Integration of SEA with other forms of assessment – Examples from the United Kingdom

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Abstract

In the UK SEA has traditionally been combined with Sustainability Appraisal (SA). More recently it is becoming increasingly frequent for SA/SEA to be undertaken in conjunction with other statutory and nonstatutory assessment processes. Such approach represents both challenges and opportunities for SEA practitioners and their clients. This paper analyses two examples of application of SEA integrated with SA, Health Impact Assessment, Equalities Impact Assessment and Habitats Regulations Assessment for land use and transport plans and looks into the degree of success of such undertakings. It demonstrates how such integrated assessments can lead to assessment process efficiencies and better decision-making.

Olena Popovych (Atkins UK), Cristina West (Atkins UK), Sarah Minett (Atkins UK)

Acronyms

Acronym	Meaning / Definition		
EqIA	Equality Impact Assessment		
HIA	Health Impact Assessment		
HRA	Habitats Regulation Assessment		
SA	Sustainability Appraisal		
SEA	Strategic Environmental Assessment		
WHO	World Health Organisation		

1. Introduction

- 1.1 The term Integrated Impact Assessment tends to be used loosely to describe different types of assessment processes but essentially any process which attempts to cover more than one type of impact assessment in a single process can be called an integrated impact assessment.
- 1.2 The Integrated Assessment Society defines Integrated Assessment as the interdisciplinary process of integrating knowledge from various disciplines and stakeholder groups in order to evaluate a problem situation from a variety of perspectives and provide support for its solution [6].
- 1.3 It can be argued that Strategic Environmental Assessment (SEA) has many of the features of Integrated Impact Assessment through its wide coverage of topic areas and the need to consider the results holistically. The SEA framework of environmental objectives often derived as part of an SEA can provide the logical framework on which to 'hook' other types of assessment. The framework allows for the examination of particular topics in a more comprehensive way, as required by each particular type of impact assessment.
- 1.4 Examples of other types of Impact Assessments that can and have been integrated with SEA in the UK are:
 - Equality Impact Assessment (EqIA);
 - Habitats Regulations Assessment (HRA);
 - Health Impact Assessment (HIA); and
 - Sustainability Appraisal (SA).

2. Integrated SEA/SA

- 2.1 SEA for plans and programmes is required under the SEA Directive which came into force in the UK in 2004 through the Environmental Assessment of Plans and Programmes Regulations 2004.
- 2.2 In the land use planning sector SA was traditionally used in the UK prior to the SEA Directive coming into force. However, SA tended to be undertaken on the finished plans rather than as part of an iterative plan making process. As a result it had very little influence in the plan making process and did not necessarily lead to more sustainable outcomes.
- 2.3 Because of this tradition, SA became mandatory for land use plans under the Planning and Compulsory Purchase Act 2004 [13]. The Regulations implementing the provisions of the Planning and Compulsory Purchase Act 2004 [14] require SA to incorporate the requirements of the SEA Directive.
- 2.4 It should be noted, however, that SA and SEA have slightly different goals. SA is a tool which purpose is to promote sustainable development through a better integration of sustainability considerations (environmental, social and economic) in the preparation or revision of a plan. SEA is another assessment tool, which objective is to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.
- 2.5 By considering the three dimensions of sustainable development, SA naturally aims to achieve such development. It can be argued that it brings together all relevant information thus allowing for an informed decision-making process, which has at its heart the achievement of sustainable development and is based on the principle of democracy. *"Well-designed tools for highlighting the social, environmental and economic impacts of plans will help to ensure that planning outcomes reflect a transparent and fair system."* [1] However, an issue that can arise with SA is the depth with which the appraisal is undertaken and whether the right balance between three dimensions

has been struck. The need to balance between environmental, social and economic considerations may prove challenging. Specifically, environmental considerations may be compromised in favour of social and economic considerations, which are historically seen as a priority on a political agenda.

2.6 SEA, on the other hand, considers mainly the environmental dimension. It, therefore, provides a contribution towards the achievement of sustainable development in terms of safeguarding environmental considerations. Its results tend to inform and feed into wider decision making processes that usually consider economics and social aspects more prominently.





