Taking stock of SEA effectiveness: A digest of expert views

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Netherlands Commission for Environmental Assessment

IAIA
International Association for Impact Assessment

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1 Introduction

This note describes the views of an expert group on SEA progress, current effectiveness and future directions. It is a synthesis of short statements (assembled in Annex 1) each expert prepared on this theme. These statements form an input to work in progress on SEA effectiveness, and will be discussed in a debate on this theme at IAIA23.

Background

The Sadler & Verheem 1996 report on 'SEA – status, challenges and future directions' documented the state of the field at an early stage of its evolution. It now affords a convenient datum against which to review 25 years of development of SEA theory and practice. To mark the 25th anniversary of the report, we carried out a preliminary appraisal of changes that have occurred since then. This scoping exercise led to the preparation of a reflection on SEA progress and effectiveness, which is intended to contribute to a discussion among the SEA community.

Consultation and input

Following the reflection, a three step process is now underway: i) a canvass of a group of internationally acknowledged SEA experts to gain their views on the trends and issues under discussion (this note provides a synthesis of these views); ii) opportunities for further debate during a session at IAIA 2023; iii) an online questionnaire to all IAIA members in the second half of 2023.

Highlights at a glance

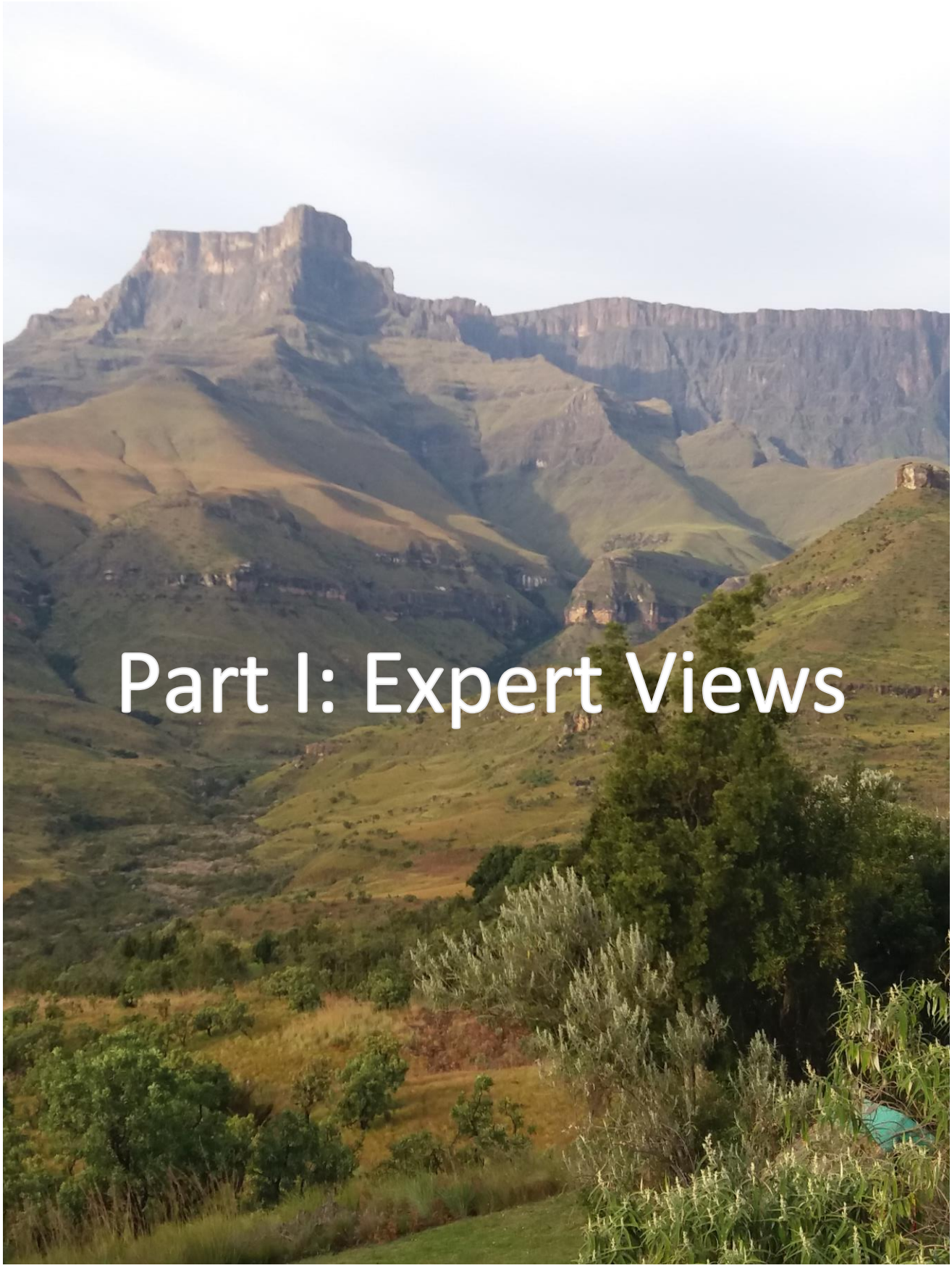
Expert opinion is wide-ranging but a rough consensus emerges:

- major extensions and improvements have occurred in SEA systems and institutions, knowledge and expert capability, and guidance, tools and data availability;
- shortfalls and deficiencies in current practice are evident too in the uneven quality of SEA reports, overly legalistic, bureaucratic approaches, insufficient public participation, limited influence on decisions and by extension on levels of environmental and social protection; and superficial consideration of sustainability matters, and
- recommended steps to move SEA forward include strengthening applicable laws, regulations and participative methods, identifying new modalities and web-based and digital tools to advance practice, further research and in depth case analysis of SEA effectiveness, particularly the impact on decision-making, and facilitating more innovative applications to sustainability purpose.

Analysis and organisation of this digest

The synthesis of expert views reported in this note is based on a content analysis of the prepared expert statements. It highlights the response to three key questions: i) how and to what extent has SEA improved in the past 25 years; ii) where does the state of practice still fall short today; and iii) what key steps may help to move the agenda forward? Major conclusions are summarised below under 'highlights at a glance'.

Next steps: We plan to explore these questions further with a larger audience using a session at IAIA23 and an online questionnaire after that. From this input, we intend to draft a road map for SEA research and development that can serve as a basis for further work by the IAIA membership.



Part I: Expert Views

2 Synthesis of expert views

2.1 How has SEA improved since 1996?

SEA is now applied worldwide

SEA has spread around the globe and it is a regulatory requirement in a large number of countries. Both formal use and research have increased substantially. SEA is now founded on a sound basis of legal and institutional arrangements and rules.

SEA is widely recognized as an important tool

More and more SEA has become accepted as a key tool in support of sound decision-making. SEA procedures are well established, widely known and applied systematically to address problems early on. In some countries, voluntary SEA practices have emerged and are used by both public and private actors to facilitate a pro-active approach.

How to conduct SEA is well understood and good practice examples are available

SEA knowledge, methodology and experience have substantially improved. Research and conceptualisation of the approach have evolved significantly and support best practice. A large kit of analytical tools, data systems and knowledge networks and growing number of SEA success stories and good practice cases are available.

SEA guidance and capacity development is available and influential

A considerable body of SEA guidance has been issued and training is conducted on a wide scale, leading to more expert capacity for SEA. Well established SEA information systems provide access to necessary resources and materials. Organisation and management of SEA has improved. Alternatives are better considered and scrutinised by the public. The role of SEA in assessing and mitigating issues such as climate change and biodiversity is better understood. A greater use of GIS and mapping has improved ability for spatial analysis.

SEA quality & effectiveness is improving

Quality and effectiveness of SEA is improving gradually. SEA has proven effective as a tool which stakeholders can employ, using its findings to continue to press for change in the implementation of plans and programs. SEA values slowly are becoming institutionalized in systems where SEA is consistently applied. There is a mounting evidence of benefits, including the use of SEA to consider the consistency of new with existing plans & policies.

2.2 Where does the current state of practice still fall short?

SEA is not influential enough.

Effectiveness of SEA overall does not seem to have improved greatly since 1996. Little evidence has been gathered about how SEA has influenced decisions. Few cases are known where SEA has made a real strategic contribution to setting direction for long term development. SEA is frequently sidelined in making the real choices. This results in relatively modest levels of environmental and social protection, well below sustainability thresholds.

SEA quality is uneven.

Quality and effectiveness of SEA vary within and across countries. SEA reports quickly became too large, complex and expensive. Bureaucratic and insufficient scoping leads to much adding of concerns with little scoping out of irrelevant issues. Often there is too much emphasis on producing and presenting baseline data that is not really used in the actual assessment. Follow up and monitoring in many cases is poorly done. This is risky in combination with an absence of binding commitments to necessary measures. Consideration of climate issues, of cumulative and synergistic impacts and of more environment friendly alternatives is often limited. As yet there still appears to be a low level of inclusion of social impacts. Consideration of sustainability matters in SEA is often generalized, superficial and inconclusive.

There is limited understanding and appreciation of SEA within government

Many governments have little awareness of the role, benefit and use of SEA. It often is seen as an environmental tool for [impact] assessment specialists, rather than a broader system perspective which involves engaging a range of actors. The result is that the circumstances in which SEA is actually applied are not always those where the most pressing issues need to be resolved, including high level strategic decisions. SEAs often start too late, justifying decisions already made. Covid has worsened this situation: over 30% of IA systems worldwide have been weakened as a result of the pandemic so that proposals could be fast tracked.

Too narrow and legalistic application of SEA

In many countries legal discourse tends to take over SEA practice, acting as a barrier for moving beyond minimum standards. This includes developing countries with young SEA systems where SEA often is undertaken to comply with external (IFI) requirements. This results in SEA application as a dogmatic, tick-box approach.

Insufficient stakeholder participation in SEA

Effective stakeholder participation in SEA remains a challenge and still faces many obstacles. Often stakeholder engagement is limited to informing parties and collecting information, rather than dialogue and discussion.

2.3 What key steps may help to move the agenda forward?

Intensify advocacy & awareness

Action should be taken to make politicians and other decision-makers more aware of the value of SEA, particularly by building the business case for SEA, providing concrete examples of how taking account of environmental, social and sustainability effects can deliver benefits and manage risks. This may include a range of activities, such as continuing to share inspirational SEA experiences and demonstrating the pay-off of more transparent and inclusive planning processes. Another option could be to form alliances of actors to break down administrative barriers and jointly promote SEA, emphasising how it contributes to the SDGs. There is a need for greater publicity and promotion in the public arena (not the scientific arena) of successful SEA processes. It is important to include and promote SEA in international treaties, such as the 'post 2020 biodiversity targets' and agreements under the UN Framework Convention on Climate Change. In addition, SEA could be embedded in the risk management world dominated by institutional investors and risk managers.

Innovate and explore new ways to apply SEA

There is a need to look at new ways to apply SEA, exploring the strategic and governance potential and capacity of SEA. This would include: moving away from EIA type applications, changing the dominant speech around SEA, and giving a stronger focus on maximising positive impacts vis-a-vis mitigation of negative impacts. Legal SEA requirements could be changed to abandon the current legalistic discourse and practices. The full value of SEA would benefit by solving current issues that prevent effective tiering. Better approaches should be developed for dealing with the uncertainty associated with changing contexts over the period covered by the assessed policy, plan or program. Investment is needed in the potential of digital IA to support and improve SEA practice, for example use of website and internet-based methods to facilitate direct and continuous participation and prepare more user friendly and influential IA reports.

Apply further research

Promote research to better understand what has worked well and what hasn't. This includes in depth investigations of the impact of SEA on decision-making and identification of cases where the process has been successful or marginalised, including how and why this happened. Development of participative methods that facilitate stakeholder interaction and dialogue should be continued.

Strengthen the legal status of SEA

Accelerate the promulgation of relevant laws, rules and regulations that give a stronger incentive for policy-making departments to carry out SEA. This would include the application of SEA at the policy level, starting with the UN and its institutions. Where needed remove screening out clauses so that SEA is applied to all strategic actions that are likely to have significant environmental and social impacts.

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3 Compendium of short papers

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Lone Kørnøv

Professor at Aalborg University and Director at Collabora ApS

"There is a risk of losing the opportunity for SEA to play a fundamental role in creating critical knowledge for realizing the SDGs."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

SEA perceived more relevant than ever as a change agent

I have observed a general better understanding of and increased acceptance of SEA as a key means to support sustainable development. With its broad concept of environment – helping to avoid trade-offs and support synergies, together with its support for early integration in decision-making and support of transparency and participation, SEA is perceived as more necessary and relevant than ever. This perception is key to increased effectiveness.

Voluntary SEA practices emerge

From own experience, the relevance of SEA is also found to go beyond the formal scope of the European SEA directive. I have observed that especially private actors (but also public) are seeking to innovate by changing focus from effect assessment to using SEA as a facilitator for sustainable decision-making. The found proactive perception and use include those environmental concerns are perceived as an opportunity for development, and that SEA is a facilitator and becoming more strategy based. So, it seems might SEA become more and more relevant to business due to their general less reactive and more proactive approach to social and environmental issues. This is important to keep in mind.

