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To cite this article: D. B. Dalal-Clayton & B. Sadler (2017): A methodology for reviewing the quality of strategic environmental assessments in development cooperation, Impact Assessment and Project Appraisal, DOI: [10.1080/14615517.2017.1322811](https://doi.org/10.1080/14615517.2017.1322811)

To link to this article: <http://dx.doi.org/10.1080/14615517.2017.1322811>



Published online: 15 May 2017.



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# A methodology for reviewing the quality of strategic environmental assessments in development cooperation

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## ABSTRACT

A methodology is described for reviewing the quality of strategic environmental assessments (SEAs) and identifying problems associated with them. It was developed to support the work of the OECD DAC SEA Task Team and designed for application to SEAs undertaken in the context of development cooperation. The methodology is based on internationally accepted principles and elements of good practice and is question-based. Three modules separately address three core attributes of SEA: compliance with requirements, technical quality, and utility and benefits of the SEA. The methodology is applicable in various ways from a relatively quick desk exercise taking one or two days and conducted by an individual, to a longer review involving a team with fieldwork, ground-truthing and stakeholder engagement (e.g. for a multi-country SEA). A range of factors that need to be addressed in reviewing SEAs are considered. Independent and trial applications of the methodology to SEAs for development cooperation in Ukraine, the Caribbean and Namibia have shown that it can be usefully and successfully applied in this context.

## ARTICLE HISTORY

Received 19 December 2016  
Accepted 22 March 2017

## KEYWORDS

Strategic environmental assessment; SEA quality; SEA quality review; SEA principles; Namibia; OECD DAC SEA Task Team

## Introduction

Many countries have now introduced legislation, regulations and guidance for the conduct of strategic environmental assessment (SEA). In this regard, the European Union SEA Directive (2001/42/EC) and UNECE SEA Protocol (2003) are notable because of their respective supra-national and international reach as well as their scope of direction, guidance on the conduct of practice and monitoring and review of practice in member states or signatories (see Aulavo 2014; Meuleman 2014). Internationally, SEA is also promoted in development cooperation under guidance and learning reviews developed, for example, by the Development Assistance Committee of the Organisation for Economic Cooperation and Development (OECD DAC 2006), the World Bank (Kjörven & Lindhjem 2002; Loayza 2012) and by various other bilateral and multi-lateral donors (e.g. ADB 2003; CIDA 2004; Yaron and Nelson 2014 for the UK Department for International Development). For the most part, this guidance draws or rests either explicitly or implicitly on agreed general principles of SEA good practice such as those established by the International Association for Impact Assessment (IAIA 2002 – currently under revision). Looking ahead, we also expect these principles and formulations will come under increasing challenge and require modification in an era of cumulative regional and global environmental impacts and risks (Sadler 2016).

As SEA uptake has expanded and practice has increased, exponentially so in the past decade, there has been an increasing demand to review, evaluate or audit completed SEAs to determine their quality and effectiveness, typically with a view to improving performance. These reviews cover various dimensions and aspects of SEA and apply many different approaches, both formal and informal. Of particular interest here are the use of systematic review frameworks and methodologies. This paper draws on elements of this work as well as criteria specific to development cooperation to describe a methodology first developed by Sadler and Dalal-Clayton (2010) as an input for use by member countries of the OECD DAC.

## Background

Many books and papers offer state-of-the-art reviews of SEA systems and practice internationally (e.g. Partidario & Clark 1999; Dalal-Clayton & Sadler 2005; Therivel 2010; Sadler et al. 2011; OECD 2012) or present approaches to analyse country SEA systems (e.g. NCEA 2014). Others consider the effectiveness of their application to policy-making and particular sectors, domains, regimes or countries (e.g. Fischer 2002, 2007; Jones et al. 2005; Mutui et al. 2013; Retief et al. 2008; Sadler & Dusik 2016a; World Bank/UoG/SUAS/NCEA 2011). These issues are a perennial subject of discourse in the literature of the field,

reflecting a pervasive and continuing concern about the quality of SEA practice and what it contributes to environmental planning and decision-making (Sadler and Dusik 2016b).