Source: Adapted from South West Regional Assembly (2002). Analysis of Baseline Data Requirements for the SEA Directive, report by TRL Limited and Collingwood Environmental Planning. Taunton: South West Regional Assembly.

- 2.7 The differentiation between SA and SEA can also be made in terms of their format and aspirations. SA is an 'objectives-led approach' with objectives often derived from international, national, regional or local policy, whereas SEA is a 'baseline-led' approach, more reliant on the understanding of environmental baseline and problems.
- 2.8 The integrated SEA/SA approach that was developed in the UK [4] brings together these two types of approaches. The agreed set of sustainable development objectives (i.e. SEA/SA Framework) is the principal component of an SA. It is the performance of a strategy, policy or project in meeting the sustainability objectives that lies at the heart of the process. At the same time the integrated process also requires a sound understanding of the baseline conditions and their future evolution without the implementation of the plan supported by indicator and other type of data and information.
- 2.9 Therefore, joint SA/SEA process provides more comprehensive approach to the assessment than these processes in isolation. Additionally, sharing a common baseline helps reduce inconsistencies in the assessment process. This also decreases pressure on local authority resources in terms of volume of workload, staff's availability, time and financial resources.

3. Other Forms of Integration

3.1 The emerging National Planning Policy Framework [3] acknowledges that apart from SA (understood to incorporate the requirements of the SEA Directive), local plans may require a variety of other environmental assessments, including under the HRA and Strategic Flood Risk

Assessment. It is recommended that assessments should be proportionate to the plan and wherever possible, share the same evidence base and be conducted over similar timescales. This arguably supports the case for an integrated impact assessment where appropriate.

- 3.2 In the case of transport plans, government guidance has evolved from a process where only SEA was necessary [9] to an integrated process [8] covering SEA, HIA, EqIA and HRA.
- 3.3 Thus, SEA or better still joint SEA/SA can provide the umbrella process within which all the relevant social, economic and environmental aspects are assessed. The assessment is undertaken to an appropriate level of depth for the plan concerned and fulfilling the legal requirements for the various types of assessment. The integrated approach can also provide the way forward to simplify the confusing world of impact assessment requirements and tools that is out there. Many of these impact assessment tools can be utilised within the wider framework with other assessment processes.

Integration with EqIA

- 3.4 An equality impact assessment is a process designed to ensure that a policy, project or scheme does not discriminate against any disadvantaged or vulnerable people. There are eight protected characteristics identified in the Equality Act 2010 [11]: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.
- 3.5 Spatial planning has a strong focus on promoting equality of opportunities for all, encouraging cohesion and interaction within communities as well as eradication of social inequalities and deprivation. Therefore, EqIA can be undertaken under the relevant SA/SEA objectives.

Integration with HIA

- 3.6 HIA is 'a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population' [15]. HIA is based on a very broad socio-environmental model of health.
- 3.7 HIA is concerned with the changes in the determinants of health that may be associated with a project. The determinants of health are largely environmental and social factors that can be root causes of illness and state of well-being. The determinants affect different social groups in different ways. HIA assesses impacts of a plan or project on the health determinants in relation to vulnerable groups (e.g. children, older people, disabled and people with other health problems, those in low-income groups and others) as well as entire population in the study area.
- 3.8 HIA is required by the UK White Paper on public health strategy [10]. The Local Government and Public Involvement in Health Act 2007 [12] also emphasises the need for HIA.
- 3.9 The Welsh Health Impact Assessment Support Unit considers integration of HIA with SEA/SA best practice. SEA/SA can provide a statutory framework for the integration of HIA into planning in more detail than is currently practised.

Integration with HRA

3.10 HRA is an assessment of proposed plans or projects which are likely to have a significant effect on one or more European sites, either individually or in combination with other plans and projects. The effects of a plan are assessed against the conservation objectives of a European site to determine whether it would adversely affect the site's integrity¹. The requirement arises from the Conservation of Habitats and Species Regulations 2010 [7] implementing the Habitats Directive (92/43/EEC).