2. Where does the current state of practice still fall short?

Too much focus on the 'instrument' of SEA leading to a very tired cyclist.

A general observation is the persistent focus on optimizing the SEA as an instrument instead of employing a broader system perspective, which involves knowing off and engaging with a range of actors to secure effects. In the Tour de France analogy by Lyhne, Kørnøv and Runhaar, the SEA is the bicycle and the cyclist the SEA practitioners. The point is that beyond the cyclist other actors are crucial for effectiveness, including 'the team of cyclist', 'the manager', 'the sponsors', 'the audience', 'the general director', 'tour officials, 'the mechanics', 'the masseurs' etc. SEA "itself only comes to life when people act in the SEA process and on the basis of SEA. SEA needs individual agents." (Kørnøv, 2020).

Public strategic decisions without relevant (and likely mandatory) SEA

A trend is a growing number of public strategic decisions with potential of affecting the environment significantly, are taken without a proper assessment. This points to a weakness in the SEA Directive and to a lack of proper national implementation.

Legal discourse tends to take over

Albeit the SEA Directive is flexible and only sets the minimum requirements, in practice the legal discourse is very strong and there is a tendency for it to act as a barrier for moving beyond the politically negotiated minimum. Personally, I would like more initiatives from both the Commission and individual member states that support experimentation. A stronger regulatory and practice culture experimenting during implementation.

3. What key steps may help to move the agenda forward?

Exploring mutuality between SEA and SDGs

SEA is a highly relevant governance mechanism for embedding SDGs in decision-making, and at the same time SDGs can strengthen SEA. However, the linking of SEA and SDGs for mutual benefit is emerging very slowly. There is a risk of losing the opportunity for SEA to play a fundamental role in creating critical knowledge for realizing the SDGs.

Stronger focus on enhancement

Mitigation is a vital part of any SEA. Its role is to ensure that negative impacts are avoided, minimized, or compensated, and is strongly linked to the precautionary principle. The mitigation of significant negative impacts is the prevailing aim and dominant approach in current practices. However, to support sustainability objectives there is a need for a stronger focus on enhancement possibilities with maximizing positive impacts and sustainability benefits. This also concerns critical consideration of the purposes (of a policy or an activity) and alternatives.

Teaming up with the 'tired cyclist'

To optimize SEA effectiveness, there is a need to go beyond the SEA instrument (the bicycle) and expand the interest and understanding of the system of actors. This also raises the question for all of us – regardless of whether we are researchers, practitioners, bureaucrats etc. – whether we are sufficiently connected to create increased effect. My own experience is that to make actionable knowledge for sustainability different agents needs to be connected.

Sources of inspiration

1. Kørnøv, L. 2020. SEA as a change agent: still relevant and how to stay relevant? IAPA.
2. Kørnøv, L., Lyhne, I., Davila, J.G. 2020. Linking the UN SDGs and environmental assessment: Towards a conceptual framework. Environmental Impact Assessment Review.
3. Lyhne, I., Kørnøv, L., Runhaar, H. 2020. Can Tour de France inspire SEA effectiveness? An analogy to encourage broader systems thinking. IAPA.

Jenny Pope & Carolyn Cameron

Professor of Sustainability in Mining at Murdoch University

Principal at Cameron Strategies

"It can be difficult to find an appropriate balance between providing certainty and flexibility in framing the conditions to allow for appropriate adaptive management."

Overview of strategic assessment in Australia under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act) 1999

The comments that follow are based upon the SEA practice under Part 10 of the *EPBC Act* (Cth) 1999 (noting that strategic assessment is also carried out under the environmental legislation of some states and territories of Australia, both formally and informally).

SEA under the *EPBC Act* is called simply 'strategic assessment' and has some characteristics that are different from SEA as conducted in the EU and other parts of the world. These characteristics provide important context for the comments and observations that follow. Specifically:

- SEA is a voluntary process, entered into by an agreement between the Commonwealth Minister for Environment and another entity, which is often a State or Territory Government but can also be a private proponent;
- If the policy, plan or programme (PPP) is endorsed by the Minister for Environment, the Minister may also approve actions defined by the PPP without requiring subsequent project-level EIA. The approved actions must then comply with the conditions of approval of the PPP. This potential streamlining is one of the main incentives for proponents to enter into strategic assessment agreements;
- In deciding whether to endorse a PPP, the Minister for the Environment must focus on the potential impacts on the nine Matters of National Environmental Significance (MNES) defined in the EPBC Act. These are: world heritage properties; national heritage places; wetlands of international importance; nationally threatened species and ecological communities; migratory species; Commonwealth marine areas; the Great Barrier Reef Marine Park; Nuclear actions (including uranium mining); a water resource, in relation to coal seam gas development and large

coal mining development. The Minister may take broader social and economic issues into account, but the environmental focus is limited to MNES.

From the time the EPBC Act was enacted in 2000 until 2022, 26 strategic assessments have commenced, but not all have reached the point of endorsement. While they have been applied to a range of PPPs, from fire management plans to programmes of mining projects and industrial precincts, the majority have been related to land use plans.

In response to a 10-year review of the EPBC Act conducted in 2020 and following a change of government in 2022, a regulatory reform process is underway which will result in new Commonwealth environmental legislation. Strategic assessment will continue to be an important tool and there is also a renewed focus on regional planning as a way of managing cumulative effects and streamlining development approvals while ensuring that important biodiversity is protected. At the time of writing it is too early to determine whether the reforms will bring any significant changes to the way in which strategic assessment is applied at the Commonwealth level in Australia.

About the SEA Community of Practice

The SEA Community of Practice (CoP) is part of the Special Interest Section on Impact Assessment of the Environment Institute of Australia and New Zealand (EIANZ), which is an affiliate of IAIA. The focus of the COP is on Australian SEA, with most States/Territories represented by members representing government, the private sector and academia. This response is informed by the work of the CoP, and contributions to conference sessions, symposia and other events organised by the CoP.

1. How and to what extent has SEA effectiveness improved since the 1996 study?

Australia did not have regulatory SEA at the national level in 1996 so it is an improvement to have Part 10 of the EPBC Act and associated guidance, together with experience from practice. This relates to *procedural effectiveness*.

2. Where does the current state of practice still fall short?

The focus on MNES comes at the expense of a holistic, integrated view of the environment, with implications for *substantive effectiveness*;

- Implementation remains a challenge for many reasons, affecting the *substantive effectiveness* of SEA in terms of outcomes actually delivered, for example:
  - Endorsed PPPs are legally binding and it can be difficult to find an appropriate balance between providing certainty and flexibility in framing the conditions to allow for appropriate adaptive management;
  - Responsibilities for implementation can be unclear, between the commonwealth, States/Territories and other parties;
  - Where State or Territory Governments are responsible for implementation, (e.g. putting land aside for conservation), implementation must be integrated with the State or territory's planning regime (which can be complex).
- SEAs can quickly become large, complex and expensive, requiring considerable scientific input to support the process. This is particularly so because the resulting endorsed PPP is legally-binding and therefore it is important that it is informed by the best possible science. This has implications for *transactive effectiveness*.

3. What key steps may help to move the agenda forward?

- Given the relatively limited experience with SEA under the *EPBC Act*, there is potential for further research to better understand what has worked well and what hasn't worked so well;
- SEA could work effectively in tandem with (bio)regional planning in Australia. Bioregional planning is enabled by Part 12 of the *EPBC Act* but no such plans have been yet developed for the terrestrial environment (although several marine bioregional plans have been prepared). There is currently renewed interest in regional planning under the *EPBC Act* and a process is underway to develop a framework for such a process. SEA could be integrated with the plan development or could be applied to a draft regional plan.

Bobbi Schijf

Senior advisor impact assessment at Netherlands Enterprise Agency (RVO)

"Practitioners have become more confident, and more able, to respond to the realities of planning."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

In the past 25 years SEA practice has spread further around the world, from a predominantly western practice, to more global application. That means that SEA is now applied in a greatly varied range of governance contexts and planning cultures. Those of us working in this field have been able to deepen our understanding of how SEA functions in these different settings. And I have a sense that we have gotten better at tailoring SEA to planning processes, and connecting it to decision-making and government – society dialogue. Practitioners have become more confident, and more able, to respond to the realities of planning. We keep the key objectives of the instrument in view, but are more flexible in the procedural mechanics.

2. Where does the current state of practice still fall short?

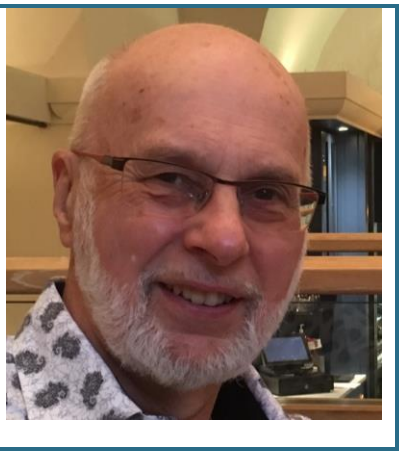
At the same time, I still see dogmatic, tick-box SEA cases. Particularly in the context of developing economies where SEA practice is younger. In such SEAs the focus is on doing studies and on data collation, and the SEA team works separately from the planners. Stakeholder engagement tends to be more limited to informing relevant parties and collecting information from them. The decision-makers are not in a conversation with stakeholders about the planning options and their implications, and are not accountable to these stakeholders for how the SEA outputs are taken on board.

3. What key steps may help to move the agenda forward?

It has been said before, but we need to continue to share inspirational SEA experiences. SEA enthusiasts need more ammunition to convince reluctant planning agencies. Particularly in less collaborative planning settings. An SEA will open the planning process up to more influence from civil society and privet sector parties, but also from other governmental agencies. The plan- owner has to relinquish some control over the planning process and the outcome. We need more SEA examples that demonstrate the potential pay-off: more broadly supported and better integrated plans.

Barry Dalal-Clayton

Director at Environment and Development Services – International



"Effective stakeholder participation in SEA remains a significant challenge."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

There has been a steady increase in the number of countries around the world (currently around 100 according to the Netherlands NCEA) that have made SEA a legal requirement, and have published regulations and rules. But the quality of SEAs remains mixed. There are examples of excellent application as well as others that are rather poor (possibly undertaken by people who do not themselves understand or have much experience of SEA, and often because the TORs are themselves deficient).

2. Where does current state of practice still fall short?

The welcome growth in formalisation and application of SEA does not necessarily translate to SEA being effective. There seems to be little evidence gathered or analysed about just how SEA has influenced decisions.

There remains limited understanding within governments and senior civil servants/decision-makers of the role and benefit of SEA, as well as limited understanding of, or commitment to, using SEA reports, conclusions, recommendations and other outcome to improve PPP development, implementation or review/revision. I agree with Peter Nelson that the institutional framework has a large influence on the effectiveness of SEA. Raising awareness and understanding at this level is a major challenge.

The growing use of SEA, particularly in developing countries, has been driven by domestic interest and requirements. However, there remains a preponderance of SEAs undertaken to comply with external requirements (eg to satisfy IFI safeguards, or meet demands by international organisations).

Whilst the IFIs continue to require SEA, and equivalent or near equivalent process under their safeguards, I have the impression that SEA has somewhat fallen off the agenda and radar of bilateral aid agencies (possibly since the OECD DAC SEA Task Team concluded its work).

I fear that there is still nowhere near enough focus on learning lessons from practice at the national level or to share such lessons (regionally, internationally), nor to review laws, regulations and guidance

to reflect such lessons and adjust requirements, procedures and practice where necessary and appropriate.

Effective stakeholder participation in SEA remains a significant challenge. In SEAs I have reviewed, this often stands out as a shortcoming. I some cases that I have been involved in, the team wanted to do extensive stakeholder engagement but the client government wanted to control (and limit) the process. This presents a difficult problem for SEA teams where good relations need to be maintained with a client.

I have the impression that consultants do not do enough to interrogate and challenge (with a view to clarifying and improving) TORs where they are poorly framed. I believe that this should be something that good practice should include in the bidding and inception phases.

3. What key steps may help to move the agenda forward?

- Examine if there is any way to encourage the bilaterals to refocus on SEA – to share experience, promote its use by bilaterals, review/update the guidance (published back in 2006). This could be linked to how SEA can help address responses to climate change. Encouraging bilaterals to engage with the IAIA initiative to develop SEA guidelines for renewable energy might offer an interest to bilaterals. The DAC process involved numerous countries and agencies and, arguably, did much to promote SEA.
- More can be done to promote SEA as a tool that can assist in delivering on the SDGs. I think that all SDGs should address how PPPs promote or detract from progress towards SDGs.