In the main, reviews on this theme have not probed deeply into operational practice or measured its performance on-the-ground, and tend, understandably, to focus on SEA reports (e.g. Bonde & Cherp 2000; Fischer 2010). Also, to date, the majority of reviews have been concerned with practice in developed countries (e.g. Jones et al. 2005; SEPA/HS/SNH 2011; Philip-Jones & Fischer 2015). SEA experience in developing countries is attracting attention both in terms of international development and capacity building activities (OECD 2006 et seq) and emerging practice in individual countries and regions (e.g. for Africa, Audoin et al. 2011; Dalal-Clayton & Sadler 2005; Retief et al. 2008; for South America, Margato & Sanchez 2014; for Asia, Dusik & Xie 2009).

Most reviews include SEA cases or vignettes to illustrate aspects of approach, and these tend to be descriptive and based on what is asserted in SEA reports or by case contributors. Much rarer are reviews that invest in the depth of independent analysis and field work required to unpack what actually happened, engage with stakeholders to gather their perspectives on the process and its outcomes, or to determine just how the SEA influenced decisions or outcomes. In the field of development cooperation, a notable exception is a review of SEA in policy and sector reform led by the World Bank which undertook extensive fieldwork on six SEA pilots (World Bank/UoG/SUAS/NCEA 2011). The study focused on the Bank's 'institution-centred SEA' approach which aims to incorporate environmental considerations in policy formulation (World Bank 2005). The OECD DAC review of development practice under its SEA good practice guidance documented several cases from different regions but did not probe in depth what had been achieved or how this guidance contributed to the outcomes achieved (OECD 2012).

As an input to the further development of this work and to meet its own priorities, CIDA<sup>1</sup> commissioned the development of a proposed approach to SEA quality review. Initial trialling of the framework approach focused on the application to SEA reports undertaken by CIDA in the Caribbean region and Ukraine and indicated that it was an usable and potentially robust tool (Sadler & Dalal-Clayton 2009).<sup>2</sup> However, this was a desk-based analysis of the technical quality of an SEA and limited, by definition, to the final documentation. However, the intent and scope of the methodology was broader and extended to other components of process, practice and performance as indicated in a proposal for its use by members of the OECD DAC SEA Task Team (Sadler & Dalal-Clayton 2010). Subsequently, it has been used along the latter lines to review seven completed SEAs in Namibia (Hipondoka et al. 2016).

## Aims and scope of the methodology

The aim of the methodology is to be problem-solving or process-enabling, rather than fault-finding, i.e. it is not meant to be overly judgemental (e.g. pass or fail) which could set back or inhibit the more widespread uptake and application of SEA in development cooperation work. Rather the methodology seeks to provide a means to identify where improvement (in SEA approach, good practice or systems implementation) might be made and to encourage users to buy-in to the process and make progress in the quality of application and ultimately in the delivery of development objectives. The latter is recognised as the primary objective of SEA application in this context – pursuant to the Paris Declaration on Aid Effectiveness (OECD 2005/2008).

The methodology presented in this paper is concerned with SEA practice – particularly in the context of development cooperation. It is based on principles and elements of approach for good practice described in guidance prepared by the OECD DAC (2006) (Table 1) and elaborated below. As used here, they provide points of reference for attributes of SEA quality and their organisation into an analytical framework for reviewing their application. This framework is geared to the particulars of SEA for development cooperation. However, with appropriate modification, it may be applicable to other SEA domains and contexts given its broad correspondence to principles and precepts of SEA approach. The latter are variously expressed in the literature on the field but are sufficiently overlapping to indicate broad consensus on their focus and content. However, we recognise the potential for divergence when moving from this general level to specifying customised methodologies and measures. This is a lacuna driven by a continuing trend towards theory-building and the 'reconceptualisation' of SEA (Sadler and Dusik 2016b).

The analytical framework comprises a set of key evaluative criteria and supplementary questions that can be used to undertake a generic review of SEA quality to

**Table 1.** SEA principles.

Establish clear goals
Integrated with existing policy and planning structures
Flexible, iterative and customised to context
Analyse the potential effects and risks of the proposed PPP and its alternatives, against a framework of sustainability objectives, principles and criteria
Provide explicit justification for the selection of preferred options and for the acceptance of significant trade-offs
Identify environmental and other opportunities and constraints
Address the linkages and trade-offs between environmental, social and economic considerations
Involve key stakeholders and encourage public involvement
Include an effective, preferably independent, quality assurance system
Transparent throughout the process and communicate the results
Cost-effective
Encourage formal reviews of the SEA process after completion, and monitor PPP outputs
Build capacity for both undertaking and using SEA

Source: OECD DAC (2006).

support improving good practice. The scope and structure of the methodology centres on three key or headline attributes of quality, namely that an SEA process should (Sadler 1998, 2004):

- conform with the requirements established by a jurisdiction or body responsible for an SEA system;
- be fit for purpose and relevant to the needs and exigencies of strategic decision-making; and
- achieve positive environmental benefits and outcomes [substantive effectiveness].