¹ Integrity is describe as the sites' coherence, ecological structure and function across the whole area that enables it to sustain the habitat, complex of habitats and/or levels of populations of species for which it was classified

3.11 In terms of the process followed, HRA differs from the SEA/SA process, e.g. consultation with statutory consultees is undertaken at different stages of the assessment report preparation. Therefore, it is recommended that a degree of separation between SEA/SA and HRA is maintained [5]. However, it is still possible to link the two processes quite closely together. For example, at the scoping stage baseline data on the protected European sites can be shared and the HRA screening report can be published alongside or as part of the SEA/SA report; at the assessment stage HRA findings can be incorporated in the SEA/SA under the framework objective relating to the biodiversity protection or European sites specifically.

4. Case studies

4.1 Atkins undertook numerous integrated SEA/SAs and more recently has been involved in a number of projects involving the integration of other assessments – HRA, EqIA and HIA. Two case studies for different project types are presented below to offer some practical insights to integrated assessment.

Integrated Assessment of Transport Plan

4.2 Local authorities are required by government to produce Local Transport Plans (LTP) which set out long term Strategies² and Implementation Plans³ for improving transport in their local area. Atkins was commissioned by the Tyne and Wear Joint Transport Working Group to undertake an integrated SEA, HIA, HRA and EIA of the Tyne and Wear LTP 2011-2021.



- 4.3 The client was keen to embark on the integrated assessment process from the very early stages of the plan development for the two main reasons:
 - To comply with legal requirements; and
 - To maximise the influence of the assessment process to shape the development of the LTP to ensure a sustainable solution.
- 4.4 The client's commitment made it possible for the project team to devise a suitable methodology for an integrated assessment at the start of the process, e.g. during the scoping exercise. An

² usually developed for the next 10-15 years

³ usually developed for shorter periods of time, e.g. 3 years, and subject to more frequent reviews

Integrated Scoping Report set out the context and approach for the subsequent assessment and covered the four assessment processes (see example in Table 4.1).

Transport Planning Stage	SEA		HRA	HIA	EqIA
	Stage	Tasks	Tasks	Tasks	Tasks
Determining the scope of the LTP (Strategy and Delivery plan); clarifying goals; specifying the problems or challenges the authority wants to solve	A. Setting the context and objectives, establishing the baseline and deciding on the scope	Identify related plans/programmes		Identify Health related plans/programmes (as part of SEA)	Review of relevant policies and strategies
		Identify environmental protection objectives		Derivation of health -related themes	Derivation of equality-related themes
		Baseline data and likely future trends	Identify all international sites within and up to 20km around the Tyne and Wear area	Gather data relating to health (as part of SEA).	Baseline evidence
		Identify sustainability issues	Contact Natural England for details of all international sites and consultation purposes	Identify health specific issues (as part of SEA)	Identify equalities specific issues

Table 4.1 – Example of Integration of the Assessment Processes

- 4.5 Specifically, the baseline data collection was undertaken jointly by the SEA/HIA, HRA and EqIA team members to maximise synergies and share evidence base for future assessment streams. Identification of the key issues also represented a joint effort, with environmental, health, social inequalities and ecological problems clearly set out.
- 4.6 A joint set of objectives (known as the SEA Framework) covering all assessment processes was developed. The SEA Framework was used as a tool against which the LTP3 performance was assessed. The Framework covered a range of topics, for example, carbon emissions, air and water quality, noise levels (SEA); protection of European sites designated for wildlife (HRA); health and well-being and reduction of inequalities in health (HIA) and greater equality of opportunity for all citizens (EqIA).
- 4.7 Relevant stakeholders for all workstreams were identified and consulted on the Integrated Scoping Report and Environmental Report which incorporated findings of all work streams as well as stand-alone documents on HRA and EqIA.
- 4.8 Further services provided included:
 - Three LTP3 strategic alternatives were assessed against the objectives in the SEA framework and compared.
 - A more detailed qualitative assessment of the preferred option (a set of 45 policies) was undertaken.
 - Linked to an overall assessment of impacts, Atkins made recommendations for environmental mitigation and monitoring. Specific recommendations from the HRA, HIA and EqIA perspectives formed part of the recommendations in the Environmental Report.

Key features of the integrated process

• Integrated assessment of SEA, HIA, HRA and EqIA provided efficiency savings to the client.

