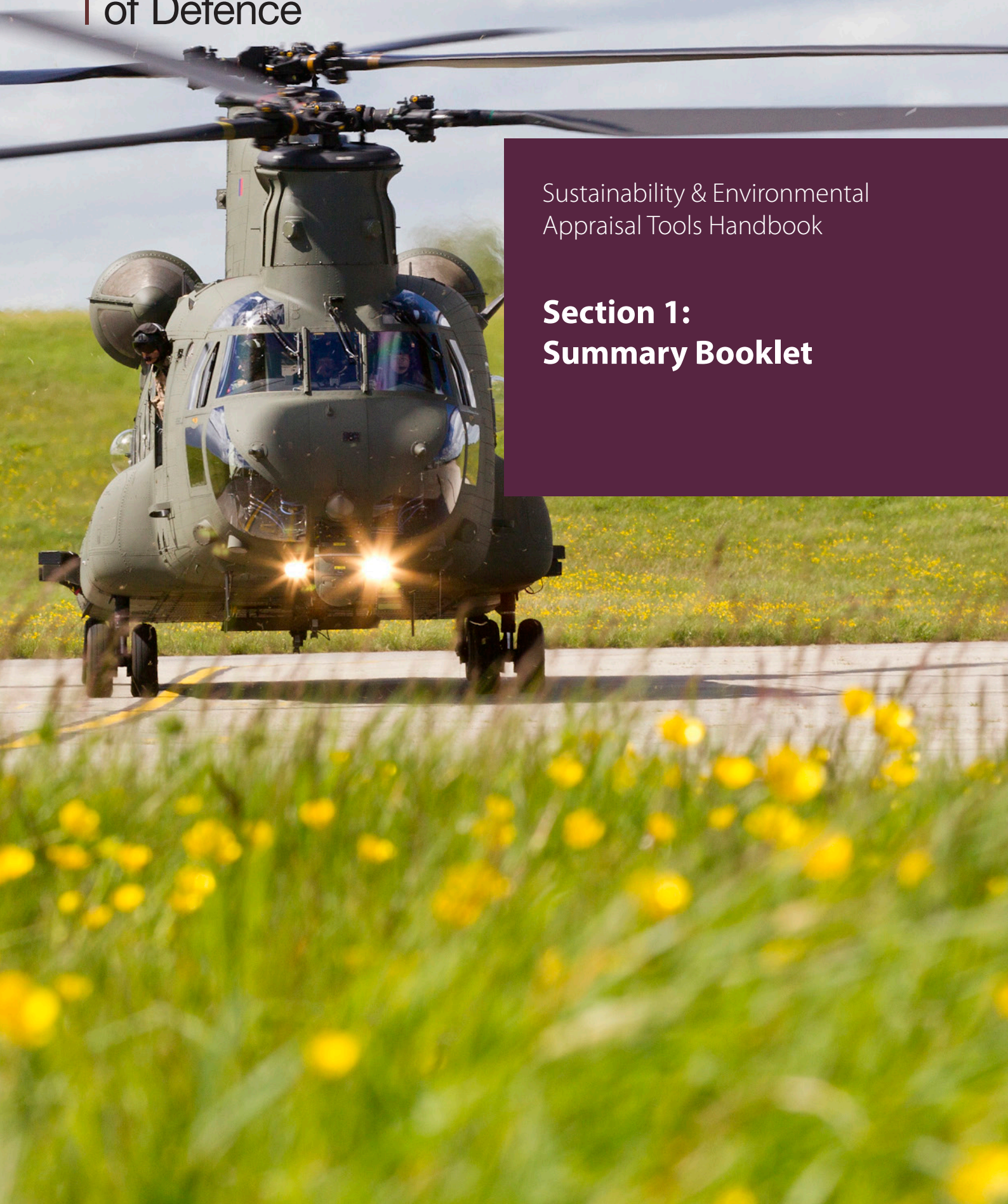




Ministry
of Defence

Sustainability & Environmental
Appraisal Tools Handbook

**Section 1:
Summary Booklet**



This Summary Booklet is for MOD staff, partner organisations and contractors working on MOD policies, plans, programmes and/or projects. It outlines the suite of appraisal tools that are used to assess and manage the effects of developments and activities across MOD consistent with the principles of sustainability.