From the standpoint of SEA review, these three attributes represent increasingly difficult ‘clearance bars’ and, correspondingly, more subjective, qualified interpretations (see Sadler and Dusik 2016b). Only the first two dimensions of SEA quality might currently be capable of testing. The third attribute is more difficult and contestable to evaluate and will depend on the environmental standard that is adopted, e.g. from shallow to deep green (Sadler 2011). It is elaborated here for completeness and to signal an area for future work (but one that is increasingly critical with the new impact order of the Anthropocene (Sadler 2016).

Overall, the SEA model implied in the SEA guidance of the OECD DAC (2006) is integrative, referring to environmental, social and economic linkages and trade-offs. Guidance produced by other donors sometimes gives stronger emphasis on environmental sustainability concerns, e.g. CIDA’s guidelines (2004) refer to risk, precaution and thresholds of acceptable change. However, these distinctions tend to be matters of degree not kind, representing different locations on what the OECD DAC (2006) guidance calls the spectrum of sustainability. Other specific points of difference in the alignment of principles in different guidelines can generally be read as non-conflicting elaborations of the same theme of SEA good practice.

In addition to basic principles, the DAC Guidance identifies three additional prerequisites that are considered to be fundamental to the application of SEA for development cooperation:

- partner countries must take ownership of the process;
- donors need to act within agreed explicit strategic frameworks; and
- SEA must be promoted with sensitivity to country contexts.

The methodology focuses on two main aspects of SEA:

- *Ensuring good quality* – synonymous with ‘good SEA’ that conforms to the key principles (Table 1). The presentation and quality of information, consideration of alternatives and assessment of environmental impacts are key concerns.
- *Delivering good outcomes* – synonymous with achieving positive results that enhance the

effectiveness of development aid, recognising that development is a complex process and it is not easy to attribute those outcomes to the application of an SEA.

### Entry points for SEA application and quality review in development cooperation

The SEA guidelines of the OECD DAC (2006) identify 12 key entry points for SEA application in three broad categories (Box 1).

#### Box 1. Generic entry points for SEA in development cooperation

- (A) *SEA led by partner country governments*
- National overarching strategies, programmes and plans
  - National policy reforms and budget support programmes
  - National sectoral policies, programmes and plans
  - Infrastructure investments, plans and programmes
  - National and sub-national spatial development programmes or plans
  - Trans-national plans and programmes
- (B) *SEA undertaken in relation to donor agencies’ own processes*
- Donors’ country assistance strategies and plans
  - Donors’ partnership agreements with other agencies
  - Donors’ sector-specific policies
  - Donor-backed public–private sector infrastructure support facilities and programmes
- (C) *SEA in related circumstances*
- Independent review commissions
  - Major private sector-led projects and plans
- Source: OECD DAC (2006)

The review methodology is intended to provide a common spine for all reviews of SEAs undertaken in the context of development cooperation. However, additional review elements or criteria may need to be added for SEAs in the three categories in Box 1:

For SEAs in **category A**, the partner country government may have set particular principles, good practice or technical criteria in legislation, guidelines or SEA terms of reference that need to be met.

For SEAs in **category B**, donors may have to meet quality criteria set out in agency internal safeguard policies or guidelines, domestic legislation, directives or other requirements (e.g. SEA undertaken or commissioned by Global Affairs Canada must satisfy a Federal Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals).

For SEAs in **category C**, additional review criteria may be relevant depending on the terms of reference,



contractual obligations, requirements and safeguard policies of international finance corporations supporting major projects or country governments in particular countries, or where companies profess to operate by international standards and principles (e.g. Equator Principles) or follow particular ethics (e.g. corporate responsibility).

Although broadly correspondent with the generic entry points, each donor agency has its own structure and designations for the policies, plans and programmes for delivering development assistance.

