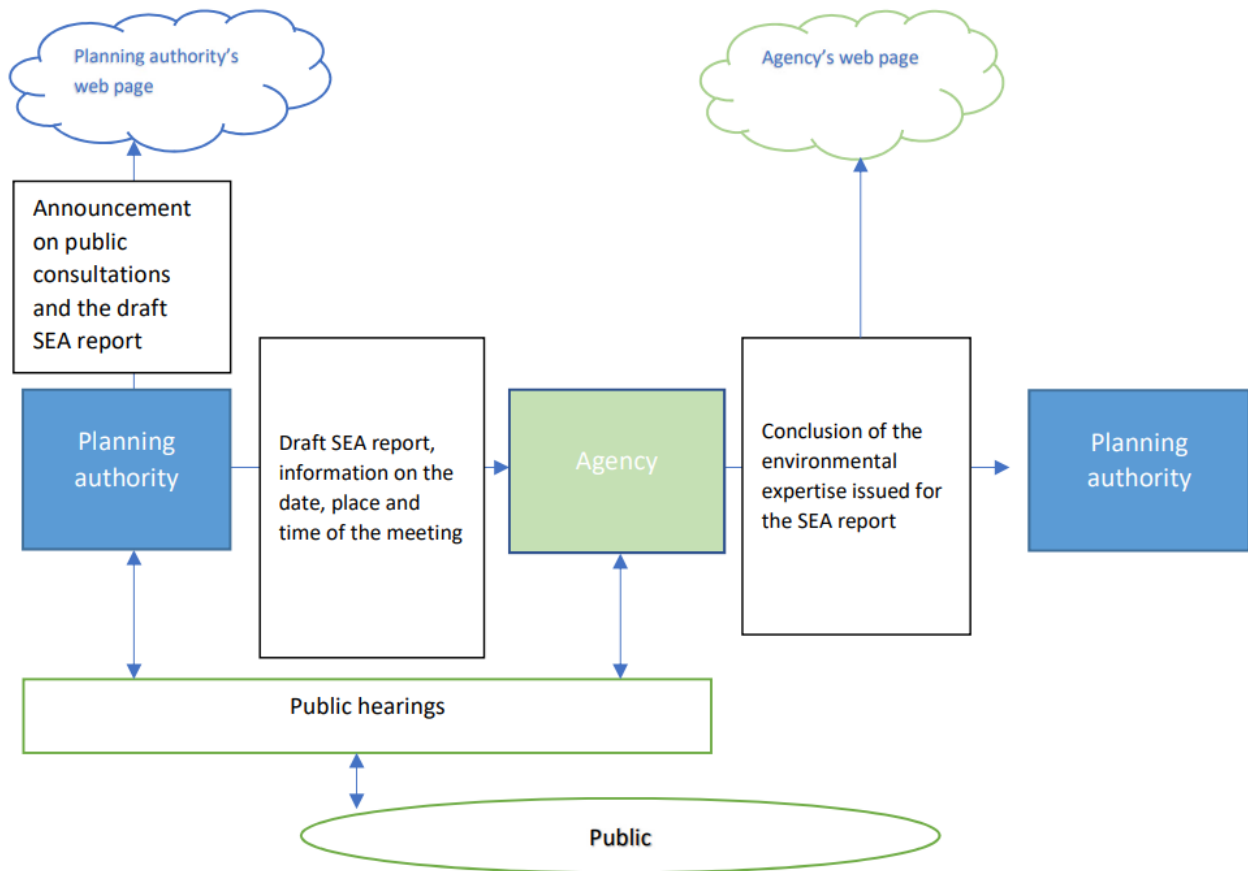
At the next stages, the planning authority prepares the SEA report and submits it to the Agency for environmental expertise. When a planning authority submits a draft SEA report to the Agency, it must also advise of the date, time and location of the public consultations.

An Agency representative must be formally notified by the planning authority of the public hearing at least seven working days in advance to ensure that an Agency representative is present at the consultations. Also, the planning authority, at least seven working days before the consultations, publishes on its website, as well as in the media, an announcement on public consultations and the draft SEA report, the purpose, date, place and time of the meeting, its format, as well as information on the venue where the relevant documents can be reviewed.

Public hearings on strategic documents of regional importance are organized in several territorial units (districts and cities); individuals and legal entities within the relevant administrative-territorial units, as well as property owners, are involved in and informed of the consultations.

The conclusion of the environmental expertise issued for the SEA report is posted on the website of the Agency (see figure 4).

**Figure 4. Review of the SEA report: public consultations and environmental expertise**



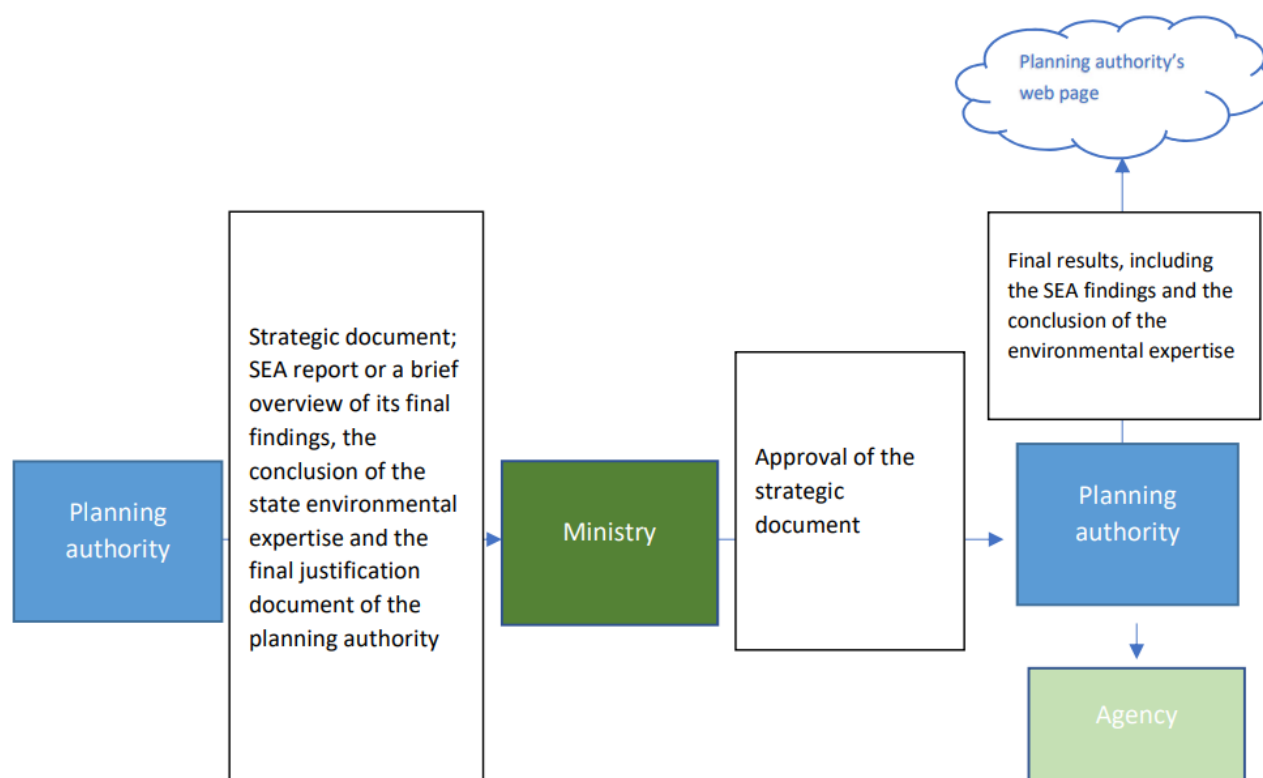
The strategic document is drawn up taking into account consultations with relevant governmental authorities and public consultations on SEA, as well as opinions and proposals submitted after the conclusion of the State environmental expertise is issued.

The planning authority prepares a final justification document on the issues considered and not considered in relation to the proposals on the strategic document and submits the strategic document to the Ministry for approval, which must be accompanied by an SEA report or a brief overview of its final findings, the conclusion of the State environmental expertise and the final justification document of the planning authority.

After approval of the strategic document, the planning authority summarizes the final results received, including the SEA findings and the conclusion of the environmental expertise, posts them on the website and informs the Agency about this in writing (see figure 5).



**Figure 5. Final decision on SEA**



### ***Prerequisites for launching an electronic SEA register***

The legal framework for the introduction of electronic government in Azerbaijan was established through the Presidential Decree “On approval of the State programme (E-Azerbaijan) for the development of communications and information technologies in the Azerbaijan Republic in 2010–2012”, as well as the and the Presidential Decree “On approval of some measures for the provision of electronic services by government agencies” dated 23 May 2011.<sup>8</sup> Subsequently, several Presidential decrees and other regulatory legal acts were adopted, which determined the strategies for developing e-government and digitalization in the country, as well as their individual aspects. For example, the Presidential Decree dated 14 March 2018 “On measures related to the development of electronic government and the transition to digital government”.

In Azerbaijan, there is currently no centralized electronic database of SEA procedures and relevant documents within the framework of such procedures. Moreover, from the interaction patterns discussed above, it appears that even within the framework of one SEA procedure some documents are posted on the planning authority’s website and some on the Agency’s website.<sup>9</sup> At the same time, it should also be taken into account that planning authorities encompass various government bodies, State agencies and municipalities that prepare strategic documents, and accordingly, only information within their purview is posted on their websites.