The latest version of the MOD Sustainability and Environmental Appraisal Tools Handbook can be found on gov.uk:

www.gov.uk/government/publications/mod-sustainability-and-environmental-appraisal-tool-handbook

or the Defence Intranet:

http://defenceintranet.diif.r.mil.uk/Policy/Safety/SustainableDevelopment/Pages/SDPolicy_SEAT_handbook.aspx

MOD is always seeking to learn from good practice to improve the ways that guidance is provided. Please email any **suggestions or feedback** to DIOEUS-SusDevSpt@mod.uk

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The Appraisal Tools

- 1.1 This Summary Booklet outlines the suite of appraisal tool methodologies to be used on new or revised policies, plans, programmes or projects. This includes (but is not limited to) construction and refurbishment projects, office relocations and disposals, acquisition programmes and new training activities.
- 1.2 The purpose of applying appraisal methodologies to all defence projects, programmes and plans is that they enable decision-makers to make reasoned judgments of their potential environmental, social and economic effects. A well conducted appraisal will ensure all the factors that could impact upon the development of the activity have been assessed accordingly. This will include:
- the requirement or objectives of the project, programme, or policy;
 - legal obligations and sustainable development policy requirements;
 - an appraisal of options and the costs and benefits of those options;
 - the assessment of risks and the analysis of their sensitivity (significance);
 - monitoring and evaluation to manage those associated risks

Box 1.1 The MOD Appraisal Tools

The aim of the Appraisal Tools is to assess and manage the sustainability effects of all MOD's developments and activities to ensure that:

- MOD is compliant with legislation
- applications for planning or other development consents are identified and supported effectively
- delays and costs due to legal challenges, Public Inquiries, etc... are averted
- operational capability is maintained or enhanced
- through-life project costs are reduced
- long-term resilience is improved
- innovative solutions can be shared for continuous improvement
- benefits are maximised
- MOD meets and delivers Government and/or Departmental policy
- MOD engages appropriately with stakeholders

[Tables 1.1 to 1.6](#) summarise some key appraisal tools, providing:

- an outline of their individual role and application including signposts to the more detailed information within the Handbook
- who is responsible for identifying the requirement for applying the tool and resourcing that requirement and
- when the tool should be applied.

[Table 1.7](#) identifies other appraisal tools that may be required to meet statutory and policy requirements. Further information on these is given in Section 8 of the [SEAT Handbook](#).

- 1.3 This suite of tools is compiled as the MOD Sustainability and Environmental Appraisal Handbook. It includes:
- Sustainability Appraisal (SA)
 - Strategic Environmental Assessment (SEA)
 - Environmental Impact Assessment (EIA)
 - Habitats Regulations Assessment (HRA)
 - Defence Related Environmental Assessment Methodology (DREAM)
 - Climate Impact Risk Assessment Methodology (CIRAM)
 - Linked Tools
- 1.4 [Figure 1.1](#) indicates which tool is relevant to particular activities and signposts the appropriate Section within the Handbook. [Figure 1.2](#) identifies the relationship between the RIBA Plan of Work, DIO Project Processes and the environmental and sustainability appraisal tools. [Tables 1.1 to 1.6](#) summarise the key appraisal tools. Detailed guidance within the relevant Section of the Handbook should be referenced and applied with appropriate support obtained from professional and technical subject matter experts.
- 1.5 Information is also given within the Handbook on other supporting tools and management systems ([Table 1.7](#)).

Which Appraisal Tool Should I Use?

- 1.6 Depending on the characteristics of the work, more than one appraisal tool may be appropriate throughout the life of the policy, plan, programme or project. There may be a requirement to undertake a series of appraisals and/or update assessments at different stages to assess different types and levels of effect and to meet legal policy obligations.
- 1.7 SA should be applied early in the decision-making process to integrate sustainability over the development of the programme, plan or project. This is used as a high-level screen of the possible effects associated with the activity, together with the Evaluation of Requirements Statutory Assessments, Consents and Licences Form (see paragraph [1.9](#)) to inform the requirement for later assessment work.