### Other considerations to be taken into account in SEA quality review

Whilst the methodology is not meant to be overly judgemental, there is likely to be a natural tendency for commissioners of a review or interested parties to perceive the findings in this light. Any review will tend to focus attention on the performance of the end product because this is the easiest thing to measure – in this case, the SEA report or the SEA process. However, it would be wrong to assess any SEA in a vacuum, without reviewing the background and context within which the work has been performed.

The character, and hence quality of each SEA, is likely to be affected by many overlapping external factors over which the promoters or authors of the SEA may have little or no influence. The following examples illustrate this point.

- (1) SEAs are often carried out in circumstances where there are no approved guidelines. In their absence, authors of an SEA may have difficulty justifying the inclusion of alternatives other than by reference to good practice. Similarly, there is a lack of openness and transparency in decision-making processes in many developing and developed countries. In such circumstances, it can be very difficult to know what alternatives to specific policies or plans may have been considered and thus difficult to carry out an assessment of such alternatives. This is not necessarily a criticism of the SEA process but rather reflects the reality of the political framework within which the SEA has been conducted.
- (2) Even where national SEA guidelines or regulations exist, some powerful ministries may oppose its use – regarding the process as giving excessive influence to other agencies. Institution-centred SEAs are designed to address such issues, but even they can be seriously constrained in scope and content.

Thus, it may well be the system of decision-making which has significant shortcomings – rather than the SEA itself.

The content and coverage of an SEA will also be affected by the size of budget, timescale and team structure. It is not uncommon for commissioning agents to set fixed time limits or budgets, regardless of the scope or complexities of the task to be undertaken. These conditions inevitably constrain the quality of the product.

There are also fundamental differences between the level of detail that is appropriate to an SEA undertaken in difficult circumstances (e.g. one produced in a conflict zone or as a response to a sudden disaster) compared to an SEA in other situations (e.g. one produced as part of a routine review of policy or planning processes).

All of these external influences need to be carefully considered by the reviewer before embarking on any SEA appraisal, and it is desirable that an introductory statement should be drafted to preface the report and put the SEA findings in proper context.

Agencies need to adapt the SEA process to suit the context and circumstances of application, so it is also appropriate to scale the scope and focus of the SEA. For example, there is a family of SEA approaches ranging along a spectrum of increasing integration and from assessing impacts to strengthening institutions. Some SEAs deal mainly with environmental concerns; others are more holistic and also address social and economic dimensions or sustainability issues. Similarly, SEA good practice and quality review needs to be responsive to the type of SEA as well as to the realities of individual process application, which shape the specific approach taken.

In this context, SEA guidance of the OECD DAC (2006) differentiates the SEA process for impact- and institution-centred assessment; the latter is represented as an evolution of the previous approach to deal with the policy domain:

*Impact-centred SEA* is organised into four basic stages:

- establishing the context,
- implementing the process,
- informing and influencing decision-making and
- monitoring and evaluating (each subdivided into individual steps).

*Institution-centred SEA* has three recommended steps:

- identifying related environmental effects and opportunities,
- assessing institutional capacities to manage effects and opportunities and
- capacity-building for managing environmental effects and opportunities.

Some SEAs are undertaken in a short time-frame and may be undertaken by a single person or small team and follow a fairly simple process. In such cases, an agency might find it appropriate to undertake or commission a relatively quick quality review – perhaps a desk exercise taking one or two days. In other circumstances (e.g. for SEAs of major policies or investments, or for

multi-country initiatives) that have taken much longer (perhaps several months or more) and involved large teams undertaking extensive fieldwork, a more thorough quality review will be warranted. This will take longer and may benefit from a site visit or further fieldwork.

In either case, the process should be designed to address and report against the spinal review criteria set out in the next section, and any additional criteria that may be added. For a short desk review, the reviewer(s) will need to rely on the SEA report itself and any supplementary information available from the donor or PPP proponent. For more detailed reviews, the reviewer(s) will likely need to undertake supplementary analysis of the SEA report with ground-truthing and interviews with key actors.

### Spinal criteria for SEA quality review

On the basis of the above discussion, a three part generic framework and methodology for SEA quality review is outlined (see also Table 2). This is built on and extends the two key aspects of evaluation identified above: ensuring good quality and delivering good outcomes. Specifically, a comprehensive review of SEA quality (interpreted broadly) would address three critical dimensions:

(i) *Was the application of the SEA process consistent with agreed principles and procedural requirements that are in place in a particular jurisdiction?* The test of quality here is 'fully compliant in all respects' as judged against specified process steps and measures. It represents a preliminary screen, a precursor to 'good quality SEA' on the premise that this result is unlikely if there are evident shortcomings in following due procedure. Procedural compliance represents a relatively low 'clearance bar' and the questions asked will be relatively straightforward, e.g. requiring a yes or no (see module 1, Table 2). For a more searching evaluation, the institutional arrangements of the SEA system (e.g. provision, procedure, coverage, guidance) can be subject to review or comparative analysis.