<sup>8</sup> <https://www.e-gov.az/en/content/read/2>

<sup>9</sup> According to the information provided by Azerbaijan as part of the preparation of this report, the Agency’s website is currently unavailable.

### 3.3. Georgia

#### *SEA legislative framework and stakeholders' interaction within the SEA procedure*

The legislative basis for conducting an SEA in Georgia is the 2017 Environmental Assessment Code.<sup>10</sup> According to the Code, an SEA includes scoping, the preparation and review of an SEA report, public participation and consultations, taking account of the information included in the SEA report in the decision-making on a strategic document and taking account of recommendations issued by the National Environmental Agency<sup>11</sup> and the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia (hereinafter - the Ministry of Health) in relation to the draft strategic document and the SEA report, taking account of the results of public participation during the adoption/approval of the strategic document, as well as the provision of information on the decision made to the public and concerned agencies.

The stages of SEA, according to the Code, include:

- submission of an application by the planning authority<sup>12</sup> to the Agency and the Ministry of Health
- scoping procedure
- preparation by the planning authority and/or consultant of a SEA report
- the planning authority's assessment of the information obtained from the SEA report, public participation and consultation
- if necessary, performance of the transboundary environmental impact assessment procedure
- public participation
- issuance of recommendations by the Agency and the Ministry of Health in relation to the draft strategic document and the SEA report.

To determine the need for an SEA (minor changes in the strategic document, as well as the strategic document relating to the territory of the self-governing community), a preliminary assessment (screening) procedure is carried out (see figure 6). In such cases, the planning authority applies to the Agency and the Ministry of Health with an application for screening and submits a concept or draft strategic document (it should contain brief information on the aims, objectives and activities provided for in the strategic document) as early as possible in its development both in paper and electronic format.

The Agency sends the application and concept or draft strategic document to the Centre for Environmental Information and Education.<sup>13</sup> The Centre ensures their posting on the environmental information portal. Also, the Ministry of Health and the planning authority post the application and concept or draft strategic

---

<sup>10</sup>This Report considered the edition of the Code as of 29 June 2023 - <https://matsne.gov.ge/ru/document/view/3691981?publication=12>.

<sup>11</sup>A legal entity of public law, part of the system of the Ministry of Environment Protection and Agriculture of Georgia.

<sup>12</sup>Planning authority – an administrative body or other authorized organization that, according to the relevant regulatory act, is responsible for preparing a strategic document.

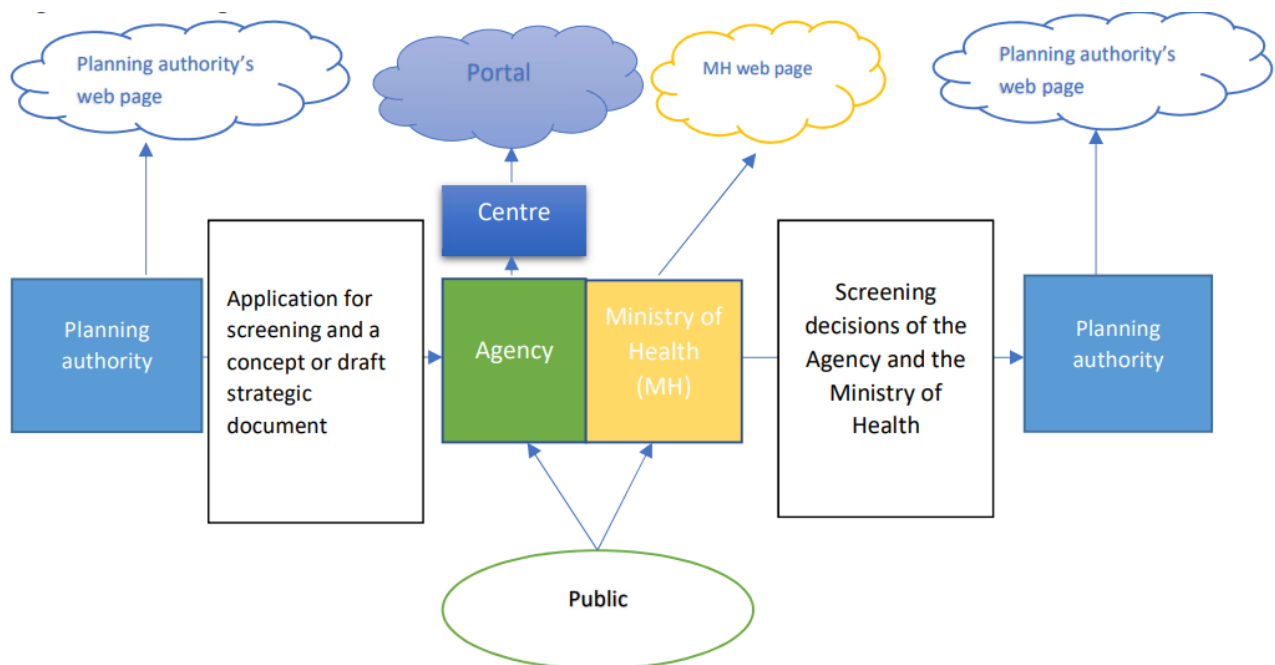
<sup>13</sup>A legal entity of public law, part of the system of the Ministry of Environment Protection and Agriculture of Georgia.

document on their websites, and the Centre also ensures that the screening application is posted on the information board of the executive body and/or representative body of the respective municipality.

Once the screening statement and concept or draft strategic document are posted on the websites and information board, the public has the right to submit opinions and comments about these documents within a specified period. The Agency and the Ministry of Health consider the opinions and comments submitted by the public and, if there are appropriate grounds, take them into account in the decision-making process.

After making a screening decision, the Agency forwards the decision, as well as opinions and comments submitted by the public, to the Centre, which ensures that they are posted on the environmental information portal. Also, after making screening decisions, the Ministry of Health and the planning authority post these decisions, as well as opinions and comments submitted by the public, on their websites, and the Centre also ensures that these documents are posted on the information board of the executive body and/or representative body of the respective municipality.

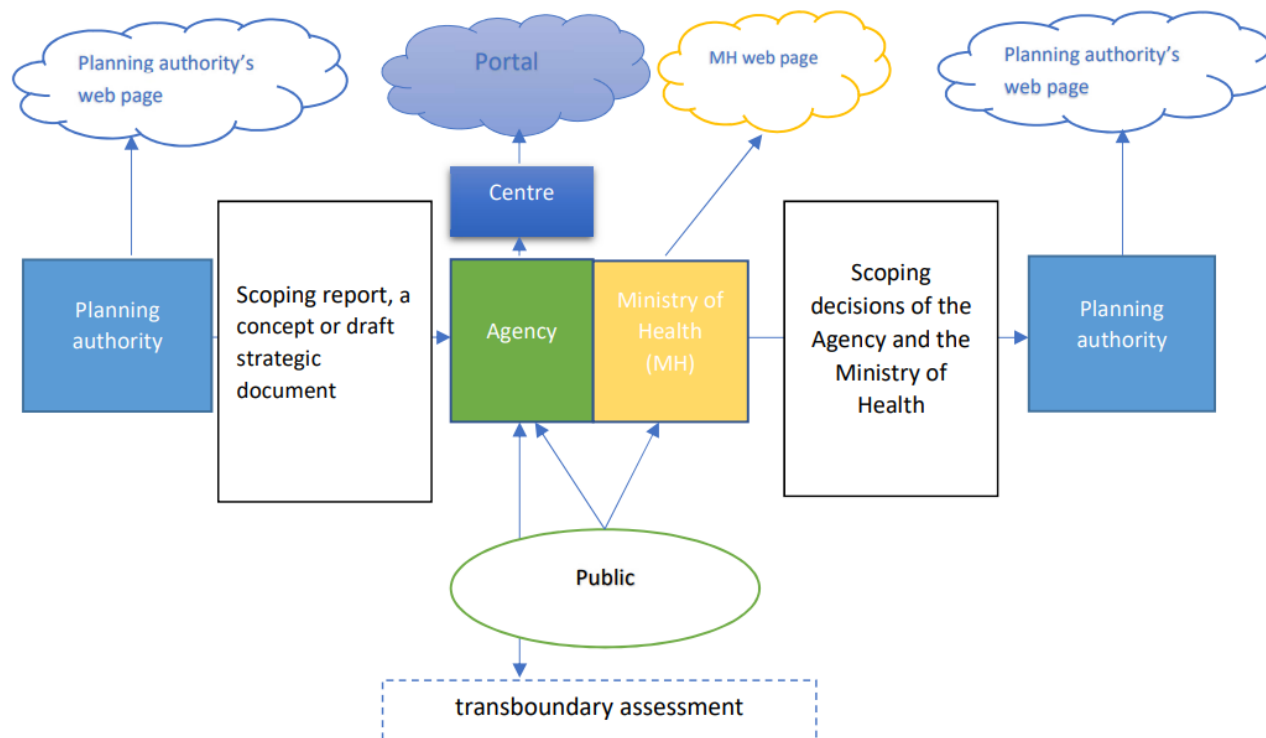
**Figure 6. Screening**



A similar algorithm for the interaction of the SEA stakeholders and the publication of information using electronic resources is provided at the scoping stage (see figure 7). The exception being the provisions on the posting by the Centre, the Ministry of Health and the planning authority of opinions and comments provided by the public during the scoping process. The Code does not specify in the scoping procedure, in contrast to the screening procedure, the posting of public opinions and comments on the relevant electronic resources; however, it stipulated that the Agency and the Ministry of Health consider the opinions and comments submitted by the public and, if there are appropriate grounds, take them into account in the decision-making process.