Xu He

Professor and Director,
Research Centre for SEA at
Nankai University

"SEA also considers the socio-economic impact of decision-making while conducting the environmental impact."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

As a tool for evaluating strategic environmental impact, the effectiveness of SEA is mainly reflected in the following aspects. First, the SEA can strengthen project EIA. SEA can help to refocus and streamline project EIA, thereby improving the efficiency and effectiveness of project EIA.

Second, compared with EIA, which focuses on local and instantaneous environmental impacts, SEA pays more attention to the cumulative environmental impacts and the cross-regional environmental impacts.

Thirdly, SEA also considers the socio-economic impact of decision-making while conducting the environmental impact. This can help decision-making departments to optimize policies more systematically and comprehensively.

2. Where does the current state of practice still fall short?

At present, there are still some deficiencies in the practice of SEA. First, SEA is rarely carried out on high-level strategies, such as high-level policies, laws, etc. However, it is often these top-level decisions that have long-term and wide-ranging (national or global) environmental impacts in in the process of implementing the policy.

In addition, as the core part of SEA, public participation still faces many obstacles, such as unfair and opaque public participation, which has led to the marginalization and formalization of public participation in many SEA practices.

3. What key steps may help to move the agenda forward?

The key resistance to SEA implementation is that it touches the interests of relevant departments and groups. Therefore, promoting the practice of SEA in the short term needs to rely on external force. To this end, the promulgation of relevant laws, rules and regulations on SEA should be accelerated to force policy-making departments to carry out SEA.

Secondly, each country should explore the SEA model suitable for its own country based on its political system and cultural background.

Finally, to effectively play its role SEA for a long time, the most fundamental thing is how to attract different stakeholders involved in the policy, such as policy-making departments, environmental protection departments, governments at different levels, enterprises, the public, etc., to actively participate in the SEA work. Therefore, it is necessary to publish and implement sustainable development policies and environmental protection policies for a long time, so that environmental protection can become the consensus of all parties. In this way, various groups can be actively mobilized while breaking horizontal and vertical administrative barriers to form a joint force to promote the implementation of SEA.

Maria Rosario Partidario

Professor of Planning, Urbanism and Environment at Instituto Superior Técnico, Universidade de Lisboa

"Create a new mentality - change mind-sets by changing the dominant speech around SEA."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

The use of SEA as a term, and as the extension of EIA to the assessment of pre-project design, has increased significantly. Even to the extent it was seen, for a few years, as an alternative to EIA, and is still often used to avoid EIA at a later stage, particularly in spatial planning contexts. But whether the effectiveness has improved is highly questionable.

Discussing the effectiveness depends on the objectives expected with SEA. If the objective is to use SEA to deliver reports with the assessment of the future expected environmental effects in the larger picture of a set of projects, the future expected cumulative environmental effects of a set of projects, or even the future expected environmental impacts of the operationalization of a plan, it may even be that SEA might have been effective. As many indicate success of SEA by the number of processes/reports.

2. Where does the current state of practice still fall short?

But should the objective of SEA be to deliver reports to inform decision-making with the assessment of the future expected environmental effects? How much does such practice influence long-term complex policy and planning options to set tracks towards sustainability? How much does it change mind-sets? What has changed with the practice of SEA beyond project changes or detailed planning changes?

The cases in which SEA has made real strategic contribution to long-term, large picture, discussion of major development options, tracking towards sustainable development, giving direction towards future visions, I believe have been very few. The proactive use of SEA to set direction for development falls largely behind its capacities.

SEA falls short of strategic oversight, of being accepted as an active influencer of more sustainable practices that really change BAU. Developers, planners, policy makers, strategists, should see SEA as a useful tool to assist forward looking decision-making, a companion to foresight approaches that bring in dimensions usually not included

3. What key steps may help to move the agenda forward?

Reflect on what the world is 25 years later, what are needs and whether it makes sense to continue using SEA as an EIA-type tool, bound by respective regulatory requirements without really looking into needs, particularly exploring the strategic and governance potential and capacity of SEA.
Create a new mentality - change mind-sets by changing the dominant speech around SEA
Change legal requirements to abandon the legalistic discourse and practices
But it won't happen.... Change is very hard!!!!

Peter Nelson

Project Lead at Planning
Green Futures.Org

"I have been impressed by the way in which stakeholders can latch on to the merits of an SEA."

Observations

It is often misleading to say that an SEA does not take decisions – it only presents the alternatives to decision-makers. In my opinion, SEA must inevitably engage in the areas of active political debate because it does not employ the precise methodologies of an EIA but grapples more with concepts and the uncertainties of the future. The more I have worked in the field the more I have come to realise that it is the 'institutional' framework which determines the success or failure of the SEA process (as argued by Fernando Loaysa from the World Bank).

In nine of fifteen regional/national SEAs in which I have been engaged some significant political issues were raised which had to be addressed at government (Cabinet) level. This required the project leader to defend and explain the purpose of SEA and at the same time justify publication of the final document (in some cases against vehement opposition from vested interests).

The second observation I would like to make is that SEAs invariably have more than one outcome. The first outcome is the level of success in addressing the initial hypothesis or set of factors which led to the SEA's launch in the first place. This is a relatively 'quick fix' which becomes apparent from the way in which the SEA is received on publication by both decision-makers and stakeholders. The second outcome relates to the way in which recommendations are embedded within the commissioning organisations and delivered on after the SEA process is complete. Are policy changes introduced? Are specific measures and guidelines acted on in the follow-up period which might last 1-5 years? The third outcome relates to the extent to which the SEA shapes opinions and perceptions in terms of the acceptance and development of SEA practice within the country(s) in question.

I have been impressed by the way in which stakeholders can latch on to the merits of an SEA and use its findings to continue to press for change long after the initial work is complete. It is also satisfying to see the way in which countries themselves have adopted and endorsed SEA processes based on some of their early experience. (South Africa, Ghana, Kenya and Sierra Leone are specific examples).

1. How and to what extent has SEA effectiveness improved since the 1996 study?

My first impression was how relatively undeveloped the practice of SEA was in 1996 (which is no reflection on the efforts being made by proponents of SEA (experts/trainers and teachers) at the time). When I compare it with my subsequent experience as a technical adviser to the OECD SEA Task Force between 2004-2006, I realise how much progress was made in the decade 1996-2006, based on formal application of SEA and the parallel process of Sustainability Appraisal, in Europe and countries listed in

the 1996 review. In this period, we had formal requirement of SEA for PPPs in the European Union, advice on SEA for Developing Countries, the World Bank's injection of Institutional SEA, significant individual studies in Asia, Africa and Australasia (and no doubt in other parts of the world with which I was not familiar). This was a very lively period for SEA practitioners to get engaged and try out new approaches

The overall credibility of SEA as a process has advanced and more countries are willing to invest in its application. The broad framework has been accepted and the procedural steps (as defined, for example in the OECD SEA guidance) are followed in many countries. In this sense SEA effectiveness has improved.

2. Where does the current state of practice still fall short?

The scale of the political challenges relating to global environmental issues have also escalated in the same timescale and will continue to do so at an exponential rate. The result is that the circumstances in which SEA is actually applied are seldom those where the most pressing issues need to be resolved (famines/poverty/ethnic conflicts /human migration/ biodiversity loss and climate change adaptation).

My impressions of what happened in the decade 2006-2016 are of consolidation in the practice and application of SEA but without any significant new development or innovation. In the current decade (2016-2026) the process is now imbedded in a number of countries but the initial ideas that SEA might bring radical new approaches to reform and improvement of policies, plans and programmes at national or even international level do not seem to have been fully realised (at least from my perspective). To some extent I think this may be because those of us who were crusading for a rigorous system of appraisal that would call governments, development agencies and international companies to account for unsustainable environmental, social and economic development strategies (PPPS) were over-optimistic about the scope for change.

With some notable exceptions (such as the work of the Netherlands NCEA), there is very little follow-up on the performance and outcome of individual SEAs. As a result, there is no overarching assessment of SEA achievements – demonstrated in part by the need for this follow-up to the 1996 effectiveness study

3. What key steps may help to move the agenda forward?

- Greater publicity and promotion of successful SEA processes is needed – not necessarily within scientific papers and journals - but in the public arena.
- Practitioners should join forces to promote the use of SEA (as already occurs within IAIA, but on a more formalised basis).
- International Agencies, starting with the UN and its institutions (the World Bank / WHO) should consider using SEA at the policy level on a regional / continental scale.

This last point has been a personal crusade on my part since we were together in Viet Nam and it led me to attempt my own Global SEA in 2020-2021.

prof. Le Trinh

Deputy President of
Vietnam Association for
Environmental Assessment
(VAEIA)

"The views and awareness of SEA of some relevant agencies are still limited, considering the implementation of SEA only as a mandatory procedure."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

a. Legal regulations were issued and are implemented
b. The environmental management organization, in general, and the management of SEA and EIA, in particular, are relatively well improved.

- To date, MONRE has appraised more than 100 large – sized SEA reports on regional, provincial development planning and sector development plans.

c. SEA technical guidance were issued and SEA training were conducted

- Up to now, MONRE has issued 3 general technical guidelines on SEA and 10 SEA technical guidelines for development plans of sectors and fields.
- In addition, MONRE has developed and issued 3 specific guidelines for SEA (Guideline for assessment of impacts on biodiversity in SEA; Guidelines for health impact assessment in SEA; Manual for professional assessment in SEA) and has developed and published 4 technical guidelines for integrating climate change factors in planning using the SEA tool: one general guideline for integrating climate change factors in planning and 3 specific guidelines for mainstreaming climate change into provincial socio-economic development master plans; guiding the integration of climate change factors into development plans for the road transport sector; guiding the integration of climate change factors in electricity sector development planning by means of SEA.

d. Quality and effectiveness of SEA is gradually improved

- The pilot SEA projects with financial and technical support from international donors and the participation of consulting agencies and domestic experts are of good quality and have proven effective results Pilot SEA for the Development Plan of the Coastal Economic Belt in the Gulf of Tonkin, the master plan for the development of hydroelectricity basins in the Vugia - Thubon river basin, the socio-economic development plan of the Red River Delta, the master plan for socio-economic development of Phuquoc island have shown that the SEA has been effectively implemented and has made positive contributions to the forecasting the environmental impacts of the plans.
- Through the SEA, there were many important opinions, which had an impact on adjusting many socio- economic development plans of various regions (Central Region of Vietnam, Vandon Special Economic Zone etc.) and provinces (Backan, Thanhhoa, Quangtri, Danang city, Tayninh etc…);

Planning of locations for construction of nuclear power plants, planning on development of water resource development were carefully considered.

- The provincial and sector master plan has become more aware of the impacts of SEA and has adjusted the Master Plans before submitting them to the Prime Minister for approval.
- The content and quality of the SEA report has become clearer, more scientific and more detailed, especially since the Government's Decrees and MONRE's circular detailing SEA and EIA (nearly) this is Decree 40/2019/NDCP and Circular 25/2019/BTNMT)
- A good example of a successful SEA is the SEA for the Planning for the Mekong Delta in the period of 2021 - 2030, with a vision to 2050.

e. According to the new Vietnam Planning Law (2017), SEA must be carried out simultaneously with planning process.

- So from now, SEA may be more substantive and effective, not like before: SEA implemented after the planning has been completed made many disadvantages.

2. Where does the current state of practice still fall short?

- The quality and effectiveness of SEA reports vary, depending on the capacity of the planning agency, the SEA consulting agency, the budgets, the organization of the SEA implementation, the coherence between the study of the Master Plan and the study of the SEA. SEA. Some SEA reports are unsatisfactory, no clear and valid as a mere condition for plan approval, especially in case the SEA is implemented after the Master Plan completed.
- The views and awareness of SEA of some relevant agencies are still limited, considering the implementation of SEA only as a mandatory procedure; the role, importance and effect of SEA in regional and sector development planning has not yet been seen properly.
- Before 2020, many SEAs are carried out after the Master Plan has been drafted, not ensuring the principle of SEA to be implemented right in the planning process. Therefore, the effectiveness of SEA is limited. On the other hand, the proposals and recommendations of the SEA are not fully absorbed by the planning agency.
- The participation of stakeholders and communities in the SEA preparation process is still limited, affecting the quality and effectiveness of the SEA. The Law on Environmental Protection (2005, 2014, 2020) regulate details the consultation in the EIA but does not specify the SEA.

3. What key steps may help to move the agenda forward?

In Vietnam:

- Improvement of awareness in role and importance of SEA of the leaders of ministries.
- Strictly implement the guideline of the Planning Law: SEA must be implemented together with planning.

Internationally:

- Methodology and training how to integrate biodiversity, climate change, cumulative impacts into SEA.

Luis Sanchez

Full Professor at the
University of São Paulo

"Legislation and policies promoting SEA grew in the period, but evidence of its actual influence on decision-making is scarce."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

We now have many examples of SEA success cases. Inside its community of practice, SEA certainly evolved a lot in 25 years. There is significantly more experience.
Research and conceptualization also evolved and support best practice. Effectiveness, however, depends not only on the robustness of strength of a tool, not even on the (in this case, low) power of its promoters, but largely depends on the context. Legislation and policies promoting SEA grew in the period, but evidence of its actual influence on decision-making is scarce.