(ii) *Was the application of the SEA process 'fit for purpose' and relevant to the needs of decision-making for the particular policy or plan under consideration?* The test of the 'technical quality' of SEA practice is twofold: (a) an analytical approach that is 'commensurate with and appropriate to the potential significance of the environmental impacts of the proposed action'; and (b) complete and sufficient in the technical information presented in the SEA report. It represents a higher 'clearance bar' than the test of procedural compliance and involves more subjective interpretation. A systematic approach to evaluation of technical quality would cover major process steps and activities (e.g. impact assessment, mitigation, participation) against an agreed set of criteria (see module 2, Table 2). For a more comprehensive evaluation, other components bearing upon the technical quality of SEA practice

also need consideration (e.g. policy context, institutional capacity, scientific knowledge).

(iii) *Did the process evidentially influence or contribute to decision-making (immediate outcome), result in more sustainable or equitable policy, planning or programme actions (intermediate outcome) or deliver environmental (and social) benefits or improvements (long term outcome)?* The test of utility and benefit is twofold: (a) identifying if an SEA had any 'influence (whether direct or indirect, immediate or later) on decisions' related to the design, content and implementation of the policy, plan or programme concerned; and (b) identifying if the subsequent development assistance 'achieved positive outcomes and realised environmental benefits'. It represents the highest 'clearance bar' and involves inherently subjective judgements of whether and how SEA has made a difference or added value to (in this case) the development process, i.e. improving the effectiveness against environmental and sustainability policy (see module 3, Table 2). A comprehensive evaluation would cover both substantive and procedural effectiveness and their relationship including consideration of the role and importance of the technical quality of SEA practice.

Undertaking this latter aspect of SEA quality review is inherently difficult and will require substantial time and resource commitments. As noted previously, SEA utility for decision-making is difficult to attribute, particularly as many factors other than an SEA are likely to influence decision-making. It also typically takes time for development outcomes and benefits to materialise following the completion of a SEA and before which any evaluation of cause-and-effect linkages would be premature. Although information from monitoring can be invaluable, the evidence for judging SEA outcomes and results (or performance) and overall effectiveness will be largely circumstantial and contestable, reflecting different views of success. Not only is there a pervasive attribution gap in isolating outcomes that are solely due to the application of SEA, but also it is not possible to be certain that unsustainable outcomes of a PPP would have been avoided by undertaking an SEA.

For these reasons and without a sufficient body of information, the utility and benefit test of SEA can be addressed only incidentally and perhaps superficially. Nevertheless, with these caveats understood, the methodology for SEA quality review presented here includes a module for this purpose. Applied in combination, these guides may help to frame, in part, the open-ended nature of this evaluation. In addition, evaluation of the first two aspects of SEA quality relating to procedural compliance and technical quality should provide indicators (assuming they are positive) of the potential for achieving good outcomes as illustrated in the following tiered schema:

- (1) Procedural compliance < supports > technical quality < supports > informed decisions.

**Table 2.** Generic questions for SEA quality review.**Module 1: Compliance review in accordance with OECD DAC guidance****(a) Preliminary assessment**

- (i) Was there an explicit determination of whether to apply an *impact or institution centred process*?
- (ii) Did the SEA process undertake the following activities:
  - (a) Apply screening to determine the need for SEA and to begin preparatory tasks?
  - (b) Identify interested and affected stakeholders and plan their involvement?

**(b) Detailed analysis**

- (i) Did the SEA process undertake the following activities:
  - (a) Scoping to identify key issues and impacts to be analysed?
  - (b) Collecting baseline information?
  - (c) Analyse potential effects of the proposal and alternatives?
  - (d) Identify measures to enhance opportunities and mitigate adverse impacts?
  - (e) Preparation of SEA report?
- (ii) Did SEA report preparation involve the following:
  - (a) Draft report on findings of the SEA?
  - (b) Engage the public on the draft report?
  - (c) Prepare a final SEA report incorporating public comment?
- (iii) Was the SEA subject to an independent review (quality control check)?

