



## Confronting reality in strategic environmental assessment in Slovenia – Costs and benefits



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### ARTICLE INFO

#### Article history:

Received 24 April 2014

Received in revised form 21 July 2014

Accepted 2 August 2014

Available online 28 August 2014

#### Keywords:

CBA

SEA

Optimisation

Planning process

### ABSTRACT

We enlarge on the viewpoint published in the *Environmental Impact Assessment Review* in 2012 – *A viewpoint on the approval context of strategic environmental assessments*. Additional alerts concerning the procedural ineffectiveness of the strategic environmental assessment (SEA) process from the cost–benefit point of view are advanced. The major contribution to the long lasting, costly SEA processes, comes from ultraistic treatment of Natura 2000.

The case study deals with a plan for constructing a traffic bypass around Škofljica, a town near Ljubljana. Based on their conclusions the authors propose that the following elements of the SEA procedure should be improved and optimised:

- CBA for SEA should become a regular component when measuring its effectiveness.
- Concretisation of expected SEA inputs to the plan should clarify its role at the earliest stage of the process.
- SEA should contribute interactively to the optimisation of alternatives; cost–benefit analysis of the SEA process could support this process.
- Nature protection interest should be confronted and balanced with wider development interests as formulated in the plan and should not be applied in absolute terms (e.g. Natura 2000).

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### Introduction

The latest European Commission (EC) report on the application and effectiveness of the SEA Directive – Directive 2001/42/EC (COM(2009) 469) – reveals numerous and substantial deficiencies of the SEA procedure in the majority of member states (MS). In a reflection on this report, Kontić and Kontić (2012) deal with the inadequacies of the approval/permitting context of SEA. This viewpoint was aimed at drawing attention to the gradually prevailing approval of the purpose of strategic environmental assessments (SEAs) in Slovenia and in some other countries of the EU. The key issue, according to the authors, is that the administrative, permitting context of SEA has ousted the primary goal of environmental impact assessment, namely optimisation of development proposals – plans and programmes (P&P) – in favour of causing minimal environmental impact. In addition, the approval context moved the basic philosophy of environmental evaluation from the area of environmental protection interests, integrated with coherent social and economic development, to the area of political power for deciding about land-use, spatial

management and acceptability of a particular economic development proposal. In addition to these views the present paper emphasizes the effects of extreme treatment of Natura 2000 on costs and efficiency of SEA. For example, Alterra reports how unclear information in the selection phase of the Natura 2000 sites and supplementary step by step addition of more and more sites to the Natura 2000 network, leads to misunderstanding and frustration of stakeholders – this has occurred in several countries (Alterra, 2010). Beunen et al. (2013) also conclude the implementation of Natura 2000 to be a failure in the Netherlands. In the first years after 2000, most actors in the Netherlands were surprised that the presence of small creatures (e.g., the hamster, *Cricetus cricetus*, the Natterjack toad, the sand lizard, etc.) was sufficient reason to stop major developments. Surprise quickly turned into irritation and frustration because developers, entrepreneurs and the local governments involved found that the legal requirements caused costly delays, expensive lawsuits and lingering uncertainty. Thus nature conservation became increasingly viewed as a brake on economic development. Several examples of conflict are identified, e.g. no construction of wind mills: Lewis Wind Farm in the UK (The Scottish Government, 2008), and a wind farm at Volovja reber in Slovenia (Golobič, 2005); restriction on port expansion in Antwerp, Belgium (OECD, 2005) and the Port of Rotterdam (Palerm, 2006); fishing rights for cockles in the Wadden Sea (Swart and Van Anel, 2008), etc. For Slovenian cases (Golobič, 2005; Kaligarič, 2010;

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Urbis, 2007a, 2012); the duration of SEA processes is clear: they lasted more than five years each, due to ineffective countering of the Natura 2000 approach. Based on information in the literature it can be concluded that other cases also lasted longer than initially expected. However, costs of the prolonged SEA processes were not discussed in reports.

Gantioler et al (2010) made a review study, commissioned by the EC, of the costs and benefits of the Natura 2000 system which shows that, even though our knowledge on the value of biodiversity, ecosystems and their service is steadily increasing, there is still an apparent lack of quantitative/monetary and well-documented information on the socio-economic benefits associated with protected areas in Europe. According to the review carried out in the context of the cited study, existing information on the socio-economic significance of Natura 2000 is mainly related to benefits arising from direct and indirect employment supported by the Natura 2000 sites. Although information is available on the socioeconomic impacts of cultural ecosystem services, in particular tourism and recreation, there is a clear shortage of well-documented examples demonstrating and, in particular, quantifying the value of other ecosystem services relevant in the context of the network, such as sustainable production of certified products from Natura 2000 sites, and the role of Natura 2000 areas in purifying water and maintaining healthy populations of species, such as pollinators and natural enemies of pests (Constanza et al., 1997; Dixon, 2008; Dixon et al., 1994; Econ Pöyry, 2010; Environmental Valuation I and II, 1999; Flyvbjerg, 2005; Haneman, 1992; Hufschmidt et al., 1983; King and Price, 2004; Kneese, 1964). In addition, the available information (e.g. information on employment and tourism linked with Natura 2000) is based on a rather sporadic collection of local case studies and examples, making it difficult to form a coherent picture of the associated benefits on a broader scale. Only a handful of studies that try to assess the gross/net benefits of Natura 2000 at the regional or national level (Gantioler et al., 2010) exist. These studies also often focus on a limited number of socio-economic impacts (e.g. excluding several ecosystem services), therefore falling short in addressing the true welfare benefits arising from the Natura 2000 sites.