The Code provides for the possibility to combine the stages of screening and scoping and submit simultaneously an application for screening and an application for scoping.

Also, in the case of a transboundary environmental impact assessment procedure, the Agency determines the obligation for the planning authority to reflect in the scoping report/scoping application the results of consultations related to the transboundary impact assessment procedure.

**Figure 7. Scoping**

After the planning authority prepares an SEA report, the procedure begins for the Agency and the Ministry of Health to review the report and issue recommendations (see figure 6). The planning authority applies to the Agency and the Ministry of Health and submits the SEA report and the draft strategic document in both paper and electronic format. The application also contains information on the proposed time, place and procedure for holding a public discussion.

The Agency sends this application and attached documents to the Centre. The Centre ensures that these documents are posted on the environmental information portal. The Ministry of Health and the planning authority post the application and the attached documents on their official websites, and the Centre ensures that it is posted on the information board of the executive body and/or representative body of the relevant municipality.

Also, in order to review the SEA report and the draft strategic document, the Agency creates an Expert Commission, which submits an expert opinion to the Agency.

The public has the right to submit suggestions and comments to the Agency and the Ministry of Health in relation to the SEA report and the draft strategic document. The Agency and the Ministry of Health review public submissions and, if there are appropriate grounds, take them into account in the decision-making process.

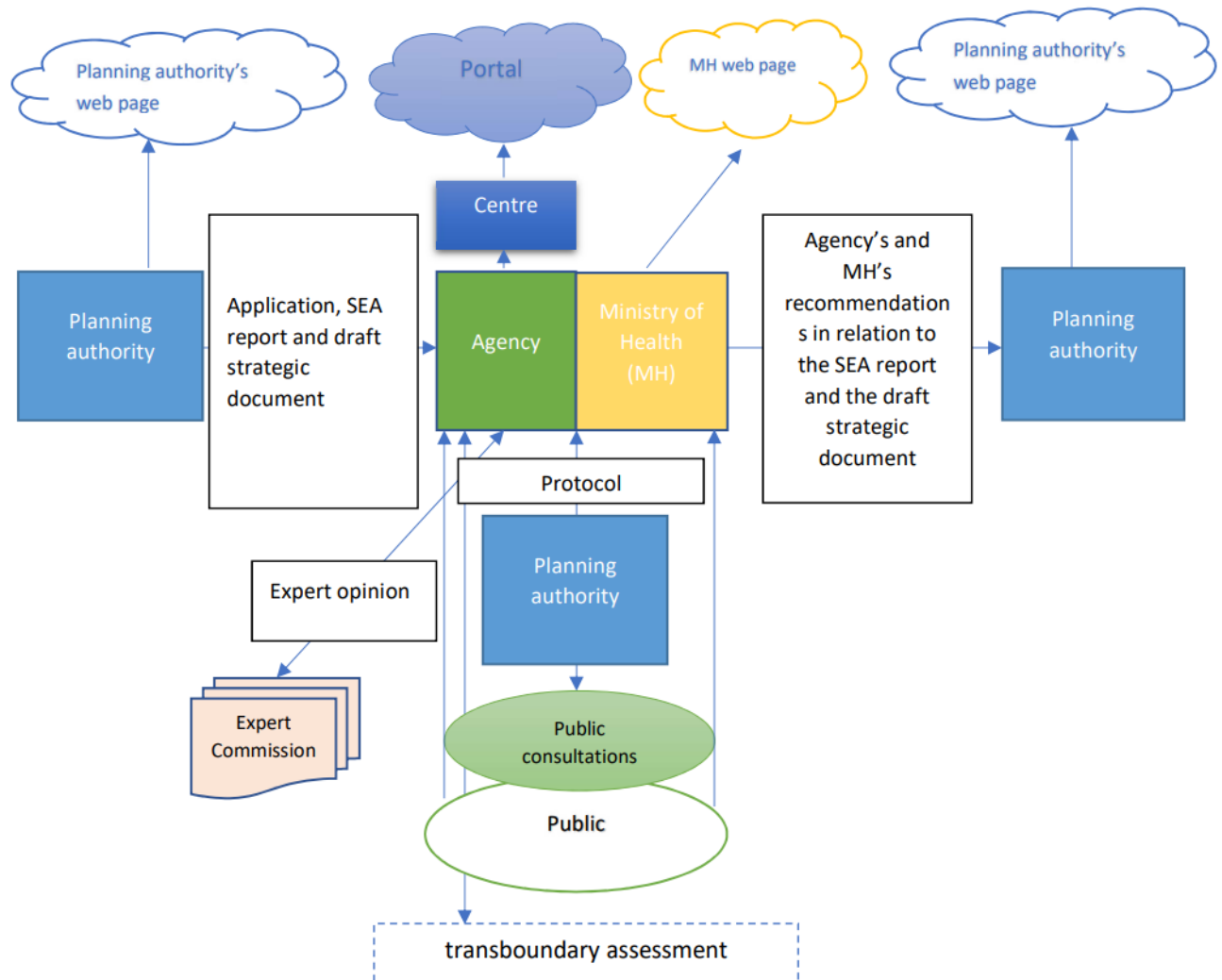
The planning authority also holds public consultations on the SEA report with the participation of the Agency and the Ministry of Health. After a public discussion on the SEA report, the planning authority ensures that a protocol is drawn up on the results of the public consultations on the SEA report and submits the protocol on the results of the public consultations on the SEA report to the Agency and the Ministry of Health.

Within their purview the Agency and the Ministry of Health issue appropriate recommendations in relation to the SEA report and the draft strategic document and forward these recommendations to the planning authority.

The Agency also forwards recommendations issued in relation to the SEA report and the draft strategic document to the Centre. The Centre ensures that they are posted on the environmental information portal. The Ministry of Health and the planning authority publish these recommendations on their websites, and the Centre also ensures that these recommendations are posted on the information board of the executive body and/or representative body of the relevant municipality.

In the case of a transboundary environmental impact assessment procedure, the Agency ensures that the results of transboundary consultations are taken into account in the process of issuing recommendations.

**Figure 8. Review of the SEA report and a draft strategic document**



After the adoption/approval of the strategic document, the planning authority ensures that the decision on the adoption/approval of the strategic document is posted on its website and sends the decision to the Agency and the Ministry of Health.

The Agency forwards the decision to the Centre. The Ministry of Health is obliged to post the decision on the adoption/approval of the strategic document on its website, and the Centre ensures that information on the decision is posted on the environmental information portal and information board of the executive body and/or representative body of the relevant municipality.

If there is a need and possibility, the Agency, based on the data available to it, ensures the performance of an independent analysis of significant effects on the environment resulting from the implementation of the strategic document and provides the Centre with the results of this analysis. In order to inform the public, the Centre ensures systematic posting of the results of further analysis of the results of the implementation of the strategic document on the environmental information portal.

### *Prerequisites for launching an electronic SEA register*

In accordance with paragraph 2(d) of article 4 of the Code, the purview of the Ministry of Environmental Protection and Agriculture of Georgia includes the creation of a unified database on issues within the purview of the Ministry, and ensuring the security, openness and accessibility of the information stored within, in order to ensure access to information, government effectiveness and public participation.

Currently, SEA documents are submitted both digitally and in paper format. Digital materials are posted on the websites of the authorities and the Agency's website and are sent to departments/various organizations for review. Thus, all administrative procedures are carried out digitally. However, special software/IT tools are not used to ensure greater digitalization of the SEA procedure. Also, currently there is no centralized electronic database of SEA procedures and relevant documents within the framework of such procedures. Moreover, from the interaction patterns discussed above, it is concluded that even within the framework of one SEA procedure some of the documents are posted on the website of the planning authority or the portal, when the part related to health is posted on the website of the planning authority and the Ministry of Health. It should be taken into account that planning authorities encompass various administrative bodies or other authorized organizations responsible for preparing strategic documents, and accordingly, information related only to their purview is posted on their websites.

From 1 July 2023, the Centre for Environmental Information and Education ([www.eiec.gov.ge](http://www.eiec.gov.ge)) is responsible for involving the public in the decision-making process in the procedures provided for by the Code, ensuring access to information and organizing public hearings.

According to the information provided by Georgia as part of the preparation of this report, Georgia is developing a public environmental assessment portal, which will combine EIA/SEA documents on a single platform and provide the public with systematic and simplified access to information on EIA and SEA procedures.