Box 1.2 Guidance & Policy

Guidance and Implementation:

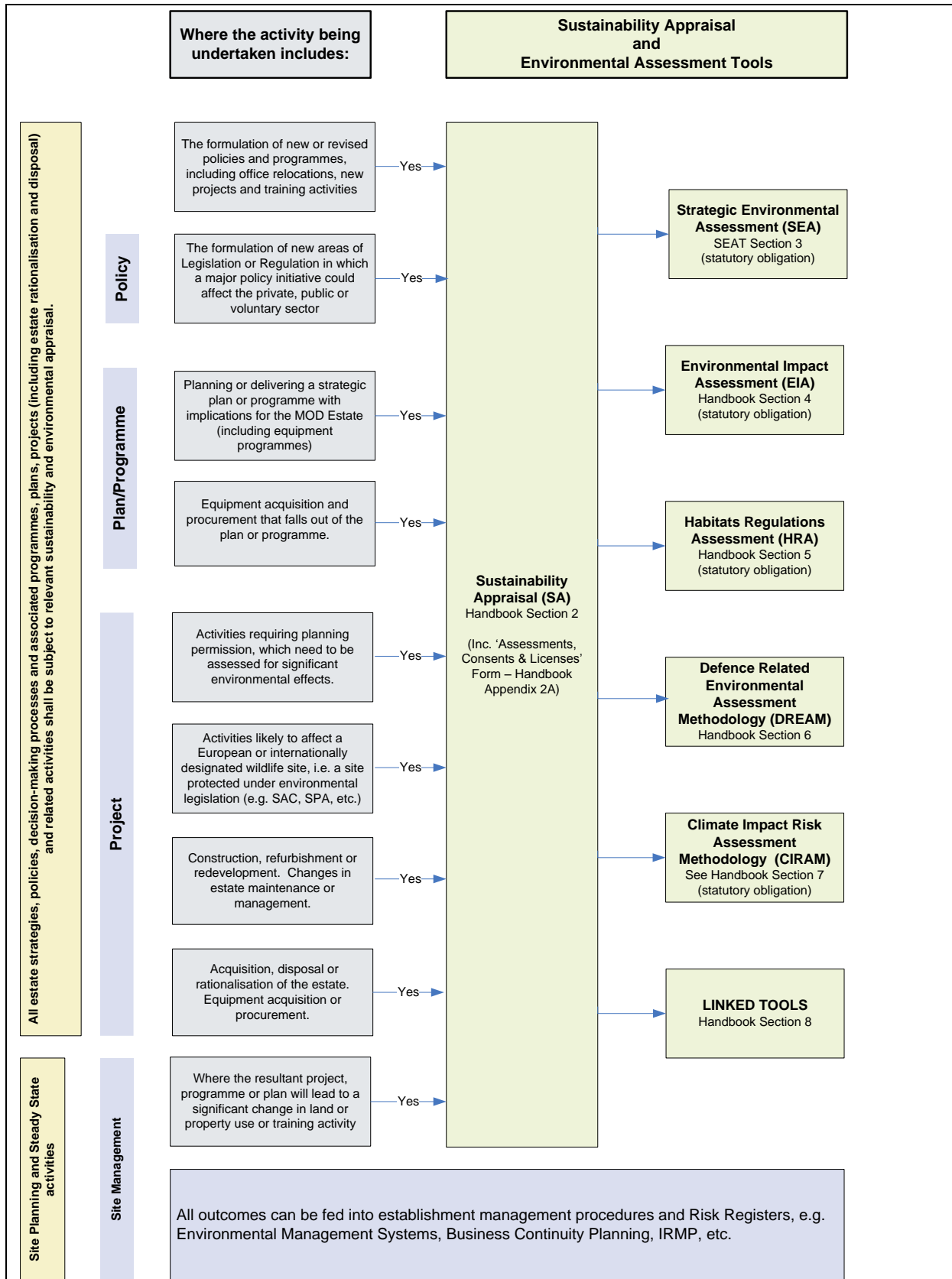
DIO Sustainable Development Support: DIOSDEUS-SusDevSpt@mod.uk

Policy

[JSP 850 – Infrastructure and Estate Policy](#) – Awaiting Publication. Please see [JSP 418](#)