2. Where does the current state of practice still fall short?

- We have many examples of 'bookshelf' studies, i.e. nice and maybe very good reports that fall short of being considered in the decision-making process.

- Evidence of actual influence on decision-making is scarce.

- Current practices are extremely uneven across countries. While there is regulated SEA practice such as required in the European Union, many countries do not have neither legal requirements nor practical experience.
  From the places where experience has been gathered, I understand that practice still falls short in many aspects, out of which I would highlight 'strategicness': where and when SEA is being conducted, does it go to the heart of strategic issues, or does it remain at the fringes and restricted to mitigating adverse effects?

3. What key steps may help to move the agenda forward?

The current climate and health crisis could be an opportunity to move forward the SEA agenda. The world is facing several transitions, one of which is urgent and already proceeding at an accelerated pace, the energy transition. To shift from fossil to renewable, new onshore and offshore energy facilities are being built and many more will be needed. Adverse environmental and social impacts are

inherent and those projects require appropriate impact assessments. SEA can contribute by highlighting trade-offs, making explicit some “non-negotiable losses”, such as key biodiversity areas. Energy transition can have far reaching consequences. One example is the need to supply large quantities of minerals, both those that are already extensively mined, such as iron, copper and aluminium, and the so-called critical minerals, such as cobalt, lithium and rare earths. Increasingly the supply of those minerals to meet the needs of energy transition can have far-reaching environmental and social consequences , including deep sea mining, for which a moratorium has been recently called upon.

Thus, SEA scholars and practitioners (better, impact assessment scholars and practitioners at large) could contribute to advance the agenda by clearly showing SEA potential contribution to make both public and private decisions about resource allocation for the energy transition. Case studies of “success” could be a contribution, as well as showing up SEA contribution to achieving the Sustainable Development Goals. Another could be endeavouring to promote SEA in international treaties – legally binding or not – such as the ongoing ‘Post-2020 biodiversity targets’ and any agreements coming out of the conferences of parties of the UN Framework Convention on Climate Change.

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Professor at the
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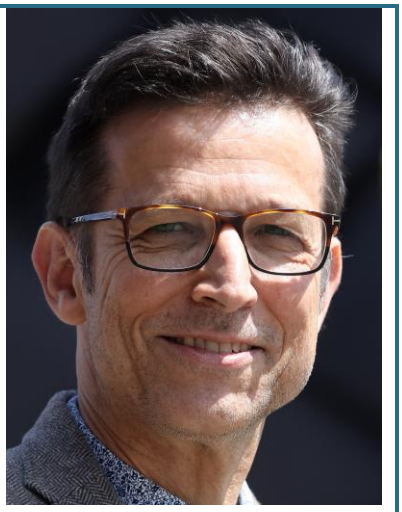

"I do not believe that substantive and normative effectiveness of individual SEAs overall has improved greatly."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

SEA practice varies and there is excellent practice out there next to very poor practice. So, the following is meant to provide for an average picture. Importantly, SEA is now formally required in over 60 countries and that's fundamentally different from what we had in 1996.

- Our understanding of what (1) context (requirements, guidelines, institutional support) is required for SEA to be able to be effective has improved substantially.
- With regards to methodology, we now also have a much better idea about what methods can be suitably applied in a particular situation of application and what options/alternatives need to / should be assessed, depending on the sector and tier (i.e. strategy, policy, plan or programme).
- The number of SEAs applied in 2022 is exponentially higher than in 1996 and this is having an effect on the way strategies, policies, plans and programmes look and also on implementation of actually development (i.e. in quantitative terms we have improved).
- Just based on the sheer number of SEAs that are being conducted today, SEA's values are slowly becoming institutionalised in systems where SEA is consistently applied.
- When it comes to pluralist effectiveness, there is some evidence that SEA is effectively leading to accommodating (some) competing points of view.

2. Where does the current state of practice still fall short?

- I do not believe that substantive and normative effectiveness of individual SEAs overall has improved greatly. In 1996 we had mainly pilot studies – these always tend to receive a lot of attention and resources, and as a consequence they are often of a very good quality; once you get into a routine application, this tends to become more mixed.

- With regards to knowledge and learning, we have advanced only very little, in particular when it comes to double or even triple loop learning.

- In terms of transactive effectiveness (i.e. value for money), I'd say that at an individual SEA level, if anything, this has decreased.

- SEA is usually approached as a one-off application and if that's the case its effectiveness is naturally reduced.

- SEA is struggling with evaluating impacts and it's struggling with identifying and assessing appropriate options / alternatives.

- Too many SEAs have an emphasis on the presentation of extensive amounts of baseline data without asking why and how they are relevant.

- Also, on too many occasions baseline data are not really used in the actual assessment. Trade-offs are usually made outside SEA and routinely bio-physical aspects are then traded off for assumed economic benefits.

- SEA follow-up and monitoring is poorly done. Recommendations are too often unclear and I've seen a worrying trend recently with SEA suggesting the worst environmental option becomes the best by suggesting numerous mitigation measures. However, in the absence of securing binding commitments to all those mitigation measures, this is a dangerous game SEA is playing.

- Not enough is done with regards to capacity building and provisions of institutional support.

3. What key steps may help to move the agenda forward?

If SEA is to be effective, it needs to be seen as an approach, not a tool. A system's view is necessary in which SEA is enabled to systematically address and assess the issues covered when devising strategies, policies, plans, programmes and projects. At each of these tiers, environmentally sustainable solutions need to be developed, based on the assessment of possible future (development) options and at each of the tiers SEA needs to acknowledge what is happening elsewhere.

SEA should be enabled to formulate non-negotiable conditions (i.e. conditions that should not be traded-off).

Jiří Dusík

Social and Environmental Standards Specialist - Europe and Central Asia. United Nations Development Programme

"Next generation SEA systems should be required to identify and consider development options that not only minimize new env pressures but instead achieve positive environmental impacts."

The effectiveness of any SEA is in my view always largely determined by the governance context in which it is applied. Having made these generic disclaimers and observations, I will now focus on SEA systems in Czech Republic and Croatia which I know well.

1. How and to what extent has SEA effectiveness improved since the 1996 study?

- We have well-established and widely known SEA procedures which are applied systematically and address all problematic development proposals early on. The mere existence of SEA system prevents developers from pursuing development plans that would be visibly problematic.
- We also now have adequate expert capacities for performing solid SEA studies.
- Lastly, we have well-established SEA information systems that provide useful and easy to access information on all SEAs (past and ongoing) – and there is no problem for the public to follow the SEA process and participate in it.

2. Where does the current state of practice still fall short?

- Scoping is bureaucratic and ineffective – it is used to add on specific concerns but not used to scope out the irrelevant issues. The regulatory framework often requires us to assess pre-defined categories of env. factors and impacts even when they are clearly not relevant.
- Limited consideration of the forthcoming changes in the affected environment due the changes in the climatic conditions – this is a well-known fact and other will write much about this, I guess.
- Limited consideration of cumulative and synergistic impacts – much has been written about it but few suggestions have been proposed to date. My recommendation: SEA systems could be inspired by the assessment regimes under EU Natura 2000 legislation or Water Framework Directive that basically do not allow deterioration of good status of key env assets (Natura 2000 network, water bodies) and often even require their gradual improvement (in the case of Water Framework Directive).

- Limited consideration of more env-friendly alternatives. This is obviously driven by several factors. Firstly, SEA almost always starts too late to influence the discussions on proposed development and alternatives of the PPs. I do not think there is much we can do about it. But we can do a lot about the second driver: SEA systems do not require consideration of development options that achieve positive environmental impacts. And here we can promote major innovations in SEA systems.

3. What key steps may help to move the SEA agenda forward?

I have one major proposition that addresses the deeply rooted problems associated with the current inability of SEA to address the growing cumulative impacts and promote more environmentally sustainable development options. It goes like this:

Next generation SEA systems should be required to identify and consider development options that not only minimize new env pressures but instead achieve positive environmental impacts. Specifically, the SEA processes should duly consider environmentally sustainable options of proposed developments that actively reduce any relevant (existing and forthcoming) problems or risks in the environment that may be affected by the proposed plan, programme or policy.

In my view, this would be the key mind-shift that the update of your 1996 SEA effectiveness study could promote. If you wish to have some references, you may wish to consider the below mentioned new pieces of work that link the IA systems (SEA included) with resilience thinking and sustainable finance frameworks. I think they provide useful supportive arguments for a major change in the SEA mind-set.

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Alan Bond

Associate Professor in
Environmental Management
at the University of East Anglia

"Significant practical experience has been gained of the application of SEA, and there is mounting evidence of the benefits that it can deliver."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

Significant practical experience has been gained of the application of SEA, and there is mounting evidence of the benefits that it can deliver. The European Commission evaluation of the SEA Directive is one example. In particular, the consideration of consistency of plans, etc. with other international and national policies helps to strengthen the effectiveness of those policies by extending their reach into other sectors.

2. Where does the current state of practice still fall short?

SEA was always expected to strengthen project EIA and, to be effective, to operate through a tiered decision-making process. Yet tiering remains a weakness, exacerbated by very different conceptions of SEA applied at policy level (based on Regulatory Impact Assessment with a largely economic focus). Different actors are involved at different levels of decision making, with very different networks and priorities. This makes tiering an enormous challenge which has yet to be overcome. It is exacerbated by the difficulty in allocating national targets (e.g. for climate change) to regional level commitments to be embedded in plans.

Monitoring remains weak and is complicated by the inevitability of counterfactuals that will influence outcomes over the long terms covered by strategic planning.

SEA predicts into the future based on current context. By the time the future date arrives which is the end date for the plan, etc., the prediction context has moved on and it becomes easy to then disregard inadequacies based on inevitable uncertainties.

Public participation also remains weak. I don't believe this is because of a lack of expertise on behalf of practitioners, or political will in many cases, but the reality remains that members of the public have too little understanding of strategic policy and planning processes and the effects they will ultimately have. Therefore, motivation to engage remains low.

3. What key steps may help to move the agenda forward?

- SEA used to operate in a vacuum when it came to intended goals. Sustainability was inconsistently defined and interpreted to suit the needs of the protagonist for any policy, plan or programme. However, the SDGs, however flawed they can be argued to be, present some benchmark against which policies, plans or programmes can be judged. Whilst trade-offs can still be made, it is easier to see the importance of any losses accepted by decision makers.

- There is increasing academic interest on the issue of tiering, and I believe this is appropriate. The full value of SEA cannot be realised unless the issues with tiering are resolved.

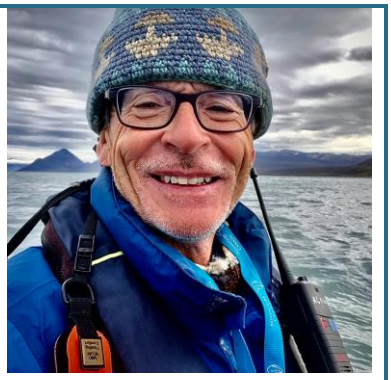
- Consideration needs to be giving to the education system and the extent to which curricula at all levels of education instil an understanding of decision processes, and the influence that can be brought to bear through public and stakeholder engagement.

- SEA needs to develop better approaches for dealing with the uncertainty associated with changing contexts over the period covered by the assessed policy, plan or programme. This likely needs to draw on scenario analysis, building on more comprehensive evaluations of past SEA case studies (focussing not simply on the SEA, but on the change in context of the focus for the SEA).

- There needs to be consideration for how monitoring responsibility can be shared across sectors so that counterfactuals can be accommodated in evaluations in the future.

Peter Croal

Environmental Consultant
at Peter Sean Croal



"Yes, has improved, but not enough. Still highly politicized at the expense of science."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

Yes, has improved, but not enough. Still highly politicized at the expense of science.

2. Where does the current state of practice still fall short?

- Science is not respected.
- Proponents have a louder voice.
- There is no real political will.

3. What key steps may help to move the agenda forward?

- Make SEA a legal statute, not a policy tool (similar to Canada's approach).
- Link to Environmental, Social and Governance and Social License to Operate.
- SEA in a Covid world. In the following remarks I include SEA in the overarching practice of IA and all its attributes:

The effects of Covid 19 are far reaching and long lasting. There is no chance of going back to a world we all experienced before the pandemic struck. All institutions, societies, businesses, governments and people are forever changed as a result of Covid-19. Some of the effects of Covid-19 may be good, but on balance, we are all finding our way to a new way of life, governance, and commerce that has shifted over the last 2 years.