### 3.4. Republic of Moldova

#### *SEA legislative framework and stakeholders' interaction within the SEA procedure*

The SEA procedure in the Republic of Moldova is regulated by the 2017 Law on Strategic Environmental Assessment with appropriate amendments.<sup>14</sup>

According to the SEA Law, an SEA is an assessment of effects that policy and planning documents may have on the environment, including public health, which involves determining the scope of the SEA report and its preparation, carrying out consultations with the public authorities concerned and the public concerned, as well as carrying out transboundary consultations where appropriate and taking into account the conclusions of the SEA report and the results of public participation and consultation in a policy and planning document

The SEA Law refers to policy and planning documents as public policy documents and planning documents, which: (a) are to be prepared according to the provisions of normative or administrative acts; (b) are to be prepared by a public authority and approved by the Government or, by means of a legislative procedure, by the Parliament; and (c) are to be prepared and approved by a local public administration authority.

The preliminary assessment (determining the need for an SEA) and an SEA are carried out at the initial stage of the development of a concept of the policy and planning document or of its modification.

The SEA process includes the following stages:

- defining the scope of the SEA report
- preparing the SEA report
- analysing the quality of the SEA report
- analysing the integration of environmental aspects into the draft policy and planning document
- issuing an environmental opinion<sup>15</sup>
- approving the policy and planning documents
- monitoring the significant impact of the policy and planning document on the environment, including on public health.

Among the obligations of the initiator and the competent authority the SEA Law provides for the posting of information on the SEA procedure on their websites.

In accordance with the SEA Law, the initiator is the central or local public administration authority that initiates policy or planning documents and is responsible for developing them. The competent authorities, according to the SEA Law, are the Ministry of the Environment (MoE) - for national-level policy and planning documents, including sectoral and cross-sectoral documents approved by the Government or

---

<sup>14</sup>This report examined the law, including the amendments dated 30 September 2022, which came into force on 21 October 2023.

<sup>15</sup>Environmental opinion is a technical-legal document issued by the competent authority confirming that the SEA report complies with the requirements of the SEA Law, and the aspects related to environmental protection are integrated into the policy or planning documents submitted for approval and do not have adverse effects on the environment, including public health.

Parliament and the Environment Agency (EA) - for local level policy and planning documents, approved by the local public administration.

The initiator, under the guidance of the competent authority, informs (through public announcements in local and national newspapers and posting information on official websites) and organizes the participation of the public concerned at all stages of the SEA. At all stages, too, the initiator posts and stores information on the SEA procedure on its official website in the section dedicated to SEA.

For policy and planning documents developed in the areas of agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, electronic communications, tourism, land use, urban and rural planning (urban planning and landscaping documentation, including plans for urban planning and development of the territory and programmes for urban planning and development of the territory at the national, regional, district, local levels, as well as for general and zonal urban plans), which establish the framework for the implementation of planned activities subject to environmental impact assessment, the SEA procedure begins with defining the scope of the SEA report.

Where these policy and planning documents relate to the use of small areas at the local level or provide for minor changes to the policy and planning documents, and where policy and planning documents other than those above establish the framework for the implementation of any type of planned activity for which a permit is required, a preliminary assessment is carried out (determining the need for an SEA).

To carry out a preliminary assessment, the initiator, at the stage of developing policy or planning documents, submits to the competent authority the information necessary for the preliminary assessment. The competent authority publishes this information on its official website and initiates consultations with central and local public authorities identified as public authorities concerned (PAC) and with the Ministry of Health (MoH).

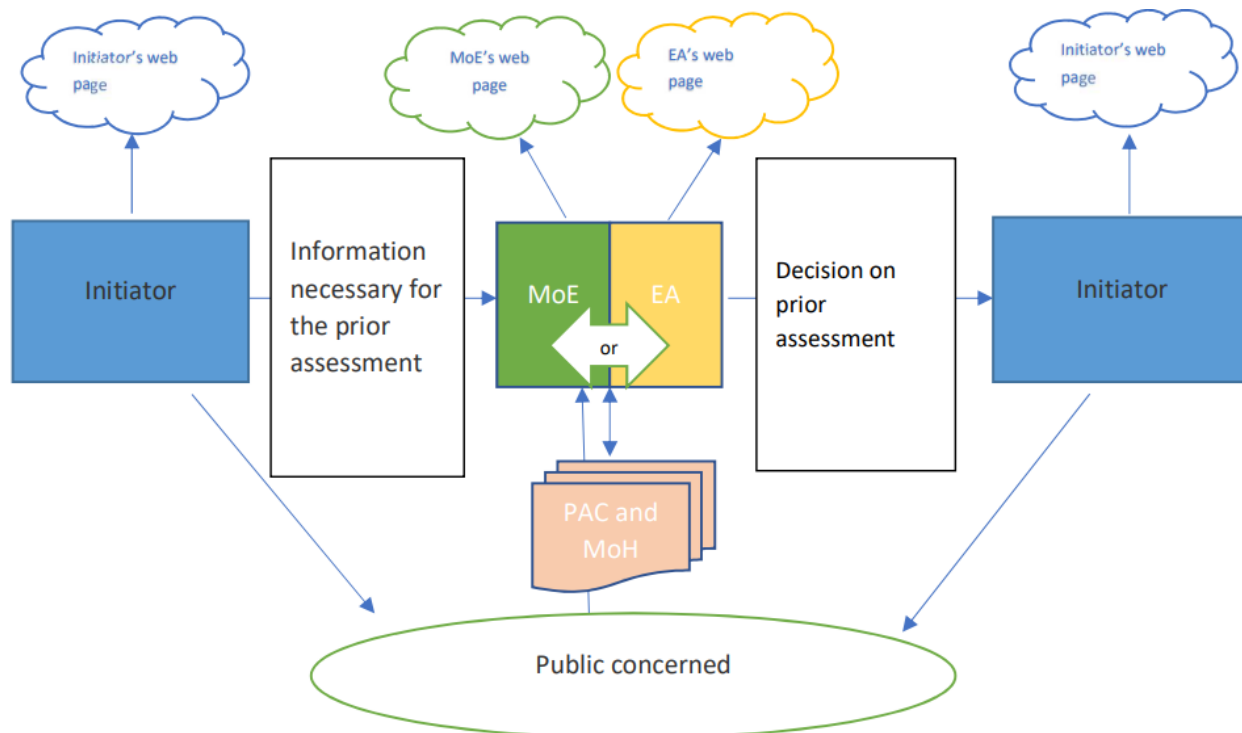
The initiator informs the public concerned. The public concerned may submit their comments and suggestions to the competent authority within 10 days from the date of notification.

The competent authority, taking into account the opinion of the public authorities concerned, as well as comments and suggestions received from the public concerned, makes a decision on preliminary assessment, sends it to the initiator and posts it on its official website, as well as at its headquarters.

The initiator, after receiving a decision on preliminary assessment, posts it on its official website and informs the public concerned regarding the decision on preliminary assessment, including through public announcements in local and national newspapers (see figure 9).

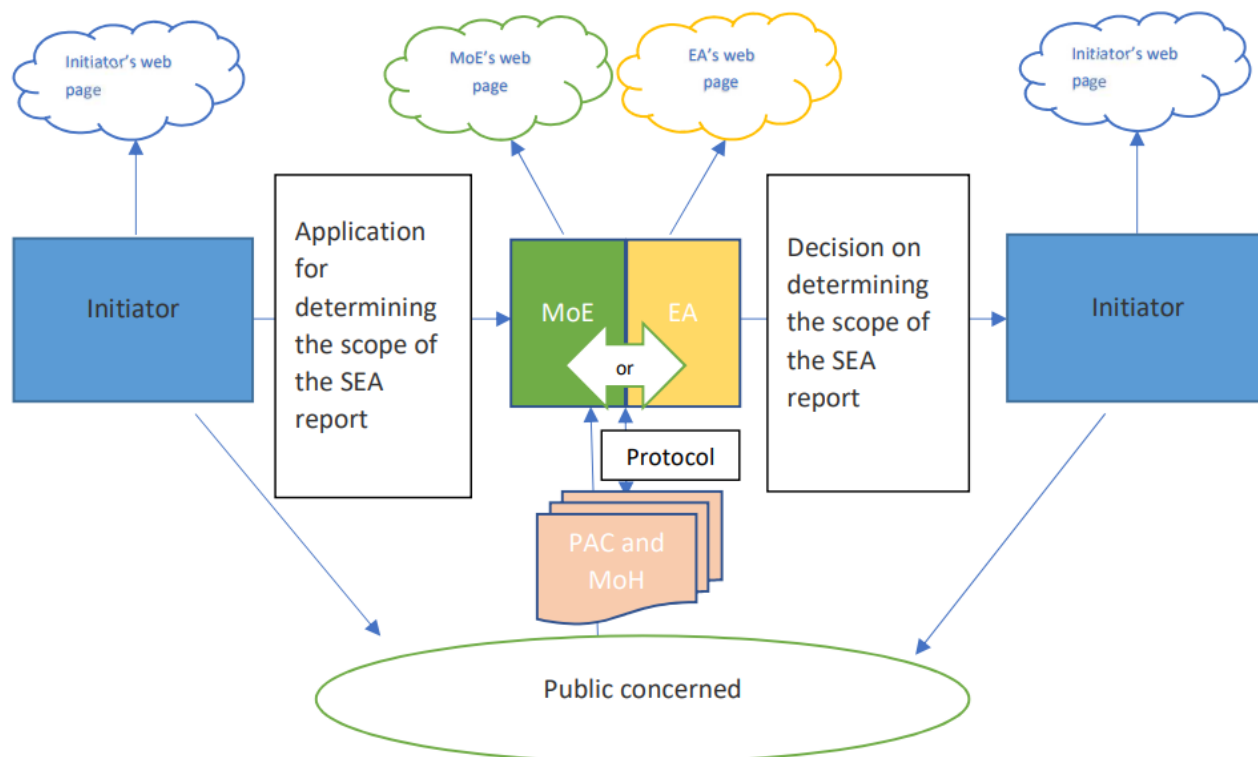
For policy and planning documents in relation to which a decision to carry out an SEA was taken, the competent authority determines the scope of the SEA report and issues the decision on the scope of the report in accordance with the scoping requirements.



