

PROCEDURE FOR IMPLEMENTATION OF STRATEGIC ENVIRONMENTAL ASSESSMENT IN THE FIELD OF LAND MANAGEMENT ON THE BASIS OF INTEGRATION MODELS

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Abstract.

This article analyses the legal framework for strategic environmental assessment of state planning documents in the EU, where such an assessment has been conducted for a long time, as well as in Ukraine. The lack of scientific and methodological bases for the implementation of the procedure of strategic environmental assessment in the field of land management has been established. The procedure for implementing the SEA in land management has been updated, namely for land management documentation, that is a subject to such assessment. The stage of development of such documentation on which it is most expedient to carry out SEA is offered.

In the framework of this study, land management documentation, that is a subject to strategic environmental assessment, as well as the conditions under which individual documents are subject to SEA are defined. The goals and objectives of the SEA in the field of land management are defined, as well as the main stages of the SEA, in particular in the field of land management.

We have analysed the models of integration of strategic environmental assessment into land management and found that the introduction of partial and complete models of integration of SEA into land management is the most appropriate. The list of components which should be contained by the SEA of land management documentation is offered, and also the most expedient analytical tools necessary at realization of SEA are defined.

Key words: *strategic environmental assessment, SEA, land management documentation, nature reserves.*

Problem statement. The Strategic Environmental Assessment (SEA) has been mandatory since 2001 for all member states of the European Union. The implementation of the SEA by EU member states is carried out in accordance with Directive 2001/42 / EC "On the assessment of the effects of certain plans and programs on the environment". Its purpose is to ensure the highest level of environmental protection and promote the implementation of environmental factors as part of the development and adoption of plans and programs of state planning, aiming to promote sustainable development through strategic environmental assessment of state planning documents, as their measures can have a significant impact on the environment (Fig. 1) [1].

In its economic part, the Association Agreement between Ukraine and the EU provides for the approximation of Ukrainian legislation to the European one on environmental issues. It is necessary to implement three Regulations and twenty-six EU Directives, in particular 2001/42 / EU "On Environmental Impact Assessment of Certain Plans and Programs", but the most important is the introduction in our country of a new vision of state planning documents. on risks to the environment in the process of implementing the plan or program, as well as providing measures to minimize negative impacts on the environment [1].