- Duplication in baseline data information gathering, which can be time-consuming and resource-intensive exercise has been avoided.
- Communication was simplified. The assessment team interacted with the client in a consistent and clearly defined manner. There was a single contact point in the assessment team who channelled the information and requirements from the client to the relevant team members and vice versa.
- The joint approach allowed the team members covering all disciplines work closely together and explore and utilise synergies in their work. For example, a degree of overlap between the HIA vulnerable social groups and the EqIA protected characteristics has been acknowledged by both HIA and EqIA processes. Consistency between the two assessments was ensured, particularly in terms of assumptions, analysing techniques and findings.
- The scoping findings and assessment results reflected a more holistic view on the Plan.
- A wider range of stakeholders have been reached.
- Recommendations covering all assessed topics were made throughout the development of the plan that helped the LTP reflect sustainability considerations better..
- An Environmental Report was produced that met the statutory requirements of integrating four assessment processes.

Case Study 2 - Integrated Assessment of Land Use Plan

4.9 Another example of an integrated assessment for a different type of plan is the assessment of the Manchester City Council Core Strategy Development Plan Document, which involved:

- Review of the suitability and robustness of the in-house SEA/SA work previously completed by the Council;
- Undertaking a full SEA/SA of the Core Strategy; and
- Undertaking EqIA and HIA in an integrated fashion with the SEA/SA work.
- 4.10 Our approach was based on the premise that an integrated assessment should add value to the plan making process and ultimately enhance the plan's sustainability performance. However, the assessment process was not as straightforward as in the case of the Tyne and Wear LTP, because it has not been devised from the very start of the process. In this case Atkins was commissioned to undertake an integrated assessment midway through the process, taking forward the SEA/SA work completed by the Council. Specifically, the Council had already undertaken the stage of the consideration of spatial alternatives when Atkins got involved in the process. This meant that a robust revision and revamp of the Council's work had to be undertaken first of all to ensure that the scoping stage provided sufficient coverage of the EqIA and HIA considerations and provided a good basis for an integrated assessment. In particular, additional work was undertaken to:
 - gather sufficient baseline information on such issues as deprivation, its spatial distribution, public health, life expectancy, equality for disabled people, characteristics of Black and Minority Ethnic (BME) communities, crime levels and gender issues;
 - ensure the relevant plans and policies for HIA and EqIA were reviewed and relevant objectives and themes derived;
 - establish vulnerable social groups specific for the area, which required a special consideration in the health and equalities assessments, e.g. women, single headed

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households with children (often female-headed), low-income households, BME households, Gypsy and Traveller communities, disabled and older people;

- develop HIA and EqIA specific objectives to be incorporated in the SEA/SA Framework to provide a 'hook' for these assessment processes:
 - A specific equalities objective *Ensure inclusion and equality of opportunity for all, whilst embracing differing needs, values and customs;*
 - A specific health related objective *Improve health of the population and reduce health inequalities*.
- 4.11 Undertaking HIA and EqIA as part of the integrated assessment was important, as the health of Manchester's residents is still amongst the worst in the country and the city experiences high levels of deprivation, especially in the areas with higher percentages of ethnic minorities' representation. The HIA and EqIA focused on the Core Strategy's potential to address issues of poor health and inequalities in health and opportunities, and set out a number of recommendations to improve the document's performance and potential to deliver change in this respect. This, for example, included the following recommendations:
 - Spatial Principles Policy should refer to the need for development to have regard to the regeneration areas' strategies and it should clearly define what is meant by "all members of the community".
 - Transport Policy should ensure that the needs of disabled people as pedestrians, public transport users and motorists will be taken into account in designing public transport infrastructure and public space.
 - Policy on Zero Carbon should include requirements for retrofit projects as well as new developments.
 - Policy on Contaminated Land and Ground Stability should include a requirement for a Health Risk Assessment.
- 4.12 All the recommendations outlined above were taken on board by the Council in developing and finalising the Core Strategy document, which was submitted to the Secretary of State.