**Figure 9. Preliminary assessment**

A similar algorithm for the interaction of SEA stakeholders and the publication of information using electronic resources is also provided at the stage of determining the scope of the SEA report (see figure 10). The exception is that at the stage of determining the scope of the SEA report, the SEA Law does not provide for posting the decision of the competent authority on its website, but states that the competent authority forwards in writing the decision on determining the scope of the report to the initiator, and the latter publishes it on its website and informs the public concerned.

Also, at the stage of determining the scope of the SEA report, the results of the consultations are recorded in a protocol, which contains a list of mutually agreed information necessary for preparing the SEA report and which must be an integral part thereof.

**Figure 10. Defining the scope of the SEA report**

At the following stages, the initiator prepares an SEA report, submits to the competent authority a draft policy and planning document and an SEA report (see figure 11), publishes them on its official website, informs the public concerned regarding these documents and the deadlines for submitting comments and proposals on them to the competent authority, as well as regarding the conducting of public consultations.

The competent authority, having received the SEA report and the draft policy and planning document, transmits them to the Panel of Experts,<sup>16</sup> publishes the report and the draft document on its official website, and forwards them to non-governmental organizations promoting environmental protection.

Depending on the nature and complexity of the policy and planning document, the competent authority may involve representatives of the public authorities concerned, as well as other independent experts, in analysing the quality of the SEA report.

Comments and suggestions from the public concerned on the SEA report and the draft policy and planning document may be submitted to the competent authority within 30 days from the date of their publication on the website of the competent authority. The competent authority forwards copies of these comments and suggestions to the Panel of Experts.

The Panel of Experts provides the competent authority with a detailed and reasoned opinion on the quality of the SEA report in writing.

<sup>16</sup>The Panel of Experts is set up by order of the Minister of Environment and made up of experts appointed by the Ministry of Health, the Ministry of Environment, the Ministry of Infrastructure and Regional Development, the “Moldsilva” Agency, the National Archaeological Agency, the Academy of Sciences of Moldova, the Agency for Geology and Mineral Resources, and the “Apele Moldovei” Agency, the State Hydrometeorological Service.

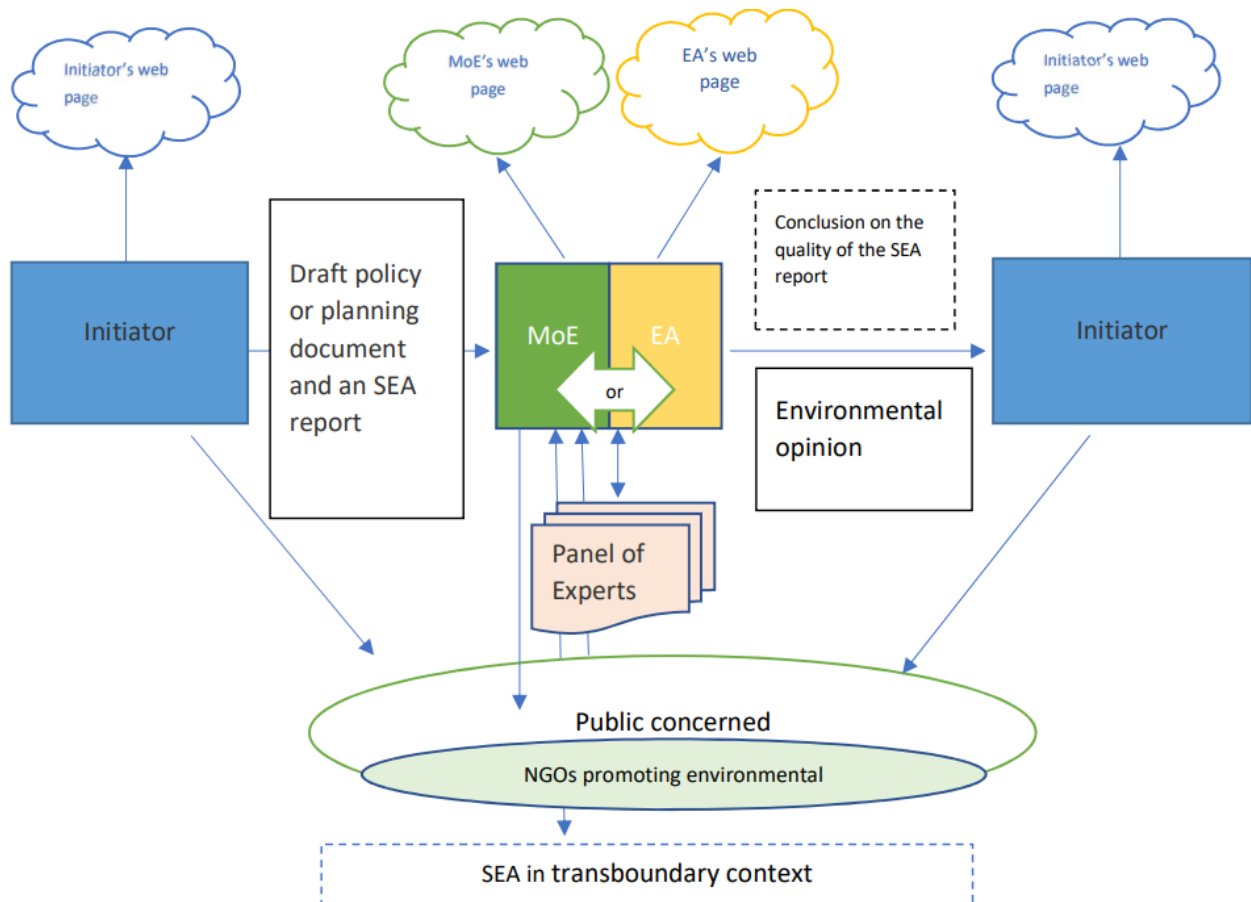
If the quality of the SEA report is inadequate, the competent authority having received the opinion of the Panel of Experts draws up the conclusion on the quality of the SEA report and indicates the aspects of the report that it considers inadequate with reference to comments and suggestions received from the public concerned and to the opinion of the Panel of Experts, as well as the recommended measures for finalizing the SEA report. If the SEA report is returned for revision, the initiator revises and resubmits the report.

Having received a conclusion on the quality of the SEA report from the competent authority, the initiator posts a copy of the report on its website and informs the public concerned.

Simultaneously with assessing the quality of the SEA report, the Panel of Experts evaluates the draft policy and planning document. Once the SEA report is found to meet the required quality standards, the Panel of Experts provides the competent authority with a reasoned opinion on the draft policy and planning document.

Taking into account the opinion of the Panel of Experts on the draft policy and planning document, as well as the results of public consultations and, as the case may be, transboundary consultations, the competent authority issues an environmental opinion, notifies the initiator in writing about the environmental opinion and publishes it on its official website. The initiator also posts the environmental opinion on its official website and informs thereof the public concerned.

**Figure 11. Review of the quality of an SEA report and a draft policy or planning document**



After the approval of a policy or planning document according to the procedure established by the legislation, the initiator places on its official website and informs the public concerned, the public authorities concerned and makes available to them, the environmental opinion, as well as the following:

- (a) a policy or planning document in the approved form;
- (b) information on how environmental concerns were integrated into the policy or planning document and the effects of the policy or planning document on the environment, including public health;
- (c) information on consultations with the public and the public authorities concerned, the results of consultations in a transboundary context.

The initiator, within its purview and in accordance with the established programme, monitors the significant environmental, including public health, effects of the implementation of the policy or planning document in order to identify unforeseen adverse effects at an early stage and to be able to take appropriate remedy measures. The initiator submits the monitoring results to the competent authority in accordance with the schedule and form provided in the approved policy or planning document and publishes them on its official website.

### ***Legal preconditions for launching an electronic SEA register***

The general legal framework for the development and operation of electronic registers in the Republic of Moldova consists of the 2003 Law on Informatization and State Information Resources, the 2007 Law on Registers, Government Decree No. 562 of 22 May 2006 on the creation of State automated information systems and resources, Government Decree no. 153 of 25 August 2021 on Approval of the Concept of the Information System “Register of State Information Resources and Systems” and the Regulations on the procedure for maintaining the Register.

The SEA Law also stipulates that the competent authority creates, develops and maintains an electronic register of information on SEA and makes it available to the public by posting it on the official website in the section dedicated to SEA (art. 84)<sup>17</sup>.

Currently, in the Republic of Moldova there is no centralized electronic database of SEA procedures and relevant documents within such procedures. From the interaction patterns discussed above, it is concluded that information and documents within the framework of the SEA procedure are posted on the websites of the initiator and the competent authority. Initiators encompass various central or local public authorities that initiate policy or planning documents and are responsible for their development. Accordingly, information related only to their purview is posted on their websites.