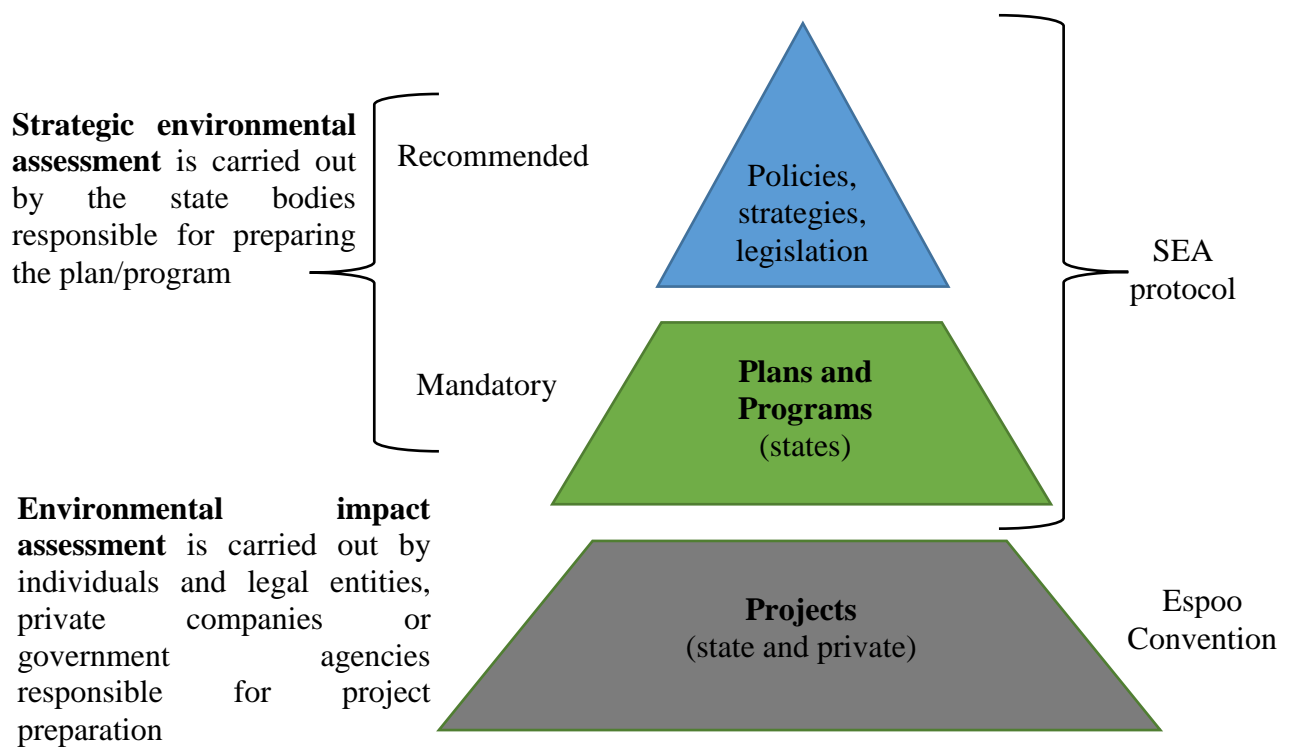


Fig. 1. Conducting SEA in accordance with the Protocol of the United Nations Economic Commission for Europe on SEA [1]

The Law of Ukraine "On Strategic Environmental Assessment" provides for its implementation for a number of documents [2], but the lack of scientific and methodological principles of SEA in the field of land management determines and enhances the relevance of the work.

Analysis of recent research and publications. The study of aspects of the SEA of state planning documents, in particular the identification of shortcomings in the practical implementation of such an assessment of various types of municipal strategies and programs, studied the following researchers: O. Ignatenko, V. Karamushka, I. Azarova, H. Marushevsky, V. Potapenko, O. Riabukh, V. Fedorchak.

The purpose of the study is to form a methodology for implementing SEA in the field of land management based on the analysis of integration models. Providing a proposal to update the procedure for the development of land management documentation, which is subject to SEA, in order to integrate SEA into such a procedure. Analyse potential SEA integration models in the field of land management.

Presenting main material. In 2018, the Law of Ukraine “On Strategic Environmental Assessment” came into force, which defines the SEA as: “prevention, reduction and mitigation of possible negative consequences, which includes determining the scope of SEA, preparation of SEA report, conducting public discussions and consultations (if necessary – cross-border consultations), taking into account in the state planning document SEA report, results of public discussions and consultations, informing about the approval of the state planning document and is carried out in the manner prescribed by this Law” [2].

Recently adopted Law of Ukraine “On Strategic Environmental Assessment” relations in the spheres of environmental impact assessment and public health impact assessment that may arise as a result of the implementation of state planning documents are regulated. This Law applies to state planning documents developed for the following areas: agriculture, fisheries, forestry, energy, transport, industry, waste management, environmental protection, telecommunications, water resources, tourism, urban planning or land management (schemes). Specifically, it should be noted that this applies only to documents that provide for activities, or that contain objects for which the law provides for environmental impact assessment, or in the event of possible consequences for the territories or objects of the ecological network and nature reserve fund, except those that are planned to create or expand the territories or objects of nature reserves [2].

At the same time, the first part of Article 186 of the Land Code of Ukraine provides that: “land management schemes and feasibility studies for the use and protection of lands of administrative-territorial units are subject to the SEA” [3].

Given the above legislation, we can say that land management projects for the allocation of land plots, which in accordance with the law declared an object of nature reserves, has conservation status for purposes not related to nature reserves, conservation activities and accordingly, the provision (transfer) of such land plots for ownership or use may have probable consequences for territories and objects with environmental protection status is also subject to the SEA procedure.

Comprehensive plans for spatial development of territorial communities, detailed plans of territories, master plans of settlements and other types of documentation, which the legislator positions as both urban planning documentation at the local level and land management documentation that formalizes the basic planning decisions for the development of the settlement or united territorial community are also subject to SEA, so the list of land management documents subject to SEA should be expanded, detailed, in accordance with Fig. 2.