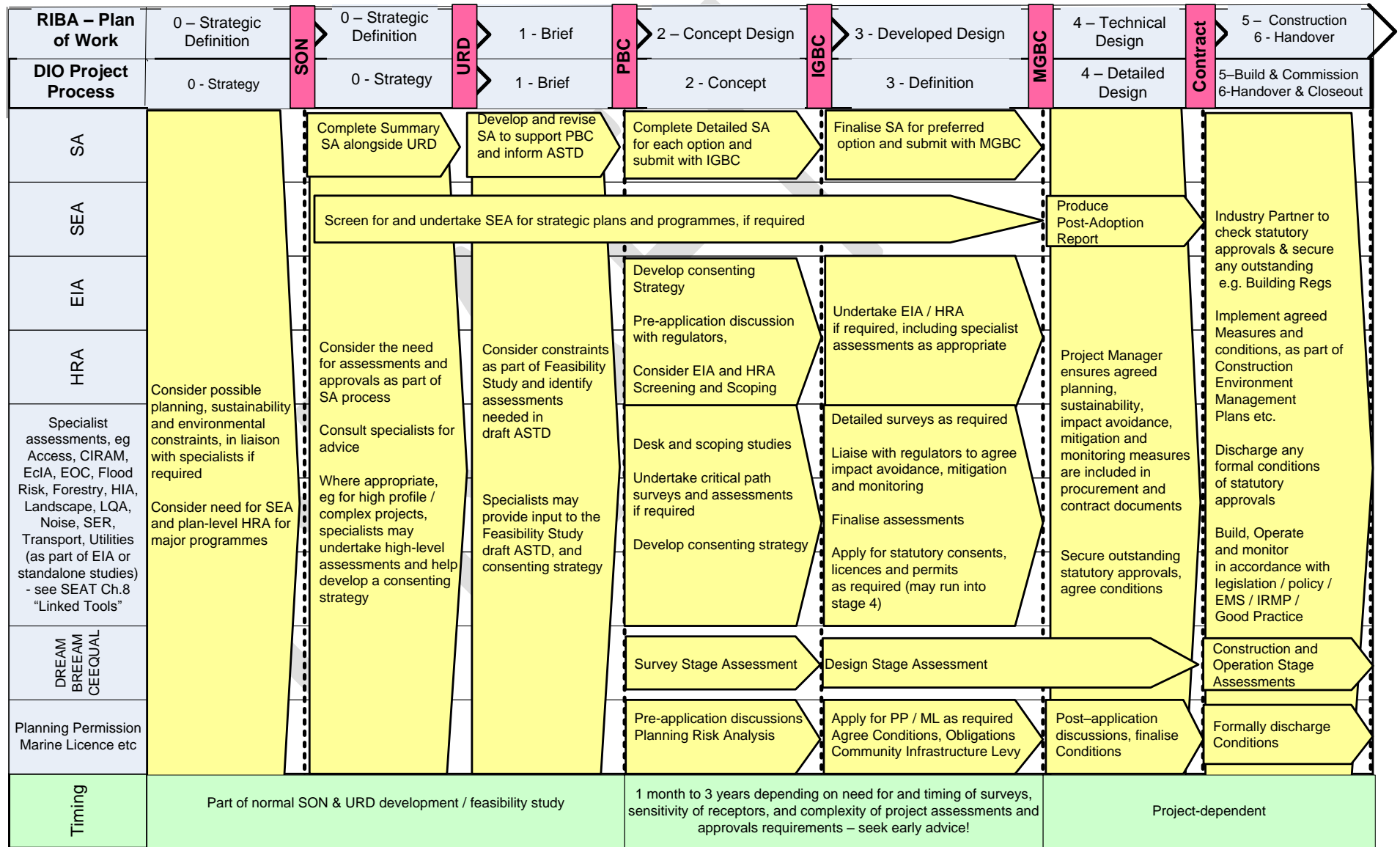
FMC Capability Infrastructure: FMC-Cap-InfraPolSustEste@mod.uk

Figure 1.1 Appraisal and Assessment Tools



Note: This diagram is provided as a *broad overview* for where the assessment or appraisal is likely to be applied. More than one assessment may be required dependent upon the nature and scale of the activity (refer to Tables [1.1 to 1.7](#)).

Figure 1.2– Relationship between Project Processes and Environmental and Sustainability Appraisal Tools



SON – Statement of Need; URD – User Requirement Document; ASTD – Assessment Study Task Directive; PBC / IGBC / MGBC – Preliminary / Initial Gate / Main Gate Business Case; SEA – Strategic Environmental Assessment; SA – Sustainability Appraisal; EIA – Environmental Impact Assessment; HRA – Habitats Regulations Assessment; CIRAM – Climate Impact Risk Assessment Methodology; EclA – Ecological Impact Assessment; EOC – Explosive Ordnance Clearance; HIA – Heritage Impact Assessment; LQA – Land Quality Assessment; SER – Socio-Economic Report; DREAM/BREEAM – Defence Related/ Building Research Establishment Environmental Assessment Methodology; CEEQUAL - Civil Engineering Environmental Quality Assessment; PP & ML – Planning Permission & Marine Licence; EMS – Environmental Management System; IRMP – Integrated Rural Management Plan