Key features of the integrated process

- The SEA/SA added value to the plan making process, enhancing the plan's sustainability performance overall. Set out recommendations were realistic and not conflicting between various disciplines.
- At the start of the process the Council was concerned that the initial SEA/SA Framework included more environmental objectives than socio-economic ones and thus was skewed towards an environmental angle. The inclusion of the EqIA and HIA specific objectives together with a wider review of the framework helped avoid an environmental bias.
- Integration of the SEA/SA with the EqIA and HIA enabled the results of each assessment to inform and support each other where appropriate in a manner which is more understandable for stakeholders. The elements and results of each work stream were presented in separate sections or sub-sections so they were not 'lost' within SEA/SA and were clear to the reader.
- Integration of SEA/SA with EqIA and HIA resulted in a more efficient and cost-effective process.
- On a minus side, a later start to the EqIA and HIA led to these processes being somewhat fast-tracked. For instance, as the integration was not envisaged at the scoping stage, consultees could not provide their comments on those processes during the scoping consultation. The Council, however, made an effort to involve as many different groups and

as diverse a mix of people as possible in the preparation of the Core Strategy before the consultant's involvement and this was explored.

5. Discussion

- 5.1 The wider experience of integrated assessments in the UK and Atkins' own experience indicate that it is possible to integrate SEA with SA. This helps avoid duplication of work and provides a wider coverage of various sustainability issues. On the other hand, the end result of some joint SEA/SAs was arguably skewed towards the environmental dimension because of the statutory requirement for SEA, environmental background of consultants and other reasons [2]. Statutory requirements for the economic and social dimensions tend to be less prescriptive, which means that there is a degree of freedom in terms of what is scoped into the SEA/SA. Incorporation of HIA and EqIA can help restore the overall balance between environmental, social and economic considerations. Equally, a role of SEA remains important, as, in our experience, plans tend to be generally socio-economic led and focused on short term gains, whilst environmental issues may be side-lined.
- 5.2 In our experience there has been feedback from some environmental statutory consultees on SEA/SA Reports that the scope of SEA within joint assessments is sometimes not fully considered, as assessments can 'dilute' environmental considerations in favour of a more 'balanced' sustainable development approach. Atkins' experience also indicates that discussions from stakeholders' perspectives in more deprived areas often take a focus on economic and social deprivation and subsequent objectives on regeneration. This can lead to a greater emphasis and reflection on economic and social objectives in the SEA/SA. However, the SEA Directive is prescriptive in terms of topics that need to be considered, and this helps ensure an appropriate coverage of environmental considerations. In addition, it is the practitioners' responsibility to ensure that the full range of considerations is given appropriate weight, dependent on the local issues and in compliance with statutory requirements.
- 5.3 Integration with EqIA allows for more detailed consideration of equality effects and their distribution within communities with a specific focus on vulnerable social groups. Meaningful consultation with the equality target groups can not only improve the quality of the plan making process and outcomes, but can create local 'ownership' of policy content, which will improve its implementation and subsequent benefits to various social groups.
- 5.4 Combining HIA with the SEA/SA process can enable local authorities to maximise the potential of their local plans to create benefits and minimise risks to health, promoting greater equality in health. The methodologies used promote evidence based planning and decision making, with economies of scale found in the evidence bases of the SEA/SA, HIA and the local plans. HIA can increase cross-sector awareness of health in decision making, with the potential to reduce the demand on the National Health Service through the promotion of preventative measures. HIA can also add legitimacy to the decision making process through public consultation, involving key informants and stakeholders, giving a transparent view of how plans will impact upon communities.
- 5.5 Integration of HRA provides an additional safeguard for environmental issues. In addition, our experience shows benefits for both teams involved: on one hand predictions of the SEA/SA team against the SEA/SA objective on biodiversity protection become more robust, as they are based on the HRA findings; and on the other hand the HRA team (ecologists), more used to working on project level assignments, benefits from working closely with SA/SEA team, which has more extensive experience of working alongside plan makers. Specifically, SEA/SA team can advise ecologists on the structure of the plan making process and on the nature of recommendations which can be usefully provided at the strategic planning stage.