One of the casualties of Covid-19 was the influence of SEA and IA. As you may know IAIA conducted a membership survey to gauge how IA had been affected because of Covid-19. The results are sobering. Over 30% of IA systems had been "weakened" as a result of the pandemic. Various IA requirements were suspended in many cases so that safety could be maintained, but also so projects could be fast tracked. The dilemma is this. At a time when climate effects are taking root and biodiversity losses are

accelerating, IA was being weakened in many parts of the world. IA has been an effective decision support tool for over 40 years. But in the last 10 years, the world has witnessed unprecedented floods, fires and other weather events costing thousands of lives and billions of dollars of losses.
The question we must ask then is: Is IA as currently practiced able to address the accelerating environmental issues now experienced globally? And does IA need to adapt to a new world order related to government structures and decision making, institutional money flows, commerce and risk management? The world has pivoted over the last 2 years. IA must as well if it hopes to be a relevant decision support tool for the decades to come.

Bottom line: the world has changed because of Covid. What do we need to do as proponents and architects of the IA practice to respect this change? We need to get IA/SEA more imbedded in the risk management world dominated by institutional investors and risk managers, lest we be left incrementally sidelined. Covid has accelerated that sidelining process.

Riki Therivel

Levett-Therivel
sustainability consultants

"I feel ambivalent about whether SEAs should be broadened to include the full range of social and economic impacts."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

- Lots of examples of SEAs: SEAs are now commonly carried out and the resulting environmental report are perceived as a key document in plan-making. Many environmental reports are publicly available which can as good practice examples/models
- Better consideration of alternatives: Clearer understanding of the three stages of alternatives (identification, assessment/comparison, explanation of the reason for choosing the preferred alternative). The discussion of alternatives in SEA is highly scrutinised by the public, consideration of alternatives is getting planners to think more actively/creatively about their plans, and planners are more actively considering consultation responses since these may suggest 'reasonable alternatives'
- Clearer understanding of the role of SEA in identifying and mitigating cumulative/strategic issues e.g. climate change, biodiversity loss
- Much greater use of GIS/mapping, with consequent improved ability to spatially analyse spatial plans, i.e. identify the location of environmental sensitivities, the location of likely significant impacts, and the need for location-specific mitigation measures from overlay maps, weighted maps etc.

2. Where does the current state of practice still fall short?

- Politicians and other decision-makers are still not aware of SEA and how to use it. Lots of 'symbolic SEAs' are written to justify decisions already taken. In part this is because the SEAs are started too late, but also in part because plan-makers/politicians are unwilling to actively use SEA to improve their plans.
- SEA is still not regularly applied to policies, and (in Europe at least) there are lots of get-out clauses (e.g. plans must be 'required' and include EIA projects)
- Tiering from SEA to EIA, and consequent time/money savings, are still under-used. This is in part because the plan-makers and project proponents tend to be different, so there is little incentive for plan-makers to do the hard work of scoping things out, suggesting project-specific mitigation measures etc.

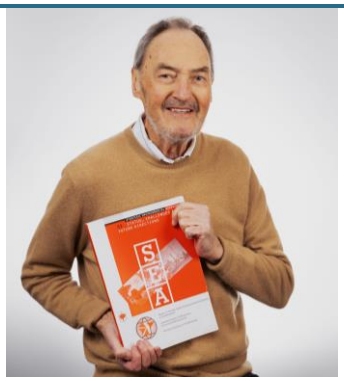
- Lack of links between SEA and environmental thresholds means that SEA rarely says 'this plan should not go ahead'. E.g. in Europe the SEA Directive should test whether a plan achieves the standards set in the Directives on air quality, water quality, climate change agreements etc.
- Too many SEAs are very broad-brush, wishy-washy, non-quantitative, in part because of the prevalence of objectives-led appraisal approaches and becaues no proper environmental thresholds apply in SEA.

3. What key steps may help to move the agenda forward?

- Link SEA to environmental standards/thresholds. This would lead to an improvement in predictive models, and give SEA more 'teeth'.
- Educate politicians and other decision-makers about SEA
- Remove screening get-out clauses. Apply SEA to all strategic actions that are likely to have significant environmental impacts
- I feel ambivalent about whether SEAs should be broadened to include the full range of social and economic impacts. However, I do think that it should consider social inequalities / 'environmental justice', as these link human health, environmental quality and fairness
- Greater application of the precautionary principle in SEA (linked to SEA having more 'teeth'), especially for issues where cumulative impacts are already severe, e.g. climate change, biodiversity, soil loss
- An expectation that certain components of SEA will be modelled and quantified, e.g. for air quality, nitrogen run-off, carbon emissions, traffic (like for appropriate assessment.

Barry Sadler & Rob Verheem

Environmental Specialist



Director International at the Netherlands Commission for Environmental Assessment

"Much work needs to be done before this potential is fully realised."

1. How and to what extent has SEA effectiveness improved since the 1996 study?

In summary, SEA today looks very different from its emerging state in 1996. It is now a well-established process, undertaken worldwide, although not yet universally. In most systems, SEA is founded on a sound basis of legal and institutional arrangements and rules that govern its conduct. The state of the art too is well developed; a corpus of norms, principles and guidance on SEA good practice is widely available; and a large kit of analytical tools, data systems and knowledge networks can be applied to assess effects and issues subject to review.

2. Where does the current state of practice still falls short?

Our broad take on this issue is that in too many cases the quality of SEA practice and reports is substandard and falls short of the level mandated in applicable regulations or guidance, let alone the criterion of 'state of the art'. In those cases, this deficit calls into question their value for decision-making; and by extension, their fitness for environmental and social purpose. By many accounts, SEA is frequently side-lined in the exercise of choice and has a peripheral influence on shaping the overall course of proposed actions. Despite progress on other fronts, SEA has yet to gain real traction on the realpolitik of development decision-making, and this constitutes a major limitation on its substantive effectiveness.

Undoubtedly, there are also many examples of SEA influencing decision-making and greening plans and programmes (policies are another matter). However, the standard or level of environmental safeguarding that is actually achieved in these cases is open to question. The same is true for social

impacts, particularly in developing countries where there is growing consensus that these should be fully included in SEA. It is a key issue of effectiveness that requires further scrutiny.

Much remains unclear in that regard. But what can be gleaned is suggestive, if not probative, that many SEA applications result at best in relatively modest levels of environmental and – even more so - social protection, well below notional thresholds for sustainability assurance. In particular, there is insufficient analysis of cumulative effects and their interaction with the complex web of global and regional environmental and social changes and threats that frame the baseline against which SEA is conducted.

Widening the lens, the potential of SEA as a sustainability instrument is well recognised and actively promoted; for example, as a means to relate or instil the UN 2030 sustainable development goals or their national equivalents in policy, plan and programme proposals. However, de facto consideration of sustainability matters in SEA is often generalized, superficial and inconclusive. It is also characterised by ambivalence on whether or how to pursue an integrated approach to assess sustainability. This debate, far from over, bears on the prospects for designing an effective SEA process to meet the challenge of sustainable development. Above all, any approach must be strictly prosecuted to secure a measure of environmental and social safeguarding consistent with a designated threshold of sustainability assurance – a notion introduced in our 1996 report as a pointer to future practice.

3. What key steps may help to move the agenda forward?

How the future might unfold is ingrained in the SEA approach and the precursor fields of impact assessment and strategic planning. It is embedded in predictions and forecasts of potential effects associated with proposed actions and alternatives. Such effects, by definition, are characterized by inherent uncertainty and possible surprise events (i.e. expect the unexpected). These caveats are writ large in looking at the future prospects for SEA in the context of the interlocking multiplex of trends and issues that define the state of the world today and lie at the crux of the overarching challenge of sustainable development. By any measure, natural systems are being altered by the footprint of human activity at rates and scales unprecedented for millennia, placing at risk 'our common future'.

This 'problematique' is the frame and focus for taking SEA forward as an instrument for environmentally and socially sound and sustainable development policy and plan-making. SEA, of course, is only one of the tools for this purpose, which requires a 'whole of public policy' approach. But as a frontline tool, SEA can be applied to build environmental and social sustainability into decision-making one step at a time, proposal-by- proposal. Herein lies its purchase on shaping the future.

Much work needs to be done before this potential is fully realised. Looking ahead, there are positive trends on which to build to advance the state of the SEA art and address issues that constrain process effectiveness. These are briefly identified below for further discussion through IAIA and similar networks to tap the wisdom of a larger body of practitioners and commentators. First, we look at some immediate steps that can be taken to move the SEA agenda ahead, and secondly, speculate on options for upgrading and reorienting SEA to a greater sustainability purpose.

As a preliminary list, we suggest consideration could be given to the following list of priorities for action and research:

- in depth investigation of the impact of SEA on decision-making and identification of cases where the process has been successful or marginalised, including how and why this happened;
- build the business case for SEA, providing concrete examples of how taking account of environmental, social and sustainability effects can deliver benefits and manage risks;
- tackle institutional barriers that impede SEA application at the policy level and limit the quality of assessments, such as compartmentalized organizational structures or bureaucratic prerogatives;
- identify measures that can incentivise good practice and effective reports;
- continue development of participative methods that facilitate stakeholder interaction and dialogue;
- develop methods to improve communication of the results of SEA reports to higher echelon decision makers; and
- invest in the potential of digital IA to support and improve SEA practice, for example use of website and internet based methods to facilitate direct and continuous participation and prepare more user friendly and influential IA reports.

All of these steps can help underwrite the role and contribution of SEA to what many see as the 'great transition' toward sustainability. Looking further ahead in a world of increasing environmental and social risk and threat, we argue that SEA must increasingly measure up to higher standards of environmental and social safeguarding and greater provision of sustainability assurance of proposals submitted to decision-making.

Part II:

IAIA Community

4 Results of the IAIA23 25 years of SEA session

Attendance: Ca 50 people, diverse backgrounds, junior and senior experts, mostly Global North

Limitation: the session aimed at tapping the minds of the experts present. In other words, the results are based on expert judgement. This means that the results are influenced by the composition of the audience and the context in which experts operate. Since composition and context have not been analysed, the results described in this session report should be regarded as interesting 'leads' or inspiration for further thinking and/or research, rather than 'facts'.

Methodology: In reaching the conclusions in this report, the following 3 methodologies were applied:

- To 'warm up', the audience jointly compiled 3 'word clouds' using Mentimeter around the topics: how has SEA improved, where does it still fall short and what should be a future agenda.

- In a second step comments from each member of the audience were gathered through Mentimeter, then clustered where they appeared to reach comparable conclusions, after which conclusions drawn by 3 people or more are summarised, starting with the ones most mentioned. *See Annex for a full overview of all comments made during the session*.

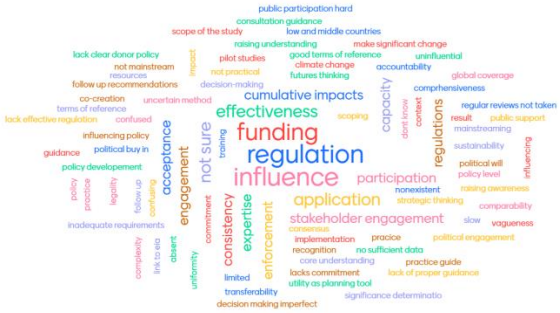
- In a third step each member of the audience was asked to score the extent to which they agreed to 14 conclusions drawn earlier by a group of seasoned SEA experts. This report gives the average score, including the spread in scoring and summarizes the result.

Step 1 Word Clouds

How has SEA improved since 1996?

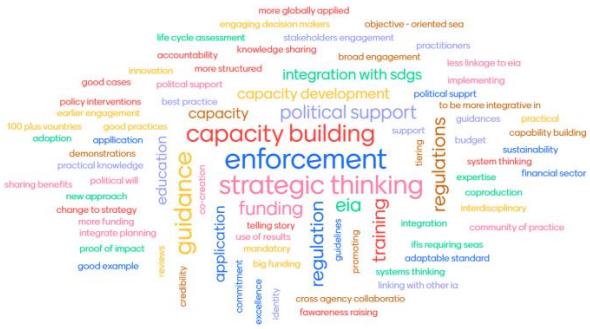
Most mentioned: better regulations, more awareness, more acceptance, more experience, more engagement (part of the audience was unsure or confused about this question)

Where does current practice still fall short?



Most mentioned: regulation, influence, funding, application and effectiveness

What may help to move the agenda forward?



Most mentioned: more strategic thinking, better enforcement, capacity building and guidance

Step 2: Opinions from the audience[1]

In general

What is striking is the diversity in response. The large majority of observations and conclusions are made by only 1 or 2 members of the audience. Even where a number of people agreed, typically this is true for only a small part of the audience (8 -10 people out of 50). Again, this asks for caution in interpreting the results.

How has SEA improved since 1996?

Most mentioned is the fact that over the last 25 years SEA has been regulated in a growing number of countries[2]. Also, it is observed that worldwide there is a growing recognition of the importance and utility of SEA, both at country level and within multilateral institutions, such as the UN, multilateral development banks and other financial institutions. To a lesser extent it is mentioned that SEA is getting more mainstreamed into strategic planning and that better data for the application of SEA has become available. Finally, it is noted that practitioners are becoming better informed and methodology is improving.

Where does current practice still fall short?