Information is also posted on various websites depending on the status of the document and the type of competent authority involved: for national-level policy and planning documents, including sectoral and cross-sectoral documents approved by the Government or Parliament – on the website of the Ministry of Environment; and for local-level policy and planning documents approved by local public administration – on the website of the Environmental Agency.

---

<sup>17</sup>This provision came into force on 21 October 2023.

### 3.5. Ukraine

#### ***SEA legislative framework and stakeholders' interaction within the SEA procedure***

The SEA procedure in Ukraine is regulated by the 2018 Law of Ukraine on Strategic Environmental Assessment.<sup>18</sup> Also, a number of by-laws were adopted to regulate certain aspects of the SEA implementation, including the Procedure for monitoring the effects of the implementation of the State planning documents for the environment, including for public health, approved by the resolution of the Cabinet of Ministers of Ukraine dated 16 December 2020, No. 1272, the procedure for maintaining the unified register on strategic environmental assessment, approved by a resolution of the Cabinet of Ministers of Ukraine dated 2 May 2023, No. 430 and others. The legal framework and general requirements for the development and operation of State electronic registers in Ukraine are prescribed by the 2021 Law of Ukraine on Public Electronic Registers.

According to the Law of Ukraine on SEA, SEA is a procedure of identifying, describing and evaluating effects of implementation of a public planning document on the environment, including human health, reasonable alternatives, developing measures to prevent, reduce and mitigate possible adverse effects, which includes the scoping of SEA, the preparation of a SEA report, the carrying out of public consultations and consultations (where necessary – transboundary consultations), the taking into account of the SEA report and the results of public consultations and consultations in the public planning document, the provision of information on the adoption of the public planning document.

Public planning documents in accordance with the Law on SEA are strategies, plans, schemes, urban planning documentation, national programmes, State target programmes and other programmes and programme documents, including amendments to them, developed and/or subject to adoption by a public authority or local self-governance authority.

The stages of an SEA include:

- 1) defining the scope of the SEA
- 2) drawing up an SEA report
- 3) conducting public discussion and consultations with authorized bodies in the field of environmental protection and health, transboundary consultations
- 4) taking into account the SEA report, the results of public discussion and consultations
- 5) informing about the adoption of the public planning document
- 6) monitoring the effects of the implementation of the public planning document on the environment, including public health.

Until May 2023, the exchange of information and documents within the framework of the SEA procedure was carried out by sending relevant documents in electronic or paper form between SEA stakeholders via e-mail or regular mail. For the purpose of consultation, planners<sup>19</sup> submitted relevant documents to authorized bodies at the national level (Ministry of Environmental Protection and Natural Resources and

---

<sup>18</sup>This report examined the version of the Law as of 9 July 2023 - <https://zakon.rada.gov.ua/laws/show/2354-19#Text>

<sup>19</sup>Planner – a State executive authority or a local self-governance authority responsible for the preparation of public planning documents and exercising general leadership and control over the implementation thereof, or other defined by the legislation planner of the public planning documents.

Ministry of Health) or authorized territorial bodies (regional level). The documents were made public on the websites of the planners and relevant authorities consulted. Also, planners additionally informed the public through print media.

Thus, SEA documents were posted on the websites of numerous and varied authorities (depending on the planner and the status of the state planning document). Moreover, within the framework of one SEA procedure, some documents were posted only on the planner's website, while other were posted exclusively on the websites of the authorities consulted.

In May 2023, amendments to the Law of Ukraine on Strategic Environmental Assessment came into force, introducing provisions on the Unified SEA register. As a result of such amendments, the SEA procedure and the exchange of documents at all stages is carried out through an electronic register - the Unified SEA register (hereinafter referred to as the Register). Since May of this year, all documents on SEA created by relevant authorities at all levels are submitted in electronic form<sup>20</sup> and are freely available in the Register<sup>21</sup>. Disclosure of documents on SEA on the Internet is carried out through the Register (authorized access), as well as on the official websites of planners (unauthorized access). At the local level in rural areas, information is also provided through notice boards.

### *Unified SEA Register*

According to the legislation of Ukraine, the Register is a unified information and communication system that ensures the creation, viewing, collection, entry, accumulation, processing, use, review, storage, protection, recording and provision of information in the field of SEA. The Register was created using software that ensures its compatibility and electronic information interaction in real time with other electronic information systems and networks that make up the State information resources, including the Unified Register on Environmental Impact Assessment, the urban planning cadastre, the State Land cadastre, etc.

The Register is an electronic database of information and documents created and loaded by electronic user accounts that facilitate electronic interaction between SEA stakeholders.

The Register is also a functional module of the Unified Environmental Platform 'EcoSystem', intended for the official publication of documentation on SEA, ensuring that SEA stakeholders and other parties concerned are informed about the progress and results of SEA implementation.

The Register is maintained to ensure:

- access of the SEA stakeholders to up-to-date information on the implementation of SEA (regulatory and legal acts, guidelines, reference information);
- electronic interaction between SEA stakeholders, submission and processing of information by planners of public planning documents and authorities consulted through electronic user accounts;
- carrying out of consultations with authorized bodies and transboundary consultations;
- free access of all parties concerned to the information on SEA of public planning documents;

---

<sup>20</sup>Except for the graphic materials of urban planning documentation, which are submitted in paper form. At the State level, there are prerequisites for the transition to a digital format in terms of graphic materials of urban planning documentation.

<sup>21</sup>Currently, access to information in the Register requires user authorization, which may not be fully consistent with the "free public access" approaches to registers provided for by the Aarhus Convention.

- holding public discussions during the SEA process and providing suggestions and comments from the public.

The Ministry of Environmental Protection and Natural Resources is the holder and administrator of the Register, ensuring the maintenance of the Register, as well as being responsible for the technical, technological and software support of the Register, and the storage and protection of the data contained in the Register.

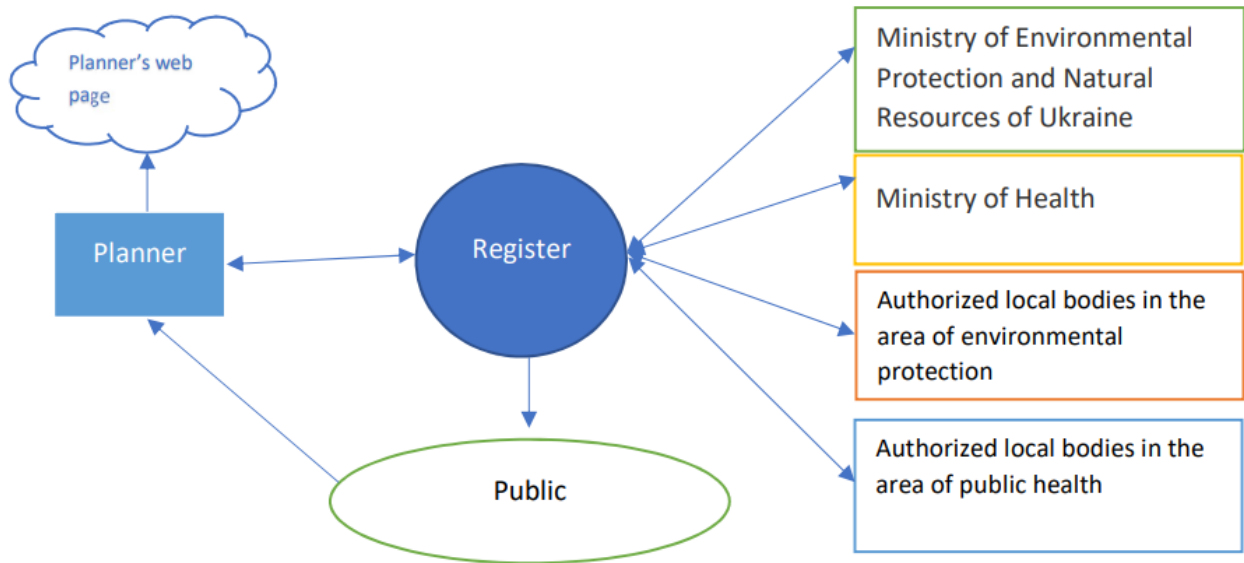
Planners and authorities consulted have access to the Register with the right to enter information in accordance with their powers through electronic user accounts. When a planner or an authority consulted enters information into the Register, the Register's software automatically creates messages sent through electronic user accounts to the authorities consulted or to the planner. Such messages include the date and time of entering the information in the Register and a link to view them in the Register.

The public has access to information entered into the Register via the internet (authorized access). The public is also informed through other means (planners websites, notice boards). Suggestions and comments from the public during the SEA process are submitted in electronic or paper form to the planner, who enters them into the Register (see also figure 12).

The following are entered into the Register:

- 1) a statement defining the scope of the SEA and a notice of its publication;
- 2) a draft public planning document, an SEA report and a notice of the publication of these documents;
- 3) comments and suggestions of the public; a statement of public consultations;
- 4) comments and suggestions of the authorities consulted; a statement of consultations;
- 5) an approved public planning document (except for information that, according to the law, constitutes a State secret or relates to information with limited access) and the decision on its approval;
- 6) information on transboundary consultations (if any);
- 7) results of monitoring the effects of the implementation of public planning documents on the environment, including public health, information on the adverse effects of the implementation of the public planning document on the environment, including public health, unforeseen by the SEA report, and appropriate remedial actions undertaken;
- 8) recommendations on the need to carry out SEA of minor changes to the public planning document for which SEA was previously carried out, and a decision not to carry out SEA of such changes.