**(c) Decision-making and implementation process**

- (i) Did the SEA make recommendations to decision-makers?
- (ii) Was provision made to monitor decisions taken on the proposal and the results of their implementation?

**Module 2: Technical quality review in accordance with OECD DAC guidance****(a) Presentation, usefulness and quality of information**

- (i) Has the purpose/aim of the SEA been described, with a mention of the regulations which underpin the document?
- (ii) Is the scope of the SEA discussed?
- (iii) Was the information provided by the SEA process adequate (i.e. comprehensive, rigorous and understandable) for those responsible for developing the PPP? What was missing?
- (iv) Was the information provided by the SEA process adequate (see above) from the point of view of the key stakeholders? What was missing?
- (v) Did the SEA identify the issues most important to sustainable outcomes, rather than all significant environmental issues?
- (vi) Did the SEA reflect questions and concerns not initially included in the PPP? What was appreciated most/what was irrelevant, etc.?

**(b) Co-operation and stakeholder participation**

- (i) Was there working co-operation between the SEA team and those responsible for developing the PPP? Was this effective? How could this be improved?
- (ii) Were opportunities provided for stakeholder and/or public involvement? Was this effective? How could this be improved?
- (iii) Was there an effort to involve less powerful stakeholders in the consultation?

**(c) Assessment of environmental impacts**

- (i) Are likely significant environmental affects, constraints and opportunities clearly described?
- (ii) Is an effort made to prioritise those effects that most affect sustainability?
- (iii) Are the methodologies for assessing environmental impacts described?
- (iv) Are both positive and adverse impacts addressed?
- (v) Are uncertainties in assessing the impacts and assumptions described or justified (e.g. use of worst-case scenario)?
- (vi) Are mitigation measures clearly described and recommended to prevent, reduce or remedy any significant adverse effects on the environment in implementing the proposal?
- (vii) Does the SEA address the linkages and trade-offs between environmental, social and economic considerations?

- (d) *Consideration of alternatives*
- Are the potential alternatives for the PPP described and considered in terms of the SEA objectives? Have these included the 'no change' alternative?
  - If any alternatives have been eliminated, have the reasons been provided?
- (e) *Planned follow up activities and implementation*
- Are the indicators for monitoring implementation of the PPP clearly defined? And, are they based upon the original baseline information and on the objectives of the PPP and the SEA?
  - Are the links to other potential follow-up procedures specified, e.g. project EIA, design guidance etc.?
  - Are recommendations for the implementation process clearly formulated?
  - Are outcome indicators defined? And is there an evaluation plan (with adequate budget and clearly assigned responsibilities) so that the sustainability focus of the SEA can continue beyond the planning phase?
- Module 3: Utility and benefits review in accordance with OECD DAC guidance**
- (a) *PPP objectives*
- Does the report describe the goals and objectives of the PPP clearly, and define these quantitatively where appropriate?
  - Does the SEA report identify and describe any conflicts that exist between the objectives of the PPP being assessed and PPPs and strategies?
- (b) *SEA and its application*
- Does the SEA report describe the purpose/aim of the SEA, and mention any regulations, policies, directives and guidelines that underpin the document?
  - To what extent was the SEA integrated with existing policy and planning structures?
  - Was the SEA customised to context?
  - Was the process sufficiently flexible and did it enable learning?
  - Was the process transparent throughout, and were the results communicated to key stakeholders?
- (c) *Alternatives*
- Were alternatives analysed against a framework of environmental or sustainability objectives, principles and criteria?
  - Is there an explicit justification for the selection of any preferred options and for the acceptance of any significant trade-offs?
- (d) *Influence on decision-makers and PPP development*
- Were the SEA findings complete and sufficient for the purposes of decision-making?
  - Was the information in the SEA report clear and easily understood (or was it too technical)?
  - Did the SEA make any contribution or have evident influence on the decision-making process (at all stages not only final approval)? Specifically, did the SEA inputs lead to any changes in PPP design, content or budget plans, specifically in making these more environmentally sound or responsive?
  - Did decision-makers respond to SEA findings or recommendations or to monitoring (e.g. justify or correct their decisions on this basis)?
- (e) *Influence on the implementation process*
- Did the SEA lead to implementation measures or outcomes that better reflect the goals of sustainable or environmentally sound development? Were options implemented which were more environmentally sound?
  - Did the recommendations of the SEA lead to change in institutional arrangements (e.g. environmental advisory group, inter-sectoral co-ordination, subsequent EIA requirements, etc.) and/or governance (access to judiciary, empowerment of weak stakeholders for environmental management) which supported the integration of sustainable development/environment during implementation?
  - Did different stakeholders of relevance for the implementation act on recommendations by the SEA during the implementation process?
- (f) *Influence on direct and indirect goals of relevance to sustainable development/environment*
- Are there any indications that the SEA contributed to:
    - The achievement of MDG 7 and/or other goals of relevance in the particular case?
    - Improved conditions of environment and natural resources in the relevant area?
    - Transparency and accountability, and improved governance?
  - Did the sustainable development benefits of the SEA outweigh the costs associated with carrying it out?
- (g) *Outcome on capacity-building and influence on accountability*
- Did the SEA help build capacity by training decision-makers or implementers?
  - Did the SEA help empower weak and vulnerable stakeholders?
  - Did the SEA enhance the transparency of decision-making processes and accountability of decision-makers on the environmental implications of PPPs?
  - Did the application of SEA lead to a better understanding of the potential of this approach and, possibly, encourage SEA applications later on?