[1] See Annex for a full overview of all comments made.

[2] For example in an overview of SEA regulation worldwide made by the NCEA it appears that in 2023 ca. 100 countries have SEA in their regulation.

Most mentioned is the lack of capacity of SEA practitioners to do good practice SEA. Secondly, use of SEA in practice is lagging behind. With some alleged SEAs at second sight being about large projects rather than strategic decisions. Thirdly, despite regulation adopted in a growing number of countries, there still is a considerable number that does not have regulation in place. An observation is that, for example, top management in public institutions often does not fully understand SEA purpose and usefulness. And, finally, it is noted that in many SEAs alternatives such as alternative sustainable development pathways are insufficiently considered.

What may help to move the agenda forward?
Two issues stand out. On the one hand the need for SEA capacity building, not only of practitioners, but also of policy makers and decision makers. On the other hand, the need for more and better SEA guidance documents, based on international experience. A number of people emphasises the need for better regulation and stronger enforcement mechanisms. Finally, the need for lobby & advocacy is mentioned to show decision makers the benefits of SEA.

Step 3: Response to the conclusions of the SEA expert group

Using Mentimeter the audience was asked to score the conclusions of an SEA expert group under each of the three headings 'How has SEA improved', 'Where does it fall short' and 'How to move the agenda forward'.[3]

Overall conclusion is that the audience appears to agree with the conclusions of the expert group as to where SEA practice currently still falls short and what a future SEA agenda should be, but not as to how SEA has improved over the last 25 years. On this topic, both the average scores (40 – 50 out of 100) and the high spread in the results indicate much diversity in the audience on issues such as actual SEA application, recognition of its utility, how well we understand its application, the availability of guidance and the effectiveness of SEA.

Box 1: How has SEA improved

- SEA is applied worldwide – average score 40 – high spread
- SEA is widely recognised as an important tool – average score 40 – high spread
- 'How to' is well understood with good practice examples available - average score 47 – high spread
- Guidance and capacity development is available and influential – average score 53 – high spread
- Quality and effectiveness is improving – average score 47 – high spread

[3] For a summary of the conclusions, the scores and the spread in results: see boxes 1, 2 and 3 (score 0 = strongly disagree – score 100 = strongly agree).

Box 2: Where does current practice still fall short

- SEA is not influential enough - average score 87 – low spread
- SEA quality is uneven - average score 85 - low spread
- Limited understanding and appreciation of SEA within government – average score 92 - low spread
- Too narrow and legalistic application - average score 72 - low spread
- Insufficient stakeholder participation in SEA - average score 81 - low spread

Box 3: What may help to move the agenda forward?

- Intensify advocacy and awareness - average score 89 - low spread
- Innovate and explore new ways to apply SEA - average score 82 - low spread
- Apply further research - average score 80 – medium spread
- Strengthen the legal status of SEA - average score 81 - medium spread

Conclusions and discussion

As might be expected, the discussion of SEA developments, potentials and prospects was wide ranging, and characterised by a diversity of views. In that regard, the discussion essentially mirrored the larger reality of ongoing discourse on the field.

The 'word clouds' profiled in figures 1 to 3 offer a rough and intuitive content analysis of the nature and scope of the initial round of views on the areas of concern. Furthermore, many individual observations were recorded. These are annotated in detail in the Annex.

Of particular interest here are several aspects on which there was a measure of agreement. From our reading, three main headlines stand out:

SEA has improved significantly over the last quarter century in a number of important respects, e.g.*,* taken up worldwide and progressively increasing in importance and utility at country level and within multilateral institutions. However, what is also clear is that – at least with those attending the session – there is quite a lot of differing opinions as to the extent of this improvement.

SEA good practice is well understood today and for the most part applied, although intermittently and variably. Both within and particularly between countries where capacities differ. More broadly, effectiveness in *influencing decision-making* still has shortcomings.

In SEA going forward there are calls for greater advocacy, awareness and innovation to explore new modes of application and further research and activism to strengthen the legal status and effectiveness of the process. Key steps most mentioned include more capacity building and training on the job, better guidance and good practice documents and stronger enforcement of SEA regulation.

Full overview of all comments received from the audience at IAIA23[4]

1. **How has SEA improved?**
   - Not sure/no experience (9)
   - Regulated and applied in more countries /adoption in national frameworks (9)
   - Growing recognition of its utility/more awareness/better accepted/including by UN agencies/MDB and MFI as a requirement (8)
   - Broader and more practical implementation/getting more mainstreamed (4)
   - Better data/more data sharing (4)
   - Improvement came about in the form of including it in EIA regulations, better informed practitioners, better awareness by the community. (3)
   - The scale of application and the overall methodology (3)
   - Wide range of examples can now be reviewed/more case studies (2)
   - More experience and understanding in some sectors and regions (but not all) (2)
   - It has expanded from developed to least developing countries (2)
   - The volume and progress of research in the field
   - Participation and consultation process has improved and helped in tailoring the process and its results.
   - Better government understanding of regulation = more plans are covered by SEA
   - Became better known
   - More focussed, right level of detail
   - Practitioners understand the role of SEA in relation to EIA
   - Integration of environment, social and health considerations
   - Voluntary SEA practice seems to emerge
   - Learning also to use the instrument of SEA for policy making.
   - More motivation for addressing sustainability
   - Better quality reporting
   - Development of credible spatial scenarios
   - Becoming more integrated in strategic planning
   - Better education for SEA

[4] The number in brackets () indicates how many people made the same comment.

2. **Where does current practice still fall short?**
   - Lack of capacity of the consulting firms/practitioners/in general (6)
   - It has not been widely adopted. Many SEAs actually are EIAs. Assessment still at project level (5)
   - Lack of regulation (4)
   - Top management does not fully understand SEA/inadequate understanding of SEA purpose and usefulness (3)
   - Lack of alternative sustainable development pathways/lack of will to consider alternatives (3)
   - No cumulative impact assessment (2)
   - Convincing decision makers of its benefits rather than being a hurdle/lack of political will to implement SEA (2)
   - Sometimes SEA is an afterthought/wrong timing/too late (2)
   - No national SEA experts in the least developed countries; reliance on international experts.
   - Clarity and understanding of the relation with project based EIA
   - Inadequate stakeholder engagement
   - Boundaries between SEA and EIA are not clear
   - Poor assessment of climate change
   - Lack of capacity to regulate SEA
   - Imbalance between what the public is concerned with and what is prioritised in SEA and the report
   - Unclear relationship between feasibility study, SEA, ESIA and cumulative impact assessment
   - Use of EIA approaches in SEA (in Europe)
   - Lack of funding, including funding for capacity development
   - Strategic concept is wrongly understood
   - Imbalance in the assessment of the environmental factors
   - Lack of real influence on decision making
   - SEA overshadowed by EIA in the general public
   - Lack of documentation of the adoption of recommendations in the SEA. EIA has concrete time bound actions whereas SEA sometimes doesn't
   - Lack of an integrated approach
   - SEA is too baseline led
   - In Europe the current legal link between EIA and SEA should be severed
   - SEA does not provide reasonable arguments for decision makers and politicians
   - Lack of standardised methodology for SEA

3. **What may help to move the agenda forward?**
   - Capacity building, including policy makers and decision makers/training on the job (10)
   - Better/more guidance/development of good practice documents based on international experience (8)
   - Better/more regulation/make it mandatory/enforce (assign institutions for enforcement (6)
   - Show decision makers the benefits of SEA/convince industry and others that SEA will simplify assessments later/convince 'decide and defend' decision makers to expose their choices to genuine scrutiny and assessment (4)
   - More policy SEA/differential policy SEA guidance from plan/program guidance (2)
   - All SEAs should kick off with training and awareness raising events (2)
   - Clear linkages between SEA and EIA
   - Make it objectives led (such as the SDGs)
   - Make the focus less 'instrumental'
   - Better timing of the SEA
   - Better scenario analysis
   - Better collaboration of local government agencies
   - Reaching audiences outside IAIA
   - SEA adoption by IFIs
   - More guidance on the consultation process
   - Adopt better strategic planning
   - Make SEA results more tangible and implementable
   - More government engagement in SEA
   - Make the SEA concept simpler and easier
   - Political champions
   - Figure out how outcomes get incorporated in policy and decision making; making the dog bite
   - Recognise that tiering goes both ways: EIAs benefit from SEA findings, and SEAs benefit equally from EIA findings
   - Review the effectiveness of SEA
   - Dare to be unpopular
   - Go for a proactive strategy rather than reactive SEA
   - Faith and perseverance

Any other comments on SEA development

- Share good practice experiences/ Is there a library of "good" SEA stories for advocacy in favour of SEA?/More good case studies needed in other languages than English (5)
- What is the best angle to persuade politicians to submit policies etc to SEA (as opposed to Decide And Defend)?/ Awareness raising of the SEA among the government officers should be improved while the funding should be in place/Political commitment is important (3)
- SEA experts may not be the best qualified to assess SEA effectiveness. You should ask SEA users and stakeholders too/Understanding of its utility is key (2)
- Capacity building of national governments and practitioners/ Capacity building for national experts (2)
- Adjust it for developing countries, focus on key strengths to ensure buy-in and application and usefulness/ SEA in developing countries needs a bit different approach to meet the challenges such as fragile conflict context (2)
- Clear guidance/ Separate policy guidance and program guidance (2)
- Use AI for SEA
- Timing is key
- Consider a new approach and name
- It could be a fantastic tool if it gets correctly applied upstream enough and with better implementation and multistakeholder engagement.
- Who in government has the mandate to make sure the ESMP is implemented?/ Difficulty in getting all govt ministries to commit to the SEMP
- Make it meaningful and an agent for change
- My dream - Policy makers will use SEA or SEA thinking without calling it SEA
- There has to be a clear perception about EIA, Cumulative Impact Assessment and SEA
- Not only research but also good practice
- It should focus more on how to improve positive impacts.
- SEA has a future when it delivers to policy makers and politicians
- Link SEA with sustainable finance frameworks
- Guidance notes for different sectors especially linear infrastructure development needed
- Move SEA forward into regional planning
- I see SEA having to be coupled to every EA. SEA addresses landscape, economic and social context for proponent and intended project/activity.
- Research the theory and practice of SEA in each country
- It should be seen as a tool that saves time and improves the outcome down the line
- SEA is wrongly understood in Japan and JICA. SEA experts should be more in the lead.
- SEA is an outdated concept. We need proactive sustainability strategies to facilitate the transition to sustainability solutions.
- SEA recommendations do not need to be detailed to reflect the strategic level but not too loose also.

5. Results of the IAIA questionnaire survey

This chapter describes the results and reflects our interpretation of an online survey as part of the project to take stock of the status of SEA. It is based on a questionnaire that was open for IAIA members on the IAIA website from February until April 2024. The questionnaire was filled out by 36 respondents. Initial findings from the survey were reported and discussed at IAIA 2024.

5.1 Overview

The questionnaire consisted of seven open-ended questions and four closed-ended questions. In addition, respondents were asked to provide more information about their background.

About the respondents

Figure 1 (page 53) provides a brief overview of the respondents' backgrounds: their roles, areas of focus and number of years of experience.

Open ended questions

The main body of the questionnaire comprised four 'open ended' questions on recent progress in SEA (see **paragraph 5.2**), the quality of current practice (**paragraph 5.3**), ways and means of improving its effectiveness (**paragraph 5.4**), and priorities for action by IAIA and its members (**paragraph 5.5**).

As the name suggests, 'open ended' questions allow participants to respond in words of their own choosing. This format typically elicits a rich and nuanced range of views, with the potential for unlocking new insights and perspectives. But it also generates qualitative data sets that are challenging to categorise and compare (as opposed to 'closed end' questions with a predetermined format for response).

Not unexpectedly, this proved to be the case here. The open questions resulted in a wide spread of views and opinions. We applied a two-step content analysis of this database. An initial scan of the compass of inputs on open questions identified emerging clusters of opinion. A second level of review looked at commonalities and associations, an emerging architecture of response, if you will.

Closed-end questions

The questionnaire also included seven closed-end questions on the effectiveness of SEA practice. They give an initial reading, broadly drawn, of how SEA varies against different metrics of performance. The response to these closed-end questions is presented in figure 2 (**paragraph 5.6**).

At the end of the chapter, four main takeaways are provided, see **paragraph 5.7**.