Information entered into the Unified SEA Register is public and open. Access to it is provided via the internet; however, as mentioned above, it requires authorization.

**Figure 12. SEA procedure stakeholders' interactions after the launch of the Register**



### 3.6. Conclusions

In all countries under consideration, except Ukraine, there are currently no centralized electronic SEA registers. Access to information and documents in the SEA process in the countries under review is carried out, for example, by posting them on the websites of the planning authorities, the environmental authorities, the health authorities and various other bodies. At the same time, planning authorities may be various administrative bodies or other authorized organizations responsible for preparing plans and programmes, and accordingly, only information within their purview is posted on their websites.

In terms of posting information within the framework of an SEA on the websites of environmental and health authorities, in a number of countries there is a division according to the status of the plan or programme and the level of the authority consulted (national, regional/local), and the information is also posted on various websites of the relevant authorities.

The dissemination of information on the websites of various authorities does not in itself contradict approaches of providing broad public information, but the need to search for information on the websites of various authorities (in some cases even within the same SEA procedure) may significantly reduce the effectiveness of information and opportunities for public participation. Launching a centralized database of information on SEA could help solve this problem.

In all the countries under consideration, digitalization processes are taking place. Many countries are switching to electronic document management and creating e-government systems. Thus, in the countries there are prerequisites for launching SEA registers.

## 4. Recommendations

### 4.1. Legal recommendations

When developing and launching electronic SEA registers, it is advisable to take into account the following recommendations:

- (a) Develop a system that can provide not only the accumulation of and access to information on an SEA, but also more effective interaction between SEA stakeholders, consultations and exchange of documents, as well as facilitate the analysis and collection of information in order to fulfil reporting obligations under the SEA Protocol;
- (b) Take into account the national specifics and features of the SEA procedure in specific countries, levels of decision-making, the purview of the authorized bodies, as well as the key functions and recommendations provided in section 1 of this report;
- (c) The SEA electronic register can be either an independently functioning system or combined with other registers (for example, an EIA register) or integrated into existing electronic e-government systems or other databases. For example, in Georgia, a public environmental assessment portal is being developed that will combine EIA/SEA documents on a single platform and provide the public with systematic and simplified access to information related to EIA and SEA procedures;
- (d) In addition to securing technical solutions and financial resources, it is necessary to amend or supplement the legislation on SEA and/or develop and adopt relevant by-laws;
- (e) When preparing amendments to legislation and/or developing new acts, legislative norms should provide a legal basis for the timely entry of information and documents into the register, compliance with the deadlines stipulated by the SEA procedure, and storage and protection of information. For example, in Ukraine, the SEA procedure is directly linked to the entry of information and documents into the Unified SEA Register, and the deadlines provided for by the procedure start from the date of placement/publication of information in the Unified SEA register;

- (f) The register should, at a minimum, ensure the availability of information as it becomes available throughout the SEA process, as well as access to monitoring information on significant environmental, including health, effects of the implementation of plans and programmes;
- (g) In the legislation, determine the periods of storage and availability in the electronic SEA register of information on completed SEA procedures, as well as information on monitoring of the effects of the implementation of plans and programmes after the expiration of their validity periods and / or completion of monitoring activities.

For some countries, the following should be additionally noted. In Georgia and the Republic of Moldova, in 2023, the legislation was supplemented by separate provisions on registers (for more details, see the chapters on Georgia and the Republic of Moldova). However, these provisions require further detailing in the relevant laws and/or regulations, in particular regarding the procedure for creating and operating such registers, and the interaction of stakeholders within the framework of the SEA procedure.

In Ukraine, changes to the legislation and the corresponding by-law regulating the operations of the Unified SEA register were adopted, and a centralized electronic SEA register was created and began to operate (for more details, see the chapter on Ukraine).

In the future, based on the results of the practical application of the register, it may be necessary to refine both the by-laws and the functionality of the register, including the issue of exclusively authorized public access to the register, which may not fully correspond to the approaches of “free access” of the public to the registers provided for by the Aarhus Convention.

#### **4.2. Technical recommendations**

Creating software to automate the SEA process requires an integrated approach that includes the development not only of the software itself but also of the associated data registries. Automation of the process can greatly simplify and speed up the exchange of information, as well as increase the transparency of procedures in all the participating countries. At the same time, it is important that the automated system be maximally integrated and harmonized with data registers and the requirements of the Protocol, and also that it should ensure the possibility of effective data exchange between countries and the secretariat of the Convention.

The following are some general recommendations for planning to automate the SEA process and create common data registries:

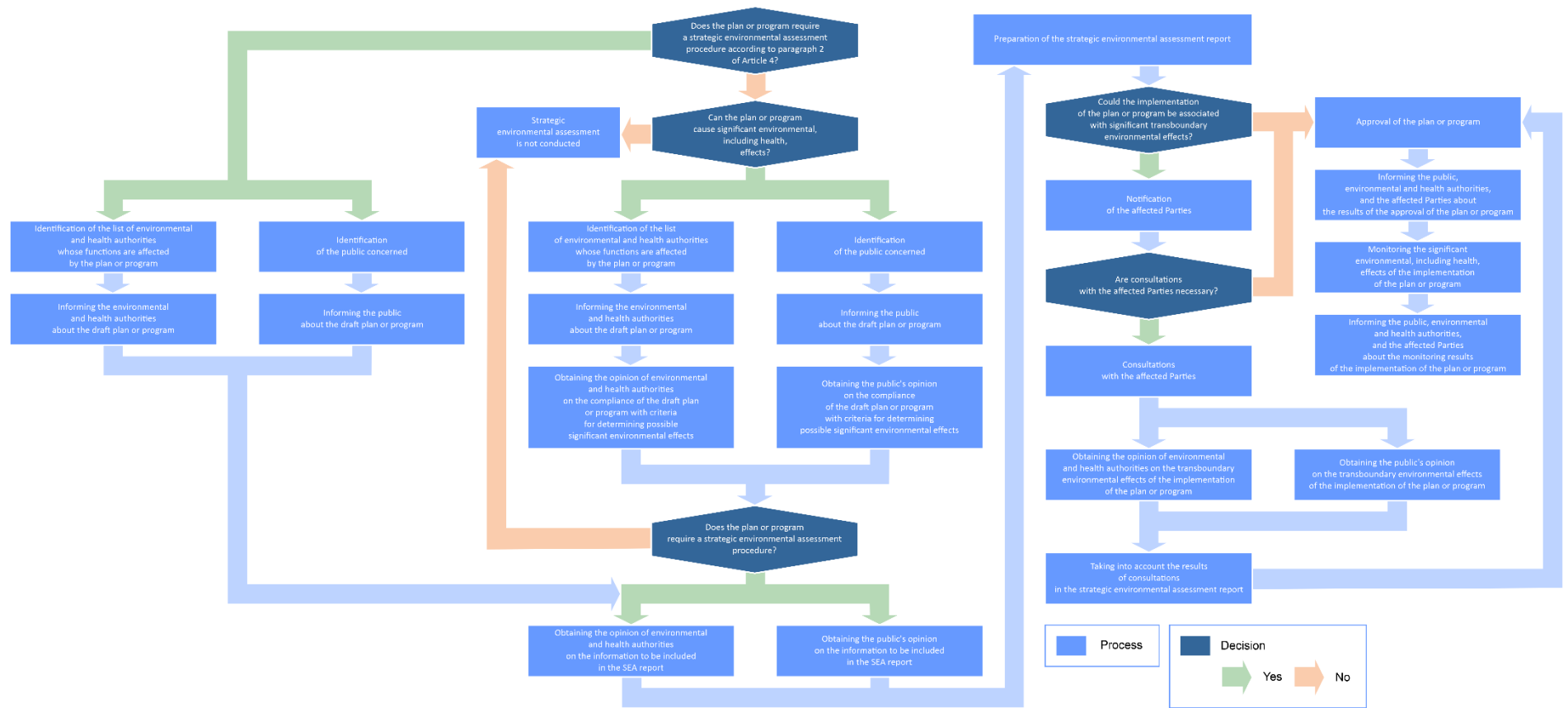
- (a) A digital platform should be central, and accessible both to authorities and to the public. This platform may include modules for initiators to submit applications, conduct public consultations and discussions, and monitor the results of the SEA. Thanks to data centralization, process participants will be able to monitor the status of applications and documents in real time, as well as to receive notifications about the need for their revision or about new legal requirements;
- (b) To ensure consistency with the Protocol, it is important to implement common data exchange standards that comply with international requirements and regulations. This will ensure comparability and compatibility of information at the international level and facilitate cross-border data exchange. Existing national systems and data registries should also be taken into account when automating the SEA process. For example, SEA registers should be integrated with the institution's automated document management system, if available, and registers of national legislation and environmental registers available in the country;
- (c) User feedback and support mechanisms should be in place to ensure prompt responses to emerging issues and problems and to facilitate the continuous improvement of software and data registries and increase their effectiveness;