Notes: The following categories may helpfully be applied to each question to systematically review and compare relative performance on dimensions of quality:

A: No fundamental flaws or inadequacies.

B: Fundamental gaps and inadequacies.

C: Insufficient basis to judge.

D (overall): The SEA contains elements that are excellent and therefore provide a template/inspiration for future SEAs.



- (2) Informed decisions < leads to > good policy and environmental outcomes < leads to sustainable development and attainment of Millennium Development and Sustainable Development Goals (both are measures of effective aid).

However, in this schema, satisfactory progress on each aspect does not automatically guarantee success for the next stage (for one thing, each step brings more intervening factors or variables into play). But an SEA process that is non-compliant and inadequate technically is highly unlikely to be a basis for informed decisions or good outcomes (Sadler 2004).

### Packaging the reference framework and methodology for SEA quality review

Table 2 provides the generic question-based methodology for SEA quality review. It is packaged in three modules for compliance, quality and utility/benefits review. In full, the three modules are intended for ex-post evaluation on completion of the SEA process or after implementation of the policy, plan or programme. But they can also be readily adapted to apply as a rolling review as the SEA process unfolds or to review the content and quality of a draft SEA report.

As an aid to applying the criteria, a report card format for undertaking the evaluation is included as a footnote to Table 2. This rating or grading scheme is intended to facilitate a systematic review and comparison of the elements of approach. It is expected that judgements will be qualitative and supplemented by brief observations rather than involve quantitative scaling and scoring (weighting) and detailed analysis. This format is meant to be applied in support of a relatively rapid evaluation of a SEA (either completed or ongoing) and based on an SEA report or equivalent document. As and where necessary, more detailed commentary and analysis can be included and appended to the review format report under the main headings used.

Specific application under the jurisdictional frameworks of individual countries and jurisdictions will require adaptation and adjustment to terminology, requirements and procedure. In addition, the information necessary to address all of the questions in Table 2 may not be to hand. This will almost certainly be the case when a review relies only on an SEA report or other comparable document, and particularly in relation to review of technical quality and, above all, to review of good outcomes.

The following examples of impact parameters may assist in evaluating and judging whether the SEA is appropriate and commensurate to the potential environmental effects and risks of a proposal:

*Frequency and duration* – Will the effect be a one-time only occurrence? Will it be a short-term or long-term effect?

*Location and magnitude* – What is the anticipated scale of the effect? Will it be local regional, national or international in scope?

*Timing* – Is the effect likely to occur at a time that is sensitive to a particular environmental feature?

*Risk* – Is there a high level of risk associated with the effect, such as exposure of humans to contaminants or pollution, or a high risk of accident?

*Irreversibility* – Is the effect likely to be irreversible?

*Cumulative nature* – Is the effect likely to combine with other effects in the region in a way that could threaten a particular environmental component?

As a further aid memoir, evaluators might review the sources of information and analytical tools used to conduct the SEA of the proposal (e.g. checklists, matrices, modelling, scenario building and simulation analysis) and compare these against other, comparable assessments or methodological advice available in the critical literature or recommended by expert federal departments.