- 5.6 Apart from the efficiencies achieved by the assessment team, the plan makers (Local Authorities) benefit from an informed timely advice on the way of taking the plan forward from both SEA/SA and HRA perspectives. The integration of SEA/SA and HRA ensures that their findings do not contradict each other which can be the case if these assessments are undertaken separately. This is particularly important, as HRA findings can be effective show stoppers for proposed development.
- 5.7 In our experience it is also important that plan makers are committed and genuinely interested in arriving at more sustainable outcomes. The danger arises when particular economic or social issues hijack the sustainability agenda and become over-riding. In such situations plan makers' remit can be restricted by the local or regional political agenda. This makes it difficult to arrive at results which deliver net benefits for all three dimensions of sustainable development.
- 5.8 As discussed above, Atkins' overall experience in undertaking integrated assessments has been predominantly positive. However, we are aware of the potential challenges and risks associated with such approach. Our understanding of the key advantages and disadvantages of the integrated assessment process, in addition to the points raised above, is presented below.

Advantages

- There is a high level of the issues cross-over in the different forms of assessment. Covering them twice in different assessments is neither particularly sensible nor efficient and cost-effective.
- Integrated Impact Assessment simplifies and reduces work for policy, programme and project developers. Organisations such as local governments and government departments have limited budgets and need to use their time and resources as efficiently as possible.
- Leading practitioners for different assessments can work together to ensure that their topic is properly considered. This can also lead to the cross-pollination of expertise of practitioners responsible for individual work streams. Working together can also help utilise particular format or templates that proved useful in one assessment. In our experience it was possible to utilise some approaches that proved efficient in SA/SEA work in HIA.
- Integrated Impact Assessment provides a possibility to avoid a problem of 'impact assessment and consultation fatigue', as the same consultees and public are not asked to engage in consultation process and provide comments on several separate assessments of the same plan/policy.
- Integrated assessments can provide more complete and holistic approach because environmental, social and economic problems are more likely to receive a balanced coverage, and also because they do not respect the borders between separate assessment processes.

Challenges

- Main constraints to good quality integrated assessments are financial resources and staff expertise.
- Timely initiation of all assessment processes is important, as later ad-hoc additions of some assessment processes is challenging and may result in a token exercise.
- There is a need for bringing internal consistency to underlying assumptions of independent disciplinary knowledge and assessment findings.
- Coordinating different time-scales may be challenging. For example, production of SEA/SA reports and HRA reports follow different consultation process and this can cause protractions in the finalisation of the integrated assessment report.

Disadvantages

- There is a danger of superficial treatment of issues and encouraging a "tick box approach". Health/ Biodiversity/ Inequality or other topic may not be properly considered or receive adequate attention. This may lead to dissatisfaction of disciplinary experts at the simplifications of their realm in integrated assessments. There is potential for errors inherent in such practices or results of various assessments may get 'dissolved' within SEA/SA and fail to shape the plan making process.
- Depending on the format adopted, HIA and EqIA may get 'lost' within joint SEA/SA reports and consultees may find it difficult to extract the information relevant for a particular assessment stream.
- The need to involve people representing all areas covered by an Integrated Impact Assessment could create additional workload for plan-makers and practitioners.
- 5.9 In the light of the above discussion, undertaking the integrated assessment process can be recommended as an efficient way to progress, provided that plan-makers and assessment practitioners are aware of potential pitfalls of the integrated process and have adequate resources and expertise to embark on it.

6. Conclusions

- 6.1 The findings of this paper show that there has been a considerable development towards integrating various assessment processes with SEA process in the UK. This started with the integration of SEA and SA and evolved into the more integrated processes, involving such assessments as HIA and EqIA.
- 6.2 Atkins has undertaken a number of integrated impact assessments where the SEA/SA element provided an umbrella framework for other type of assessments. Atkins' lessons of such assessments have been generally positive with such benefits, as avoiding duplication of work between various work streams in the areas of cross-over, taking a more holistic view on the plan and setting out balanced recommendations, enhancing the plan's sustainability performance overall and avoiding consultation fatigue.
- 6.3 A number of challenges and potential disadvantages associated with integrated impact assessments have also been acknowledged. This includes a danger of superficial treatment of issues, diluting other assessments in the SA/SEA report or skewing reports either towards an environmental or socio-economic bias.
- 6.4 However, overall, it is suggested that the integrated impact assessment is an efficient way forward, provided that adequate resources and expertise are in place.

7. References

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