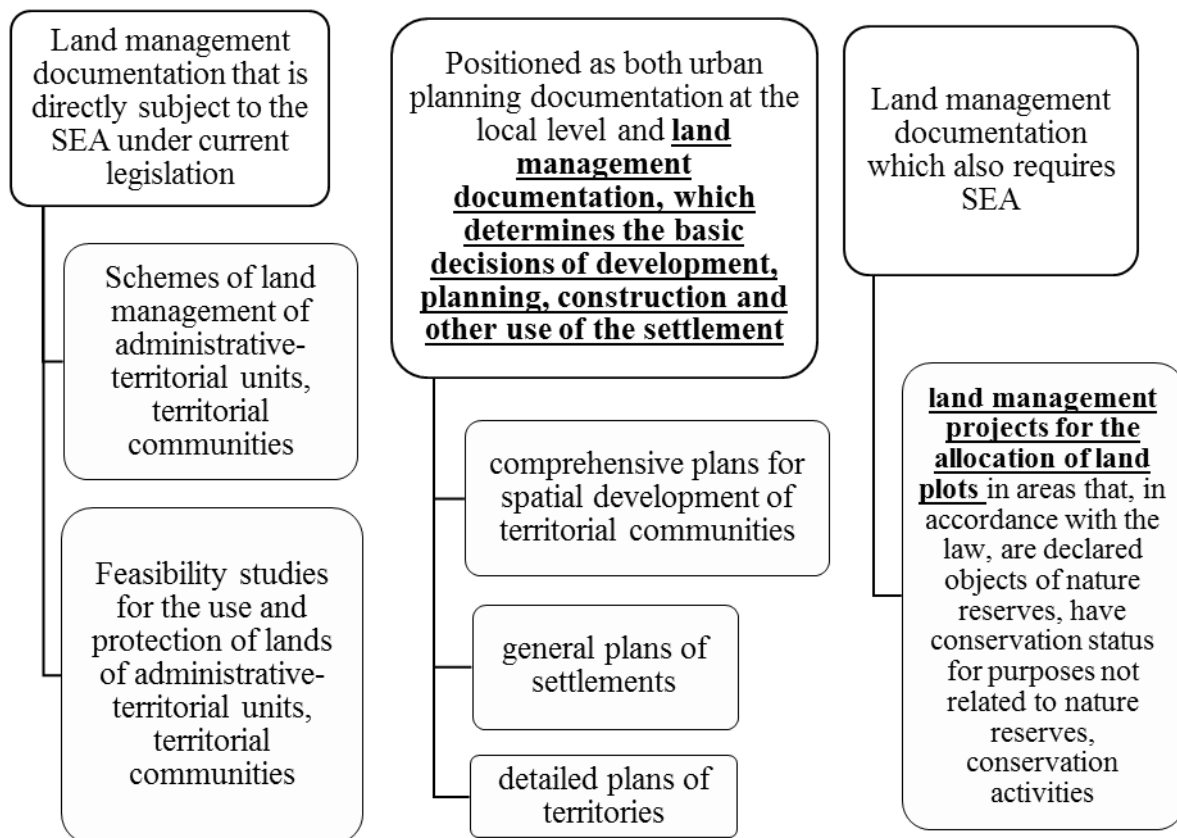


Fig.2. Documentation on land management that is a subject to SEA

In general, it can be said that conducting a SEA helps to avoid poor planning (as you know, poor planning leads to poor performance), and the implementation of the process of competent SEA guides and ensures sustainable development. The following goals and objectives of the SEA are intended to facilitate this process:

1. Priority of sustainable development and environmental priorities in the process of land management documentation development. Environmental priorities must take precedence over development priorities. Environmental priorities should be determined through the analysis of internal (we are talking about indicators

of environmental quality, trends in their change, resources, etc.) and external (we are talking about institutional organization, human resources, development goals defined at local, regional and national levels, regulatory framework, etc.) factors.

From a practical point of view, this means that such planning activities cannot be part of strategic documents. This is due to the fact that having received economic benefits at the initial stage – on the one hand, on the other – we receive a decrease of social indicators, depletion of natural resources and deterioration of the environment.

2. Accumulation and further analysis of information, which is the basis for making informed design and management decisions, taking into account the positions of all parties. Design and management decisions must be considered and duly justified, requiring a detailed analysis of a significant amount of relevant data and information. Accordingly, the following are subject to collection, organization and analysis: 1) demographic indicators and trends in their changes; 2) assessment of natural, labour and intellectual resources; 3) views of stakeholders. Particular attention should be paid to the full involvement of the public in the early stages of SEA, as public discussions and consultations are the key to making informed decisions and their effective implementation.

3. Assessment of the probable (project) impact on the state of the environment and human health of strategic options and measures proposed by the land management documentation. In the presence of complete, relevant information, its analysis provides an opportunity to assess the likely impact of planned activities on certain environmental and social indicators and parameters, such as public health, environmental conditions and more. As a result, it is possible to choose a design solution that neutralizes or minimizes such impact to an acceptable level.