Statutory and Policy mandates

- 1.8 **Legal Requirements.** International Conventions and EU Directives establish obligations, which the UK (including that of Devolved Administrations) must transpose into legislation. MOD must comply with statutory requirements when developing and seeking formal approval of its plans, programmes and projects. As an example, the appraisal tools that are driven by statute are:

Strategic Environmental Assessment

European Directive [2001/42/EC](#) on the assessment of the effects of certain plans and programmes on the environment

Environmental Impact Assessment

European Directive [2011/92/EU](#) for the assessment of the environmental effects of public and private projects

Habitats Regulations Assessment

European Directive [92/43/EEC](#) for the conservation of Natural Habitats and Wild Fauna and Flora and European Directive [79/409/EEC](#) on the Conservation of Wild Birds

Climate Impact Risk Assessment Methodology

UK [Climate Change Act](#) 2008 to undertake an assessment of current and future climate risks

- 1.9 **Evaluation of Requirements for Assessments, Consents and Licences.** A checklist to support the decision-making process is provided at Appendix 2A to Section 2 of the Handbook. This document will assist with establishing the statutory obligations that need to be addressed as the project or plan, programme or policy is developed, particularly where formal planning consent and consultation is required.
- 1.10 **Policy Requirement.** To accord with the mandate for mainstreaming sustainable practices into Defence business, all estate strategies, policies, decision-making processes and associated programmes, plans, projects (including estate rationalisation and disposal) and related activities shall be subject to relevant sustainability and environmental appraisal. The outcomes (risks and opportunities) shall be used to inform decisions to deliver a sustainable and resilient estate and support the delivery of Government requirements and targets. As a minimum a Sustainability Appraisal shall be undertaken at the earliest opportunity.¹
- 1.11 **Defence Exemptions.** For those plans, programmes and projects serving national defence there are exemptions available within the SEA and EIA Directives. Specific criteria and authorisation have to be met for an exemption to apply. SEA and EIA should be considered early in the development of a proposal and internal MOD resource is available to assist. There is no defence exemption from the requirement for HRA.
- 1.12 The [Policy Statement](#) by the Secretary of State for Defence specifies that “*where Defence has exemptions, derogations or dis-applications from Health Safety & Environmental Protection legislation, we maintain Departmental arrangements that produce outcomes that are, so far as reasonably practicable, at least as good as those required by UK legislation*”.

¹ [JSP 850 – Infrastructure and Estate Policy](#) – Awaiting Publication

- 1.13 In accordance, an equivalent non-statutory appraisal must be prepared that is, “so far as reasonably practicable, at least as good as those required by UK legislation”. This will provide a sufficient level of environmental information to make the determination or support the approval without compromising the national defence interest, e.g. in the case of SEA, a Strategic Sustainability Appraisal may be required.

When Appraisals should be Completed and by whom

- 1.14 SA is not an isolated exercise, but should evolve and be revisited as a proposal is more defined. The Programme/Policy Lead or Requirement/Project Manager is responsible for understanding the requirement for undertaking and implementing additional assessment in support of the activity.
- 1.15 Undertaking the assessments is a collaborative exercise and depending on the assessment and the stage of development of the proposal may require input from the project team, delivery contractors, Estates Surveyors, environmental advisors, external bodies, appropriate Subject Matter Experts (SME).
- 1.16 Project teams are expected to complete the necessary appraisal work, with specialist input from [Defence Infrastructure Organisation](#) (DIO) specialists to support complex assessments such as SEA, EIA and HRA. [FMC Infrastructure](#) can provide policy advice on the application of appraisal tools and the defence exemption process.

Completion of the Appraisal

- 1.17 Appraisal tools inform decision-making and support applications made to planning and approving authorities. The appraisal methods integrate sustainability throughout the development of the policy, plan, programme or project. Through effective evaluation of options, they can be used to influence project design, future management and development of sites and support cost benefit analysis.
- 1.18 Appraisal tools also identify where mitigation or compensation measures are required, commensurate with the adverse effects of the activity. This work must be programmed and resourced. It is essential that the Budget Manager is made aware of these requirements early on and be prepared for them to meet project costs and offset delays.
- 1.19 With project-level appraisals, a formal approach should be taken for capturing ongoing environmental risk management or monitoring work arising from mitigation or compensation measures. These measures can be incorporated subsequently to manage and offset environmental risks, e.g. into a Construction Environmental Management Plan for building projects or into an establishment’s Environmental Management System, Integrated Rural Management Plan or Business Continuity Plan to support site planning.
- 1.20 Post-project evaluations and audits may also be required to assess where the appraisal has benefited or affected the course of the project, as well as identifying whether mitigation and compensation measures delivered the required outcomes.