In the context of revealing effectiveness, costs, and benefits of SEA, the review studies in the last decade, and even earlier, report on certain deficiencies of SEA and EIA, and provide general, mostly opinion based, information on the costs and benefits of formal environmental assessments (COWI, 2009; EC, 1996; EC, 2006; Institute for Environmental Studies, 2007; OECD, 2006; Sadler and Dalal-Clayton, 2010; World Bank, 2003). In this relation, however, it is important to stress the need for distinction between a (e.g., construction, infrastructure) project related CBA, monetization of the environmental quality with cost evaluation of the environmental impacts, and the CBA for SEA procedures. The former two are covered by an extensive literature, research and other contributions discussing various aspects of the topic, including their strengths and limitations (Asafu-Adjaye, 2000; Bockstael et al., 2000; Braden and Kolstad, 1991; Brennan and Eusepi, 2009; Canadian Cost-Benefit Guide, 2007; Clawson and Knetsch, 1966; Commonwealth of Australia, 2006; Constanza et al., 1997; Dixon, 2008; Dixon et al., 1994; Environmental Valuation I and II, 1999; Flyvbjerg, 2005; Haneman, 1992; Hufschmidt et al., 1983; King and Price, 2004; Kneese, 1964; Krutilla, 1967), while coverage of the third by any kind of literature, including case studies, is relatively poor. The report of the EC from 1996 examines the relative costs and benefits associated with the implementation of environmental impact assessment (EIA) and SEA in selected countries within the EU (note: in 1996, the SEA Directive was still not accepted, although strategic environmental evaluation was already in widespread use throughout the EC). Respondents in the survey identified some benefits of SEA – improvement of the basic strategic concepts of the P&P, enhancing P&P's contribution to the overall goals of environmental sustainability, enhancing transparency, etc. In the conclusion, the Study reveals that SEA is relevant at all levels of public decision making, and that the costs are generally borne by the public sector. It also reveals that SEA

is being used by organisations as a logical extension to their existing strategic planning processes.

In its study (Institute for Environmental Studies, 2007), the Institute for Environmental Studies presents the results of a review of existing studies that identify the costs and benefits associated with implementation of the EIA Directive. The costs of performing an EIA are mostly less than 1% of the overall (investment) costs of the project. EIA costs incurred by public administrations consist mainly of man-hours, which are often not specified. In some cases it is argued that delays are a major cost item. This survey has not encountered any studies trying to quantify or even monetize environmental improvement that can be attributed to the EIA process. Most/all benefits of EIA were not monetized but there is widespread agreement that the benefits outweigh the costs.

Fundingsland Tetlow and Hanusch (2012) assess SEA as a flop or a success story, since their study revealed mixed findings on its effectiveness. In some cases SEA has failed to live up to expectations but in others it has led to changes in P&P contents and to increased transparency. The authors recommend that SEA must become more strategic and must be integrated into the development and decision making of P&P.

The last study on the implementation of the Directive on SEA is based on a review of responses of the 27 EU Member States to the questionnaire concerning the application and effectiveness of the SEA Directive. As already mentioned, this study reveals problems related to the implementation of SEA in almost all MS (COWI, 2009). Costs reported on SEAs are mostly based on estimates and vary according to the type of plan and programme being assessed (ranging from €3.000 to €100.000). Most Member States either do not have reliable estimates of the costs of preparing the procedural steps of the SEA process, or claim that they have insufficient experience to provide an estimate. Some Member States acknowledged the benefits of SEA but they have not monetized them. The main conclusions about benefits and cost, based on these studies/reports, are: SEA is a bureaucratic process, ineffective and of minor importance in improving P&P; it increases time and money costs and, in only a few cases, contributes to environmental quality and safety and to increased public involvement. These conclusions, however, appear different from those recently presented by the researchers, who argue that SEAs contribute to plan improvement, environmental quality protection, and sustainable development (Arts et al., 2012; Fisher, 2003; Fischer, 2009; Impact Assessment and Project Appraisal, 2012; Morrison-Saunders and Fischer, 2009; Sadler and Dalal-Clayton, 2010; Therivel and Minas, 2002; Therivel, 2005; Van Doren et al., 2013). Based on all these studies it is difficult, or even impossible, to draw clear conclusions as to whether the benefits of the procedure exceed costs. Such a situation thus allows the conclusion that guidance provided by the EC on the methodology for carrying out cost-benefit analysis (EC, 2006), together with its purpose, has still to be accepted and applied by Member States. The Manual of European Environmental Policy (Institute for European Environmental Policy, 2011) emphasizes the importance of preliminary assessment of the cost and benefit of the policy, if introduced, and of their contribution to achieving the environmental and social objectives. This procedure is called Impact Assessment (IA), not CBA, but it is clear that CBA is part of such an assessment (EC, 2005).

Due to such an unclear and mixed situation throughout the EU regarding the costs and benefits of SEA it has been decided that the issue should be more thoroughly investigated in Slovenia. Organisationally this has been performed in the framework of a targeted research project. The study covers two case studies – one the SEA process for the bypass around Škofljica, the other a strategic spatial development plan for the city of Ljubljana. In addition, three workshops on the praxis and weaknesses of SEA in Slovenia, together with a survey on the same topic made among Slovenian spatial planners, conductors of environmental reports and representatives of the authorities involved in the SEA processes have been performed.

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