4. Determining the conditions for environmentally friendly implementation of strategic design decisions. Implementation of design and management decisions provided for in land management documentation should be optimal in the context of environmental, economic and social priorities and principles [4].

Procedurally, the SEA process in land management should include the following main stages for its implementation, which would not differ from the SEA for other state planning documents, namely:

- Assessment of the need for SEA (screening).
- Defining the scope of SEA (scoping).
- Preparation of a report on the SEA.
- Consultations with the authorities.
- Public participation.
- Cross-border consultations (if necessary).
- Decision making.
- Ecological monitoring of the implementation of the planned measures of

land management documentation [4].

An important procedural component is a SEA integration into land management model determination, which may have several options (Table 1).

Table 1. Models of integration of SEA into land management [4]

Model	Retrospective model. SEA and development of land management documentation are independent processes. SEA is performed for the developed land management documentation, which was publicly discussed immediately before its approval
Advantages	SEA can be performed during the adjustment of land management documentation (if such adjustment is provided). With the support of the body that commissions the land management documentation, the SEA can be useful for the implementation of the provisions of the land management documentation and the accumulation of practical experience with the SEA.
Disadvantages	The SEA does not influence the process of land management documentation development. Duplicate processes (eg consultations and public discussions).
Model	Partial integration of SEA and development of land management documentation. SEA and development of land

	management documentation are performed as parallel processes
Advantages	Saving resources in collecting baseline data and conducting consultations with the Ministry of Environment, the Ministry of Healthcare or local governments and discussions with the public. Early consideration of different points of view.
Disadvantages	Increasing the burden on developers of land management documentation. The need for coordination between groups that develop land management documentation and implement SEA. The need to adapt the SEA work plan to the changes that occur in the process of land management documentation development.
Model	Full integration of the SEA and development of land management documentation
Advantages	Saving resources in collecting baseline data and conducting consultations with the Ministry of Environment, the Ministry of Health or local governments and discussions with the public. Consideration of different points of view at the planning stage.
Disadvantages	Loss of independent status of SEA executors due to its full absorption by the land management documentation development process.

Introduction of partial and complete models of integration of strategic environmental assessment into land management, according to which SEA reports should be prepared before approval of land management documentation, is the most appropriate for land management, in contrast to the retrospective model.

Methodical recommendations for the development of land management schemes and feasibility studies for the use and protection of lands of administrative-territorial units (paragraph 1.14.) provides for the procedure for a land management scheme development. According to the procedure, preparatory work is performed first and then the task for the scheme development is formed. The key stage of this procedure is a development of a land management scheme, which includes production of materials and documents. In the end, its approval is carried out [5].

Therefore, the SEA Report should be part of the Guidelines for the development of land management schemes and feasibility studies for the use and protection of lands of administrative-territorial units.

The SEA report contains the following information, considering the content and level of detail of land management documentation, current knowledge and assessment methods:

- Content and main goals of land management documentation, its connection with other state planning documents.

- Information in the form of a description of the current state of the environment, including information on public health and forecasting its condition, if land management documentation would not be approved (according to administrative data, research results and statistical information).

- Information in the form of characteristics of the forecast (project) state of the environment, the state of health of the population, the conditions of people's life in the territories, which are subject to impact (according to administrative data, research results and statistical information).

- Potential environmental problems, including information on possible risks to public health related to the implementation of decisions provided for in land management documentation, including areas that have been granted environmental status (according to administrative data, research results and statistical information).

- Environmental commitments identified at the international, national and other levels, including the prevention of adverse effects on public health, related to land management documentation, as well as ways to comply with such obligations in the process of land management documentation development.

- Description of positive and negative secondary, synergistic, cumulative, permanent and temporary, namely short- (1 year), medium- (3-5 years) and long-term, 10-15 years, and if necessary - 50-100 years) consequences for the environment or public health.

- Description of the measures envisaged to be taken in order to prevent and minimize the negative consequences of the implementation of decisions provided for in the land management documentation.

- Justified alternatives considered, description of the way in which the SEA was carried out, including any complications (lack of information or technical means for the implementation of the SEA).

- Measures provided for monitoring the consequences for the environment and public health from the implementation of design and management decisions of land management documentation.

- Description of the transboundary effects that are likely to occur on the environment and public health.

- Non-technical information intended for a wide audience (in the form of a summary).

Further implementation of SEA in land management requires the definition of the most appropriate analytical tool for SEA, including:

1. Approaches and methods based on impact assessment.
2. Characteristics of the current state of the environment and public health.
3. Assessment of the magnitude and significance of impacts.
4. Methods of strategic analysis.
5. Analysis of the context of strategic planning.
6. Target analysis.
7. SWOT analysis.
8. Indicative methods.
9. Evaluation of cumulative effects.