- (d) An important element of automation is also a module for conducting expert assessments and issuing conclusions. Experts should be able to interact with the system to upload their reports and conclusions, which will increase the efficiency of the document approval process, and have access to other national environmental registers, including registers related to public health and environmental monitoring data;
- (e) Registers can be integrated with geographic information systems to visualize the affected areas of planned projects and programmes, allowing for a better assessment of their potential environmental effects;
- (f) In the process of creating SEA registers and automating them, data protection is a key aspect. Data protection not only ensures the security and confidentiality of information, but also maintains the confidence of all stakeholders in the SEA process. Given this, security recommendations should include a number of measures aimed at protecting information at all stages of its life cycle;
- (g) As data confidentiality can be guaranteed by encrypting both stored and transmitted data, information from SEA registers must be securely encrypted to prevent leakage or unauthorized access. It is also important to differentiate access by providing different levels of access to different groups of users by establishing strict authentication and authorization procedures based on the use of passwords, biometrics or electronic keys;
- (h) To maintain data integrity, use systems that can track and verify any changes to the data, including regular audits and reviews. This will ensure that the information in the registers is accurate and up to date, and that any changes are documented and can be traced back to the source;
- (i) As availability of data is essential for the efficiency of the SEA process, data must be protected from attacks and failures that could disrupt access to it. Backup and disaster recovery strategies must be integrated into the registry infrastructure so that in the event of any disaster, data can be quickly recovered;
- (j) Technological solutions such as firewalls, antivirus software, as well as virtualization and cloud technologies, can serve to strengthen the overall system security. These tools will help protect the registry infrastructure from external threats and ensure its stable operation;
- (k) Compliance with international data protection standards such as the European Union General Data Protection Regulation and national legislation is mandatory. This requires regularly reviewing policies and procedures to ensure that SEA registries comply with current regulatory requirements and data protection best practices;
- (l) Regular training should be provided for software users to interact effectively with data registries and take full advantage of their capabilities. Personnel training may include training, seminars and information sessions aimed at increasing users' security competencies – for example, training in the correct handling of confidential information, rules for creating and using passwords, rules for searching for information, and using geographic information systems.

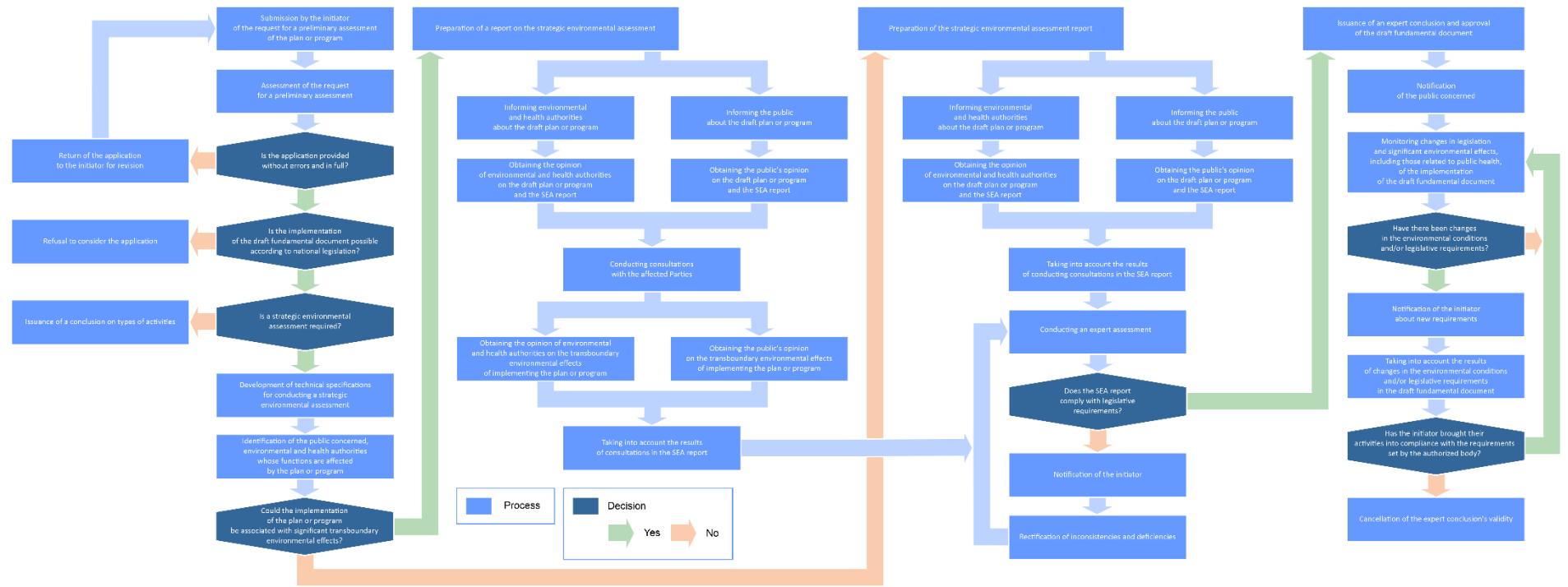
In conclusion, to maintain confidence in the SEA process and its results, it is important not only to create a reliable data protection system but also to ensure the transparency and accessibility of the information for all stakeholders: international organizations, government bodies, scientific and expert organizations, and the public – whose participation and involvement is key in the environmental assessment process.

# Annex. Process mapping: block diagrams of processes/functions of SEA registers

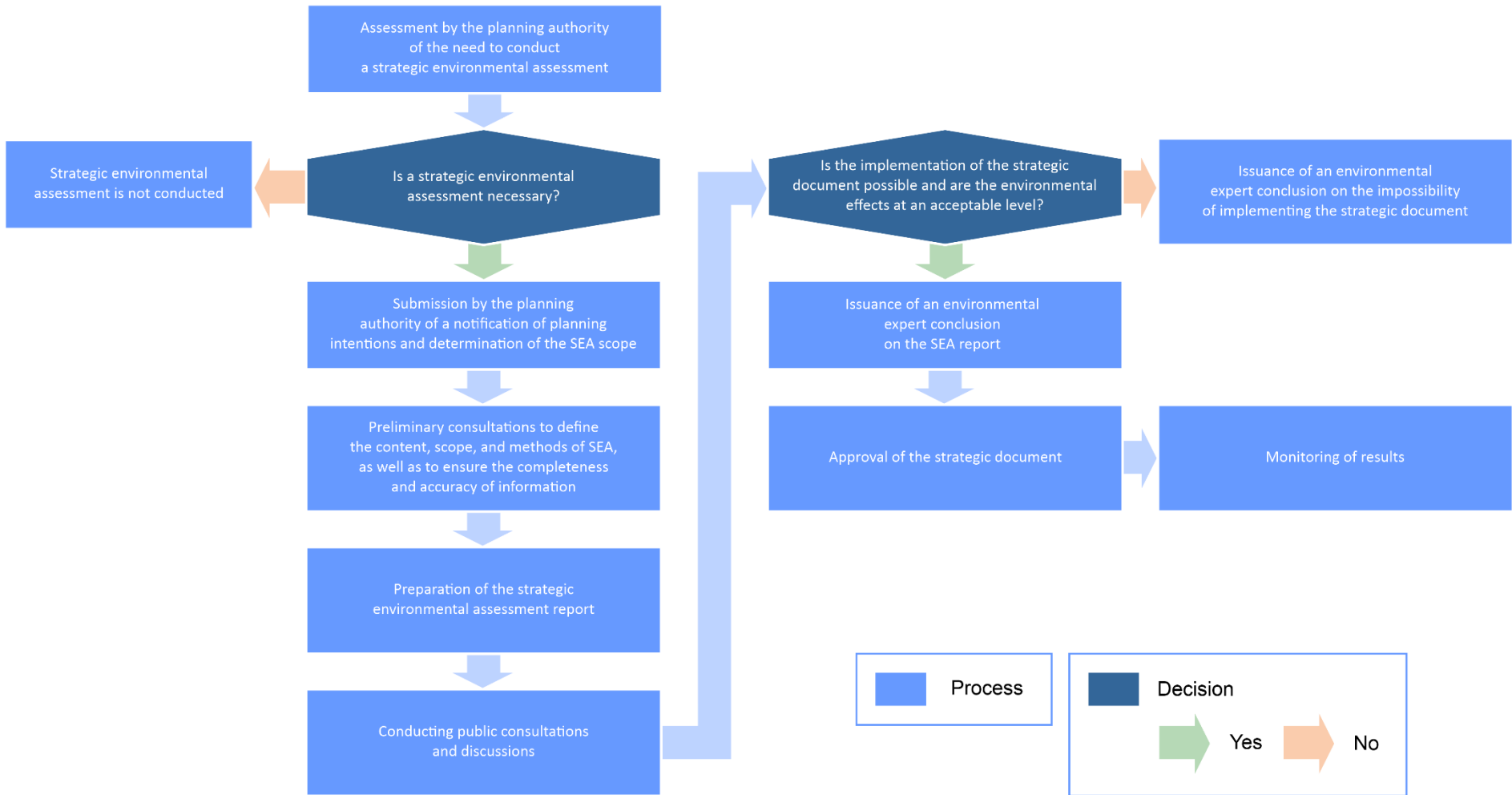
## SEA Protocol



# Armenia



Azerbaijan



Georgia



The Republic of Moldova