How to read this chapter

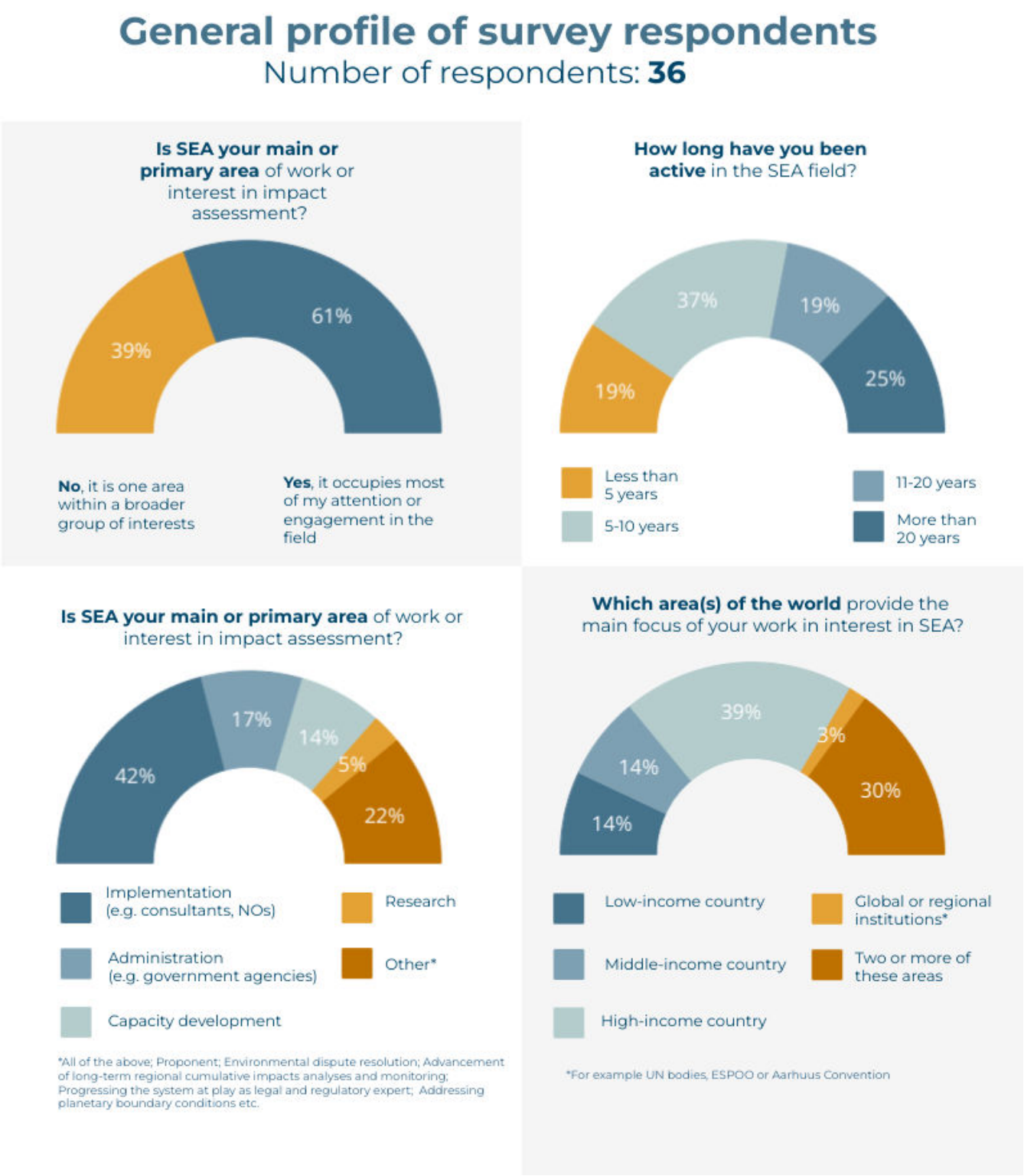
The open-ended questions elicited a broad and eclectic range of responses on the SEA past, present and future that vary widely on what is important. So, in most cases, the views identified here are those of a relatively small number of respondents.

Taken overall, the state of the field is given a somewhat mixed review. There is a wide spread of opinion on questions. Both pros and cons, strengths versus weaknesses of SEA practice, are roughly contraposed. In general terms, however, the balance of views skews more positive than negative (confirmed by responses to closed end questions).

The dimensions of opinion on each question are drawn below. They are based on commonalities and associations that could be identified or reasonably assumed from participant responses. Our characterisation and organisation of the views expressed is perforce subjective and inevitably has left some overlap/ replication between the categories.

When reviewing these, note there are also overlaps between areas of agreement and disagreement within and between opinion sets on each question. In some cases, seeming conflicts and contradictions reflect the focus or context of questions; e.g., what may be identified as an area of progress also might be considered a limitation on current practice.

Figure 1 Overview of the background of respondents



5.2 Open-ended question: How has SEA improved in the last 25 years?

Overview

- Notable progress occurred in SEA during this period;
- Improvements made in many aspects of the field, though often with the proviso that much more remains to be done [see section 4.4];
- Key developments are listed below;
- Little consensus on the relative extent importance;
- Some questioning of whether 'real change' occurred.

Greater recognition and visibility

- SEA became better known and acknowledged;
- Elements of SEA more fully understood by parties to the process;
- Increasing though variable perception of its role and contribution to policy and plan-making.

Increased take up

- SEA established in increasing number of countries and international bodies;
- Adoption in global north and south;
- Formalization of SEA systems and arrangements;
- Informal requirements also introduced in a number of jurisdictions.

Process development:

- Many advances in SEA procedure and arrangements across a broad front;
- Legal and regulatory enactments by many countries;
- Formal and informal rules widely established;
- Guidance on how to apply and undertake SEA;
- Some progress in tiering of PPP applications and linkage of SEA and project-level EIA in some countries.

Administrative developments

- SEA institution and agency building;
- Improvements made in organisation and management controls;
- Better process oversight and accountability;
- However, such gains seen as modest at best.

Scope of SEA extended

- In types of policies, plans and (to a lesser extent) policies covered;
- In review of cumulative and regional scale effects;
- More attention given to biodiversity, ecosystem, and sustainability issues;
- Inclusion of social, health and (in some cases) equity impacts on disadvantaged communities.

Strengthened methods and tools

- Larger body of techniques and measures available to carry out SEA;
- Innovations supporting data and information technologies;
- Emergence of computer-based and online knowledge;

- Evolving body of SEA theory and methodology (e.g. analysis of ecosystem and cumulative effects).

More open process

- Increasing provision for public involvement;
- Greater availability of information for stakeholders;
- More interactive, consultative approaches undertaken in some countries;
- Also a few examples of outreach to engage marginalized groups (such as indigenous communities).

Greater capacity building and training

- Increasing provision of SEA courses, programmes and learning opportunities;
- All levels and aspects from introductory to advanced skills;
- SEA development assistance to developing countries;
- Availability of increasing information and guidance on SEA (underpins other advances noted above).

Increasing visibility in decision making (?):

- Mixed opinions on this issue;
- Some see improved identification and integration of environmental effects in PPP;
- Others questioned this and 'what it really added up to';
- Related to concerns about the use and impact of SEA on decision-making (see next section).

5.3 Open-ended question: What are the main areas where SEA practice still falls short?

Overview

- Numerous concerns, 'shopping list' of outstanding issues specific and field wide;
- Ranging from state of SEA practice in particular countries and jurisdictions to general or systemic weaknesses;
- These reflect procedural, methodological, and institutional limitations;
- More frequently mentioned deficiencies include weak legislation, poor enforcement, inadequate public participation, limited application to policy, unclear downstream implementation of SEA ('what happens, how are reports/inputs used' in decision-making?);
- Lack of follow up fails to capture accumulated experience;
- SEA quality and impact overall thought to fall short.

Understanding and commitment still too limited

- Among parties to the SEA process;
- SEA practitioner and administers views differ on the role, aims and scope of SEA, markedly so in some cases;
- Low level of political and social consensus on its value and contribution(s);
- Too often seen as a 'bolt on' or inconvenience by implementing agencies;
- Building public support for SEA remains a challenge.

Reservations that SEA falls short of being fit for purpose[5]

- Differing critiques of why;
- 'Worst case' is that SEA amounts to little more than a perfunctory, 'box ticking' exercise;
- Others saw it as too lengthy, time consuming and costly;
- Or as an overly broad or abstract scrutiny of issues lacking 'urgency' and 'focus' (unfavourably compared to EIA of controversial projects).

How 'real' is the 'sign on' to SEA?

- Number of doubts expressed about the degree of commitment to SEA;
- Some consider the process is not taken seriously (or seriously enough) by key actors;
- Others questioned the level of 'buy-in' by implementing agencies;
- Scepticism that SEA findings are taken 'on board' in policy or plan design;
- ('Part and parcel' of a larger concern about effectiveness of SEA in decision-making).

Limitations in scope and focus

- Various issues identified;
- Prominent was that SEA at the policy level falls well short of requirements;
- Poor or uneven application of SEA to certain plans and programs across a number of sectors and countries;
- Many differing and opposing views expressed on scope of SEA;
- Applications seen both as i) too broad and ii) too restricted;
- Some complained of unnecessary data and information gathering;
- Others of unfocused or superficial approaches;
- Assessment of cumulative and indirect environmental effects viewed as too limited by some, too extensive by others;
- Consideration of social, cultural and health impacts mixed at best;
- Sustainability and climate issues often given cursory attention or overlooked.

Institutional and procedural shortcomings

- Many flaws identified;
- Mix of generic and country-specific examples mentioned;
- Variable development and implementation of legal and regulatory frameworks;
- Absent in some jurisdictions;
- Weakly enacted and deficient in others;
- Many lack 'teeth' and mechanisms to enforce compliance;
- Procedural rules and requirements often not up to accepted standards;
- Mixed record on substantive principles and guidance;
- Participation measures do not meet public/ stakeholder expectations;
  Inadequate funding allocated to 'do SEA properly'.

Administrative inadequacies

- Process management viewed as lax, lacking transparency and accountability;
- Weak scrutiny of procedural compliance and the quality of SEA practice;

[5] Minority view -- but strongly held?

- Poor tracking of implementation of terms and conditions (deficiencies that 'lead to fears' that SEA input is overlooked or given limited consideration in policy and plans);
- Limited oversight/coordination of SEA with EIA and policy systems.

SEA process inconsistently and/or poorly carried out

- A number of concerns fell under this category;
- SEA process 'starts too late' to add much according to a few;
- Uneven application of SEA steps seen as continuing weakness;
- Individual concerns noted included perfunctory significance, mediocre reporting and 'bog standard' mitigation;
- Screening and scoping also considered by some as too superficial and by others as too excessive;
- Public participation 'too often to little, too late';
- SEA follow up and ex-post review often absent or limited, hindering learning and improvement.

Professional capabilities and skills questioned

- Seen as uneven and falling short on a number of fronts;
- Still at a nascent state in some developing countries;
- Practitioner expertise varies even in established SEA systems;
- Technical 'know how' viewed as limited in SEA compared to EIA;
- 'Not good enough' in assessing long term, ecosystem wide impacts, social and economic effects and relationship to sustainability, climate and other global challenges;
- Competencies and skills in applying computer based analytical and information technologies thought to be in short supply.

SEA-specific methodologies and tools underused

- Too much reliance on EIA methods and incremental approaches;
- Uneven adaptation to scope/scale of policy and plan-making;
- Insufficient review of ecosystem wide, long-term effects;
- Too little or lagging application of new ideas (e.g. boundary conditions, tipping points) and approaches (e.g. risk and scenario analysis, regional studies, cumulative effects mitigation and regeneration plans);
- Limited use of quantitative data and computer simulations.

Role and impact of SEA in decision making in question[6]

- The role of SEA in decision-making is unclear/ uncertain in too many cases;
- Doubt expressed about the contribution and influence of SEA on policy and plan-making;
- Key questions: What does it all add up to? To what extent are environmental and other effects 'taken on board'? How much consideration are they given? Does it make a difference in mitigating/ offsetting environmental and social effects?

Is SEA practice strategic, or strategic enough?

- For some, SEA is not 'forward looking enough';
- Too many narrowly framed applications;

[6] Note many comments or concerns bear on this relationship indirectly but collectively added up

- Lacking an 'eye on the big picture' and foresight on longer term, cumulative effects; SEA systems often lack (internal) coherence and alignment with EIA and planning frameworks, limiting collaborative thinking and collaboration.

5.4 Open-ended question: What steps and measures are required to improve the quality and effectiveness of SEA practice?

Overall[7]

- Promote SEA understanding and commitment among stakeholders and interested publics;
- Strengthen legal and regulatory frameworks;
- Apply SEA to all significant policy, plan, program, and funding proposals;
- Improve SEA procedures, methods, and data bases;
- Upgrade modes of public and community involvement;
- Undertake cutting edge to research to improve 'evidence-based' SEA practice.

Promote SEA awareness and support

- Outreach and advocacy still need to make the process and its benefits better known;
- Ensure the 'what, why and how' of SEA are clear and understood;
- Encourage buy- in and ownership by complying agencies and decision-makers;
- Exemplify the contributions that SEA provide for policy and plan-making;
- Illustrate its role and potential for taking forward the sustainability agenda and safeguarding against emerging risks (e.g. large scale /global changes);
- Champion SEA as a process of democratic decision making.