Conclusions and prospects. The implementation of the SEA in the field of land management is an extremely important and necessary procedure, as it brings land management documentation to a qualitatively new level that meets high UN standards and contributes to addressing the environmental challenges of the XXI century. The proposed procedure for the implementation of SEA in land management, namely for land management documentation, which is subject to such assessment, will be a significant driver of effective implementation of SEA into land management documentation. We believe that this type of assessment should be

carried out at the stage of development of land management documentation, which precedes the approval of such documentation.

Particular attention in the process of strategic environmental assessment in land management should be paid to the stage of “consultations” – a public invitation to discuss through the introduction of the practice of publishing draft land management documentation and the ability to take into account the proposals from the public.

After the decision is made and the land management documentation and the SEA report are approved, the responsibility of the parties for monitoring the consequences of the adopted documentation and its design decisions should be settled.

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ПРОЦЕДУРА ВПРОВАДЖЕННЯ СТРАТЕГІЧНОЇ ЕКОЛОГІЧНОЇ ОЦІНКИ В СФЕРІ ЗЕМЛЕУСТРОЮ НА ОСНОВІ ІНТЕГРАЦІЙНИХ МОДЕЛЕЙ

Анотація.

У даній статті проаналізовано нормативно-правові засади здійснення стратегічної екологічної оцінки документів державного планування як в країнах Європейського союзу, де така оцінка проводиться вже тривалий час, а також в Україні. Встановлено відсутність науково-методологічних засад здійснення процедури стратегічної екологічної оцінки в сфері землеустрою. Оновлено процедуру впровадження стратегічної екологічної оцінки в землеустрої, а саме для документації із землеустрою, яка підлягає такій оцінці. Запропоновано етап розроблення такої документації, на якому найдоцільніше проводити стратегічну екологічну оцінку.

У рамках даного дослідження встановлено документацію із землеустрою, що підлягає стратегічній екологічній оцінці, а також умови за яких окремі документи підлягають СЕО. Визначено цілі та завдання стратегічної екологічної оцінки в сфері землеустрою, а також з'ясовано основні етапи проведення СЕО, зокрема в сфері землеустрою.

Проаналізовано моделі інтеграції стратегічної екологічної оцінки в землеустрій та встановлено, що впровадження часткової та повної моделей

інтеграції СЕО в землеустрій є найбільш доцільними. Запропоновано перелік складових, які повинна містити стратегічна екологічна оцінка документації із землеустрою, а також визначено найбільш доцільний аналітичний інструментарій необхідний при здійсненні СЕО.

Ключові слова: стратегічна екологічна оцінка, СЕО, документація із землеустрою, природно-заповідні території.

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ПРОЦЕДУРА ВНЕДРЕНИЯ СТРАТЕГИЧЕСКОЙ ЭКОЛОГИЧЕСКОЙ ОЦЕНКИ В СФЕРЕ ЗЕМЛЕУСТРОЙСТВА НА ОСНОВЕ ИНТЕГРАЦИОННЫХ МОДЕЛЕЙ

Аннотация.

В данной статье проанализированы нормативно правовые основы осуществления стратегической экологической оценки документов государственного планирования как в странах ЕС, где такая оценка проводится уже длительное время, а также в Украине. Установлено отсутствие научно-методологических принципов осуществления процедуры стратегической экологической оценки в сфере землеустройства. Обновлена процедура внедрения СЕО в землеустройстве, а именно для документации по землеустройству, подлежащей такой оценке. Предложен этап разработки такой документации, на котором целесообразнее всего проводить СЕО.

В рамках данного исследования установлена документация по землеустройству, подлежащая стратегической экологической оценке, а также условия при которых отдельные документы подлежат СЕО. Определены цели и задачи СЕО в сфере землеустройства, а также выяснены основные этапы проведения СЕО, в частности, в сфере землеустройства.

Нами проанализированы модели интеграции стратегической экологической оценки в землеустройство и установлено, что внедрение частичной и полной моделей интеграции СЕО в землеустройство наиболее целесообразно. Предложен перечень составляющих, которые должны содержать СЕО документации по землеустройству, а также определен

наиболее целесообразный аналитический инструментарий, необходимый при осуществлении СЭО.

Ключевые слова: *стратегическая экологическая оценка, СЭО, документация по землеустройству, природно-заповедные территории.*