

**Policy**

Europe: Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment; Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

Italy: dlgs 152/06, (Codice Ambiente)

First draft

TOOL SEA/EIA – Territorial Scale: Campania

WHY

Environmental assessment is a crucial part of plans and project within the European Union.

According to the Treaty on the Functioning of the European Union (art. 191), Union policy on the environment contributes to pursuit several objectives: preserving, protecting and improving the quality of the environment; protecting human health; prudent and rational utilisation of natural resources (principle of prevention); promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

Following the aforementioned principle of “prevention”, Environmental Assessment of plans and projects has the objective of preventing harmful effects on the environment. This principle can be also considered a cost-effective rule, since it is cheaper to prevent environmental damages than to act after the damage occurred. The cited principle has lead to the establishment of administrative tools, such as EIA (Environmental Impact Assessment) and SEA (Strategic Environmental Assessment), which aim to include environmental considerations before the decision is taken (e.g. before the establishment of an industrial site or before the design of a new urban development plan).

In the process of elaboration of SEA and EIA, the description of the state of the environment – not only the natural environment, but also the cultural heritage, social features, etc. – has a crucial role.

L1 Documentation of the state of the environment

Study area (i)
 Surface water (ii)
 Protected areas (iii)
 Population and population density (iv)
 Physical landscape (v)
 Lithology (vi)
 Soils (vii)
 Land use (viii)
 Climate data (ix)
 Potential Ecosystem Services (MAES approach) (x)
 Hydrogeological hazard and risk (xi)
 Cultural heritage (xii)

FOR WHOM

The “SEA/EIA” tool is aimed at professionals in the field of urban and territorial planning, public administrations and researchers.

HOW – if you want to select your *Region Of Interest (ROI)*ⁱ

The tool allows the free selection of a region of interest ROI in the entire territory of Campania region by following a very simple procedure:

Operational procedure

- Simply select the Administrative limits or;
- Click on the "Draw (Polygon)" button on the top bar and draw the ROI boundary;
- Assign a name to the selected ROIⁱⁱ;
- Click on the "Save" button to keep the ROI available in the system for further queries.

L1 - STATE OF THE ENVIRONMENT	HOW – if you want to select L1 “State of the environment”
	Operational procedure
	By users’ clicking on icon L1, the “model requester” appears, allowing users to choose the Region Of Interest (freely drawn or administrative units). Click on the “evaluate” button and calculation starts. The system will automatically open the “Results” sub-folder; by clicking the last elaboration performed, in the “Elaboration detail” folder the users can view - and download - the processing result, as a .pdf report.
	What for

The L1 “State of the environment” tool provides information on the environmental state of the ROI. The tool produces a .pdf report containing the following information:

- Protected areas
- Population and population density
- Land use
- Climate data
- Potential Ecosystem Services (MAES approach)
- Hydrogeological hazard and risk
- Etc.

The .pdf report contains final remarks on methodology and data sources. The tool is currently under development and some data and information in the report are missing or may not be correct.

LIMITATIONS

The user should be aware that tool L “SEA/EIA” has some limits:

- some tools/outputs may be incomplete, with some data sources and information, missing or having low accuracy. Of course, environmental data inherit the limitation of the original dataset. Please check in corresponding metadata.
- there may be miss-classifications of some features due to both bad performance of the classifier and limited resolution (10 metres) of the “ISPRA-SNPA Land Consumption Map”, which is used as an elaboration base layer.

The cited limits will be addressed in the coming months as the LANDSUPPORT platform will be developed and improved.

FUTURE DEVELOPMENT

The following future developments are expected:

- upon request from stakeholders and users, new tools can be developed.

ⁱ Special care is required when user draws/select the Region of Interest. In fact LANDSUPPORT is a multi-scale decision support system. Each of the 15 available tools is designed for a specific application and for a specific scale. Furthermore, the databases using specific standards required for that specific scale. The users of LANDSUPPORT web platform must therefore be well aware of the limitation embedded in the different maps that they require for their specific application. The users must be expert on their specific problem and must understand if the input data offered by the platform are suitable for their problem. In light of the above, the system provides very reliable results only if used appropriately.

ⁱⁱ It is also possible to draw a ROI with numerous polygons. In this case, it is possible to assign different values (eg numbers) to each of the drawn polygons.