Strengthen SEA legal and regulatory frameworks

- Review and upgrade [as needed] against internationally accepted precepts and rules;
- Focus on provisions for enforcing compliance and implementation;
- Improve measures for public participation (significant upgrade needed);
- Look for opportunities to streamline and simplify requirements and arrangements where practicable/appropriate;
- Ensure they retain functional integrity and adaptive capacity to accommodate new challenges.
- *Broaden scope and focus of application*
- Full coverage of policy initiatives (much needed, high priority);
- Ensure SEA applies to all key sector /spatial plans8;
- Push the boundaries of SEA to include long term, larger scale effects9;
- Utilise more holistic, integrated approaches;
- Address global challenges and systemic risks;
- Look for options that yield positive gains and benefits;
- Give attention to social factors and next generation consequences;
- Adopt a regional or ecosystem approach to address cumulative effects and interactions;

[7] NB Many respondents listed only one or two measures; varied mix of responses.
[8] Some SEA regimes were considered lacking in this aspect; energy, transportation were among sectors cited in this regard.
[9] Note range/number of suggestions relatively individualised with limited overlap.

- Emphasise impact mitigation and regenerative plans (aim to achieve no net loss);
- Refocus SEA on taking forward the sustainability agenda;
- Review proposals against key frameworks, goals, and criteria (such as planetary boundary conditions);
- Integrate environmental, social, and economic effects.

More stringent SEA process and procedure

- Reinforce weak links in the process;
- Upgrade key procedures and supporting measures;
- Ensure their systematic application; earlier, proactive approach to screening and initiation of proposals;
- Collaborative scoping to address complex policy and environmental issues;
- Improved quality of SEA reports/ better documentation for decision making;
- Enhance measures for stakeholder engagement and public participation;
- Strengthen impact mitigation and management;
- Ensure implementation of SEA terms and conditions;
- Better follow up on compliance and monitoring of results and impacts.

Reinforce governance

- Strengthen mandates and institutional arrangements for SEA administration and accountability;
- Allocate necessary financial and support resources;
- Ensure consistent oversight and enforcement of requirements;
- Improve agency transparency and reporting;
- Upgrade guidance on SEA good practice;
- Introduce results-based approach to SEA governance;
- Closer alignment of SEA and EIA, policy, and plan-making systems.

Sharpen and diversify analytical tools

- Less reliance on EIA methods;
- More emphasis on strategic and risk-based tools and approaches;
- Strengthen social and health assessment;
- Improve methods to assess regional and cumulative effects (priority);
- Apply systematic approach and higher standards to impact mitigation (no net loss/net gain);
- Make better use of ecosystem science and baselines (GIS data);
- Draw on new technologies and information processing systems10;
- Improve measures for assessing sustainability, biodiversity and climate-related effects;
- Adopt 'futures perspective' on implications of evolving multiple global challenges.

Provide for meaningful public participation

- Apply a systematic, multi level approach;
- Tailor opportunities/ measures to facilitate contributions from all participants;
- Support the participation of directly impacted communities and disadvantaged groups;
- Better accounting of public inputs/ views in SEA reports.

[10] There was a particular focus on artificial intelligence (AI) and its pros and cons. Several respondents emphasised its potential to enhance SEA; others cautioned about risks associated with its use.

Learn from experience

- Take a more systematic approach to SEA knowledge building;
- Ensure follow up is carried out as an essential element of SEA procedure;
- Focus on evaluating "what was achieved and added";
- Build a bank of SEA cases and examples of good/best practice;
- Update guidance on 'how to do the job better'.

Forward looking SEA training and capacity building;

- Focus on upgrading professional expertise and organisational 'know how';
- Equip SEA practitioners with the skills to use new tools and technologies;
- Facilitate 'forward thinking' on SEA and take of new ideas and advances;
- Foster adaptability and response to emerging trends and issues;
- Relate SEA to policy development and initiatives11.

5.5 Open-ended question: Which are the most critical priorities for IAIA action to meet emerging SEA challenges?

Overall

Several priority areas stand out, including:

- Re-establish an IAIA section on SEA;
- Best practice guidance and materials;
- Training and capacity building;
- Advocacy and promotion;
- Build an SEA library/ knowledge platform.

'Best practice' guidance

- Promote and develop at all levels - strongly emphasised as priority for IAIA action;
- Build on established principles and standards;
- Update and supplement as required, e.g. case examples of good practice (draw on international experience);
- Specific topics for attention put forward include sustainability, indigenous rights, use of best available technology, models /examples in dealing with critical /emerging issues, linking SEA, Cumulative EA, Regional EA and project EIA, and how best to assess proposals with more abstract effects;
- Identify particular needs of developing countries and others catching up;
- Consider IAIA awards/ recognition for best practice examples.

[11] Tying SEA into advancing policies with positive traction, like 'nature positive' or climate offsetting, can also build enthusiasm for what is seen by many as another regulatory obligation.

SEA advocacy and promotion

- Continue to build awareness of the value and benefits of SEA for policy and plan making;
- Enhance cooperation with relevant agencies, managers and decision-makers;
- Initiate a dialogue on the role of SEA in the finance and risk sectors;
- Launch a process of international exchange on addressing critical issues such as climate change, biodiversity etc.

Measures to strengthen the field

- Extend the global coverage of SEA law and regulation;
- More robust implementation and post-SEA follow up, monitoring and evaluation;
- Improve measures and opportunities for public participation;
- Better integration of SEA and project level ESIA;
- Linkage among other aspects such as health;
- Make SEA more flexible and simplified where possible.

Training and capacity building

- Strongly emphasised as a priority for action, especially for practitioners in developing countries;
- Build capacity to better implement SEA process;
- More focus on constructive incremental approaches to SEA;
- Promote SEA-related disciplines in education and academia (bachelor and higher-level degrees);
- Introduce IAIA certification /diploma in SEA (and other sub-fields of IA).

Re-establish SEA section as a hub of IAIA action and networking

- IAIA should become more engaged in supporting /advancing the field;
- Notably by mobilising resources, levering finance, cooperating with allied bodies etc.;
- A 'new' SEA section can be the momentum for change and serve as a forum and work space for members to collaborate on shaping the field;
- Use the IAIA annual meeting to exchange ideas and views on the latest developments and to take section for initiatives, such as additional workshops, online seminars and research projects;
- Need to prioritise was strongly emphasised ('less is more').

Build an SEA resource library and knowledge platform

- Develop / put together key publications and materials on SEA;
- Give priority to examples of good practice/ reviews of SEA implementation, especially examples at the policy level;
- Compendium of approaches to environmental impacts, e.g. on land use, water, etc. or from transportation, energy developments etc.;
- Maintain reference list of published work/ ongoing research; open platform for members to share innovations and solutions;
- Join with NCEA and others active in the field on this initiative.

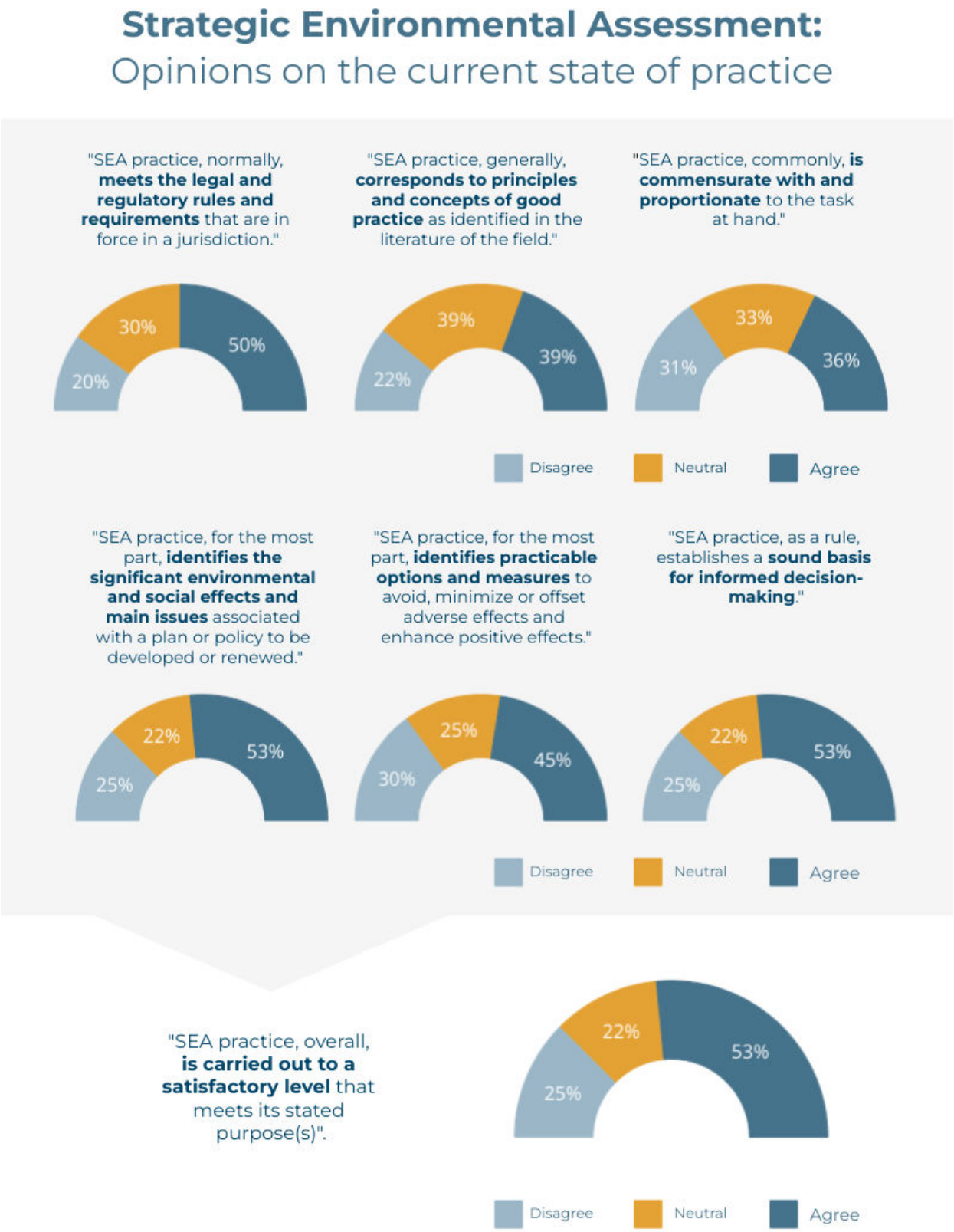
5.6 Response to the closed-end questions

The seven closed-end questions took the shape of statements to which respondents could indicate which multiple-choice answer they found most applicable. The seven statements were formulated as follows:

- SEA practice, normally, meets the legal and regulatory rules and requirements that are in force in a jurisdiction.
- SEA practice, generally, corresponds to principles and concepts of good practice as identified in the literature of the field.
- SEA practice, commonly, is commensurate with and proportionate to the task at hand.
- SEA practice, for the most part, identifies the significant environmental and social effects and main issues associated with a plan or policy to be developed or renewed.
- SEA practice, for the most part, identifies the significant environmental and social effects and main issues associated with a plan or policy to be developed or renewed.
- SEA practice, as a rule, establishes a sound basis for informed decision-making.
- SEA practice, overall, is carried out to a satisfactory level that meets its stated purpose(s).

The response to the closed-end questions is presented in figure 2.

Figure 2 Overview of response to the closed-end questions



5.7 Main takeaways

We conclude with four key takeaways from the responses to questions posed.

1. How has SEA improved in the last 25 years?

During this period, substantial improvements were made in most areas of the field. Notable were the wider adoption of SEA, expanded scope of review, stronger legal and institutional arrangements, and procedural developments*

**These points often came with the proviso that much more remains to be done, and some questioning of whether 'real change' occurred.*

2. Where does SEA practice still fall short?

The state of SEA practice falls short in many aspects, with **numerous** procedural, methodological and institutional limitations identified. More frequently mentioned deficiencies include weak enforcement of rules and requirements, inadequate public participation, limited application to policy, and unclear implementation of SEA ('what happens, how are reports/inputs used'?). Reservations also expressed about if there is 'real buy-in' to SEA by implementing agencies or it makes a 'real difference' to decision making.

3. What steps and measures are required to improve the quality and effectiveness of SEA practice?

Various initiatives were put forward; not surprisingly, many focussed on areas of weakness noted in current practice. Key actions included strengthening legal and regulatory frameworks, applying SEA to all significant policy, plan, program and funding proposals; improving procedures, methods and data bases; upgrading modes of public involvement; and undertaking 'evidence-based' research to improve SEA practice.

4. Which are the most critical priorities for IAIA action to meet emerging SEA challenges?

IAIA on a number of fronts, beginning with stronger promotion and advocacy to raise the profile of SEA and push the momentum for positive steps to meet emerging challenges. Priority areas include establishing an IAIA section on SEA; updating and supplementing best practice guidance and materials; supporting training and capacity building; and building an SEA library/ knowledge platform of cases of good practice and advances in dealing with critical /emerging issues, e.g. applying CEA, REA and sustainability approaches

Colophon
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