Table 1.1 Sustainability Appraisal (SA)

Decision Making	Procedure	Reference
What?	<p>Sustainability Appraisal (SA) is a mandated policy commitment that is designed to assess the potential environmental, social and economic effects of a plan, programme or project against a series of key sustainability objectives.</p> <p>The appraisal uses a matrix consisting of sixteen key themes which are used to assess the potential impacts and suggest management measures or additional actions in support of the activity.</p>	<p>SEAT Handbook Section 2.1.1</p>
When?	<p>Sustainability Appraisal must be applied early in the process and evolve with the life of the plan, programme or project.</p> <p>The Appraisal should be used to identify legal obligations and statutory assessments and influence decisions, evaluate management options and implement sustainable solutions.</p>	<p>SEAT Handbook Section 2.1.7</p>
Who?	<p>The Project team leader, lead decision-maker, requirements manager or project manager responsible for each stage in the decision-making process.</p>	<p>SEAT Handbook Section 2.2.8</p>
How?	<p>The Sustainability Appraisal process is detailed in Section 2 of the SEAT Handbook. Further advice & guidance is available from DIOSDEUS-SusDevSpt@mod.uk</p>	<p>SEAT Handbook Section 2.2.12</p>
Links to other Tools	<p>SEA may be required, subject to screening, for certain plans and programmes.</p> <p>EIA will be required, subject to EIA screening, for projects that are likely to have significant effects on the environment.</p> <p>HRA will be required if the project is likely to impact upon a European or internationally designated site of ecological importance.</p> <p>DREAM will help integrate sustainability into the design and material specification of construction and refurbishment projects.</p> <p>CIRAM may be required for certain plans, programmes or projects.</p>	

Table 1.2 Strategic Environmental Assessment (SEA)

Decision Making	Procedure	Reference
What?	<p>Strategic Environmental Assessment (SEA) is a multi-staged process that considers and manages the likely significant effects of a plan or programme on the environment.</p> <p>SEA is a statutory requirement for certain plans and programmes. It provides the opportunity to identify and mitigate any potential significant adverse effects that the plan or programme might have. It also provides the opportunity for reasonable alternatives that contribute to improving environmental, social and economic conditions to be investigated.</p>	<p>SEAT Handbook Section 3.1.1</p>
When?	<p>SEA is a statutory requirement for certain plans and programmes which arises from European Directive 2001/42/EC (the SEA Directive) (as amended) and enacted by national legislation.</p> <p>SEA is only required for plans and programmes which are likely to have significant effects on the environment. This will be determined through SEA screening.</p> <p>The requirement for SEA should be considered as early as possible in the plan or programme process.</p>	<p>SEAT Handbook Section 3.3.1</p>
Who?	<p>The Senior Responsible Officer in charge of strategic planning and programme work has responsibility for ensuring that SEA is properly considered and undertaken for qualifying activities.</p> <p>SEA must be undertaken by suitably qualified and experienced experts.</p>	<p>SEAT Handbook Section 3.4.1</p>
How?	<p>The SEA process is detailed in Section 3 of the SEAT Handbook. Further advice & guidance is available from DIOSEE-EPSPEnvTeamWDC@mod.uk</p>	<p>SEAT Handbook Section 3.4.1</p>
Links to other Tools	<p>SA provides a description of the environmental issues that indicate likely effects.</p> <p>The SEA should be informed by an HRA and can provide an evidence base for subsequent assessments such as EIA.</p>	

Table 1.3 Environmental Impact Assessment (EIA)