### Preparing a review report

The TORs for a quality review should specify clearly what is required of the review in terms of:

- length and content of review;
- special issues to address;
- additional review criteria to be incorporated; and
- format for recommendations for SEA improvement.

Usually, for busy administrators or decision-makers, a brief (2–3 page) review report will be required which would summarise the findings in relation to the criteria listed above under the following headings:

- which organisation commissioned the SEA;
- the objectives of the SEA;
- when it was undertaken and who was involved (SEA team);
- the process followed (steps, methods used);
- how stakeholders were consulted/engaged;
- alternatives considered, prioritised and/or eliminated (and why);
- the technical quality of the assessment (adequacy/ usefulness of information provided, relevance of analytical methods used);
- how the report was received by decision-makers and other stakeholders;
- what outcomes resulted from the SEA (i.e. decisions/implementation influenced or changed);
- contribution to SEA capacity-development in the partner country or agency;
- opportunities, constraints and cost-effectiveness of the SEA;
- recommendations for improvement; and
- appendices (where necessary) with detailed commentary and analysis.

## Transparency

Just as transparency of the SEA process is a basic principle of SEA (Table 1), so too should the outcome of a quality review be made available and accessible to a broad range of stakeholders (unless over-riding security and confidentiality issues dictate otherwise) in appropriate media and languages (including local languages, where appropriate, so it is accessible to local and affected peoples).

## Test application of the methodology in Namibia

In Namibia, SEA is not yet a formal requirement and SEA has been applied on an ad hoc basis. Draft SEA regulations are currently being prepared. To provide lessons to inform their development, the methodology presented in this paper was applied to review seven SEAs undertaken in Namibia between 2008 and 2013 (Hipondoka et al. 2016). The reviews examined the processes followed by the SEAs, appraised stakeholders' reflections, and assessed the outcomes and contributions to decision-making.

Some of the SEAs were undertaken by Namibian consultants, and others jointly by international and domestic consultants. But there was no significant difference between them in terms of quality, content and presentation to reflect the imported expertise. Although all analysed SEAs delivered on their respective terms of references, inadequacies encountered were attributed in large measure to shortcomings in their terms of reference.

Nearly all of the SEAs failed to address some fundamental elements of an SEA, such as alternatives, cumulative effects, synergies, antagonisms, and strategic thinking. Engagement with rural and vulnerable communities was generally inadequate. These deficiencies indicate a range of areas that will need to be addressed in SEA regulations and guidance in Namibia. But most of the SEAs had some influence on decision-making and proposed sound monitoring procedures.

## Conclusions

The test application of the methodology in Namibia suggests that it provides a sound basis for reviewing SEA quality and performance, and a meaningful platform for engaging with stakeholders and interested parties on focus, content, conduct, role, contribution and value of SEA. However, much more remains to be done on the last two scores, particularly if the sterner tests of minimising harm, reducing risk or avoiding impacts to the environment (themselves difficult to measure) are applied.

Using the methodology can help to indicate ways of improving SEA practice to better conform to accepted principles of SEA. Applied systematically over the longer

term, it may drive SEA towards becoming more effective, although it will likely require more radical reforms to institutions, processes and practice if the aim is to ensure that PPPs are more sustainable (e.g. as discussed in Sadler 2016). In this regard, however, it is important to remember that for decision-makers, the SEA process can often appear complex, particularly in terms of selecting a desired alternative to the PPP or element of the PPP. It is critical that SEA reports – which can often be lengthy and dense – contain a concise, non-technical summary that adequately summarises and explain the SEA findings to decision-makers and stakeholders (Sadler 2004). For example, Croal et al. (2010) describe a SEA decision-makers support tool to help SEA outcomes be presented in a readable briefing note format. The application of a systematic SEA review methodology together with such a tool could help to improve the quality of SEAs and their utility for decision-makers.

## Notes

1. In July 2013, the Canadian International Development Agency (CIDA) officially became part of the Department of Foreign Affairs, Trade and Development which, since November 2015, is referred to as Global Affairs Canada (GAC).
2. Namely of the Ukraine Country Development Programming Framework and the Caribbean Regional Development Programming Framework.

## Acknowledgements

The development of this methodology was funded by the Canadian International Development Agency (CIDA) as an input to the work of the OECD DAC SEA Task Team, members of which provided feedback and suggestions on the methodology. We also extend our grateful thanks to Peter Croal (formerly CIDA) for his support and encouragement.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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