Decision Making	Procedure	Reference
What?	<p>Environmental Impact Assessment (EIA) is a multi-staged process to consider and manage the likely significant environmental effects of a proposed project. EIA should be iterative, undertaken in parallel with project processes and allow the consideration and incorporation of environmental effects and mitigation.</p> <p>EIA is a statutory requirement for certain projects, and it is essential to provide sufficient environmental information in order for consenting authorities, e.g. Local Planning Authorities, Marine Management Organisation etc. to grant development consents and licences.</p>	<p>SEAT Handbook Section 4.1.1</p>
When?	<p>The requirement for EIA in Europe arises from European Directive 2011/92/EU as amended (the EIA Directive). Nationally, it is enacted through multiple EIA legislation specific to certain types of projects which are likely to have significant effects on the environment.</p> <p>EIA has been widely adopted in various forms worldwide and should be a consideration in whichever country a project is proposed to ensure compliance with the host nation laws and MOD policy.</p> <p>EIA is only required for projects which are likely to have significant effects on the environment. This will be determined through EIA screening.</p> <p>The requirement for EIA should be considered as early as possible in the project process.</p>	<p>SEAT Handbook Section 4.3.1</p>
Who?	<p>The developer of an EIA project is responsible for EIA as part of the consenting process. For DIO projects the Requirements Manager or Project Manager will generally be responsible for procurement of EIA through external consultants or through DIO/MOD SMEs.</p> <p>EIA must be undertaken by suitably qualified and experienced experts.</p>	<p>SEAT Handbook Section 4.4.1</p>
How?	<p>The EIA process is detailed in Section 4 of the SEAT Handbook. Further advice & guidance is available from DIOSEE-EPSPEnvTeamWDC@mod.uk</p>	<p>SEAT Handbook Section 4.4.1</p>
Links to Other Tools	<p>SA provides a description of the environmental issues that indicate likely effects of the project and can inform the EIA.</p> <p>SEA or Strategic Sustainability Appraisal can provide baseline data for EIA if the project is part of a Plan or Programme.</p>	

Table 1.4 Habitats Regulations Assessment (HRA)

Decision Making	Procedure	Reference
What?	<p>Habitats Regulations Assessment (HRA) is required for any plan or project that could have significant effect on a European or internationally important site for nature conservation, e.g.</p> <ul style="list-style-type: none"> • <i>Special Protection Areas (SPAs)</i> • <i>Special Areas of Conservation (SACs)</i> • <i>Wetlands of International Importance (Ramsar Sites)</i> - <p>This may include estate development or rationalisation, changes to or intensification of training patterns, type of vehicles being used and changes to land management regimes.</p> <p>Failure to comply with the procedures for assessing plans and projects under the Habitats Regulations can result in delay, refusal of permissions, or Judicial Review, and if damage results, a potentially unlimited fine.</p>	<p>SEAT Handbook Section 5.1.1</p>
When?	<p>HRA screening may be triggered by an SA.</p> <p>For projects, HRA should be screened and, if required, initiated during Assessment Studies. HRA must be completed before Main Gate and before any applications for statutory approvals, e.g. planning permission.</p> <p>For proposed changes to training and land management, HRA must be completed before the change is approved.</p> <p>If no species and habitat surveys are required HRA may be completed at short notice for Urgent Operational Requirements, and within one month for other requirements. If surveys are required, and/or the assessment is complex or controversial, then HRA may take 1 month to 3 years.</p>	<p>SEAT Handbook Section 5.1.10</p>
Who?	<p>The Requirements and/or Project Manager is accountable for identifying the possible requirement for HRA and Statutory Permissions.</p> <p>Where required, MOD's registered Competent Individuals must be contacted and are accountable for undertaking or guiding, reviewing and approving the HRA process. Industry Partners may be responsible for providing external assistance. Regulators may be consulted or Informed.</p>	<p>SEAT Handbook Section 5.1.16</p>
How?	<p>The HRA process is detailed in the Section 5 of the SEAT Handbook. Further advice and guidance is available from DIO-EcologyTeam@mod.uk</p>	<p>SEAT Handbook Section 5.2.1</p>
Links to Other Tools	<p>The need for HRA is identified by SA.</p> <p>HRA can run concurrently with all other environmental assessments and may be required to support any application for statutory permissions.</p>	

Table 1.5 Defence Related Environmental Assessment Methodology (DREAM)

Decision Making	Procedure	Reference
What?	<p>Defence Related Environmental Assessment Methodology (DREAM) is an environmental performance assessment tool that enables the MOD to deal positively with environmental issues associated with the built environment.</p> <p>It is designed to raise awareness of sustainability (e.g. energy consumption, carbon emissions, ecology etc...) and prompt the consideration of these factors throughout the life of a project.</p>	<p>SEAT Handbook Section 6.1.1</p>
When?	<p>It is mandatory for the MOD to complete an appropriate environmental assessment such as DREAM, or an equivalent, on all construction projects.</p> <p>DREAM has been designed to be used for the assessment of new build and major refurbishment projects. Where only individual elements (e.g. windows or roofs) or individual services (e.g. heating or air-conditioning) are being replaced or upgraded the DREAM Minor New Works tool should be used.</p> <p>DREAM is defined by four key assessment stages:</p> <ul style="list-style-type: none"> • Survey • Design • Construction • Operation <p>A DREAM assessment should take no longer than five days, however, may vary depending on the complexity of the project.</p>	<p>SEAT Handbook Section 6.1.10</p>
Who?	<p>Requirement/Project Managers are responsible for assessing whether a DREAM assessment is required. Specific trigger criteria can be found in Chapter 6 of the Handbook.</p>	<p>SEAT Handbook Section 6.1.16</p>
How?	<p>The DREAM process is detailed in Section 6 of the SEAT Handbook. Further advice and guidance is available from DIO-DREAM@mod.uk</p>	<p>SEAT Handbook Section 6.1.16</p>
Links to Other Tools	<p>A DREAM assessment may be triggered by a SA.</p> <p>Other environmental assessments may be required as part of the DREAM process.</p>	

Table 1.6 Climate Impact Risk Assessment Methodology (CIRAM)

Decision Making	Procedure	Reference
What?	<p>Climate Impact Risk Assessment Methodology (CIRAM) is a site-based assessment designed to identify the risks to defence outputs from current and future climate or extreme weather events. It also helps identify the actions required to maintain and optimise operational capability and increase resilience.</p>	<p>SEAT Handbook Section 7.1.1</p>
When?	<p>MOD is committed to ensuring plans, programmes and projects are resilient to current and future climates. CIRAM may be triggered if the P/P/P:</p> <ul style="list-style-type: none"> • Provides or supports critical national infrastructure; • Has elements affected by the weather; • Involves significant investment; • Involves decisions with significant irreversible impacts; • Has significant interdependencies with other government activities or the wider economy; or • Addresses contingency planning or business continuity needs. <p>The workshop and completion of the risk register takes approximately 3 to 4 hours plus any associated actions that stem from the register.</p>	<p>SEAT Handbook Section 7.3.1</p>
Who?	<p>For critical and priority sites each TLB has a nominated Climate Resilience Focal Point that is responsible for ensuring Head of Establishment undertakes a CIRAM assessment on their site.</p> <p>For P/P/Ps, accountability lies with the Requirements / Project Manager for ensuring that CIRAM is properly considered.</p>	<p>SEAT Handbook Section 7.4.1</p>
How?	<p>The CIRAM process is detailed in Section 7 of the SEAT Handbook. Further advice & guidance is available from DIOSDEUS-SusDevSpt@mod.uk</p>	<p>SEAT Handbook Section 7.4.1</p>
Links to Other Tools	<p>CIRAM may be triggered by SA, EIA and SEA.</p> <p>CIRAM may help with the completion of a DREAM assessment.</p>	

Table 1.7 Linked Tools

Decision Making	Procedure	Reference
What?	<p>Other appraisal tools that may be required to meet statutory and policy requirements:</p> <ul style="list-style-type: none"> • Impact Assessment (IA) • Social Economic Report (SER) • Building Research Establishments Environmental Assessment Method (BREEAM) • Civil Engineering Environmental Quality Assessment (CEEQUAL) • Cultural Heritage Assessment • Project Oriented Environmental Management System (POEMS) • Sustainability or Environmental Management Systems (SMS or EMS) • Integrated Rural Management Plans (IRMPs) • Construction Environmental Management Plans (CEMP) • Maritime Environment and Sustainability Appraisal Tool (MESAT) • Ecological Impact Assessment (EcIA) • Heritage Impact Assessment (HIA) • Flood Risk Assessment (FRA) • Land Quality Assessment (LQA) • Transport Assessment (TA) • Landscape Visual Impact Assessment (LVIA) • Air Quality Assessment • Forestry/ Arboricultural Impact Assessment (ForIA/ ArbIA) • Health & Safety Tree Inspections 	SEAT Handbook Section 8
When?	<p>Potential requirements should be identified through Sustainability Appraisal. Some assessments will be required during project development, whilst others will require updating post-project completion</p>	SEAT Handbook Section 8
Who?	<p>Specialist advice is likely to be required.</p>	SEAT Handbook Section 8
How?	<p>Further information on each of the linked tools can be found in Section 8 of the SEAT Handbook.</p>	SEAT Handbook Section 8
Links to Other Tools	<p>SA and in particular the approvals and consents checklist at Appendix 2A should identify which linked tools may be required or advisory.</p>	