

MOD Sustainability and Environmental Appraisal Tools Handbook





















MOD Sustainability and Environmental Appraisal Tools Handbook

Summary Booklet

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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 support specific areas of defence work. It sets out guidance and methodologies within a suite of tools, the 'Appraisal Tool Hierarchy', that assess and manage the effects of developments and activities across MOD consistent with the principles of sustainable development.

This booklet is a summary of the policy and guidance available for the Appraisal Tool Hierarchy. It provides the signpost for more detailed guidance, available in electronic format, within the MOD's <u>intranet and internet</u>.

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SUMMARY

THE APPRAISAL TOOL HIERARCHY

- 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 construction and refurbishment projects, office relocations and disposals, acquisition programmes and new training activities.
- 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

The MOD Appraisal Tools



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

- MOD is compliant with legislation
- applications for planning consent are supported effectively
- major delays and costs due to Public Inquiries are averted
- operational capability is maintained or enhanced
- through-life project costs are reduced
- innovative solutions can be shared for continuous improvement
- sustainable development benefits are maximised

The Appraisal Tool Hierarchy orders the tools under their relevant drivers and stages of implementation; this covers the legal requirement or non-statutory equivalent.

Appraisal tools also:

- enable MOD to meet and deliver Government and/or Departmental policy on sustainable development
- ensure MOD engages appropriately with stakeholders
- validate methods based on legal requirements and best practice

Tables 1.1 to 1.8 summarise each appraisal tool, 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.

- 1.3 This suite of tools is compiled as the MOD Sustainability and Environmental Appraisal Handbook and is known as the 'Appraisal Tool Hierarchy'. It is a tiered level of assessment with triggers to each subsequent appraisal tool. This includes:
 - Sustainability Appraisal (SA);
 - Impact Assessment (IA)
 - Strategic Environmental Assessment (SEA);
 - Environmental Impact Assessment (EIA);
 - Habitats Regulations Assessment (HRA);
 - Defence Related Environmental Assessment Methodology (DREAM);
 - Climate Impact Risk Assessment Methodology (CIRAM)
 - Project Oriented Environmental Management System (POEMS)
- 1.4 Figure 1.1 indicates which tool is relevant to particular activities and signposts the appropriate Section within the Handbook. Tables 1.1 to 1.8 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. For brevity, these are not included in this Summary Booklet.

WHICH APPRAISAL TOOL SHOULD I USE?

- 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 at different stages to assess different types and levels of effect and to meet legal obligations, i.e. at the strategic developmental stage or at a project-specific or site management stage.
- 1.7 Sustainability Appraisal should be applied early in the decision-making process to integrate sustainable development 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 for Statutory Assessments, Consents and Licences (see paragraph 1.9) to inform later assessment work.

Box 1.1 Further advice and guidance



For further advice on the requirement contact:

Policy:

DIO Secretariat,

Contact: SD&Energy1b1 9355 84132/01225 884132 or

email: sustainable.development@de.mod.uk

Implementation support:

Environmental Advisory Services

Contact: 94325 4869

email: estsustainability@de.mod.uk

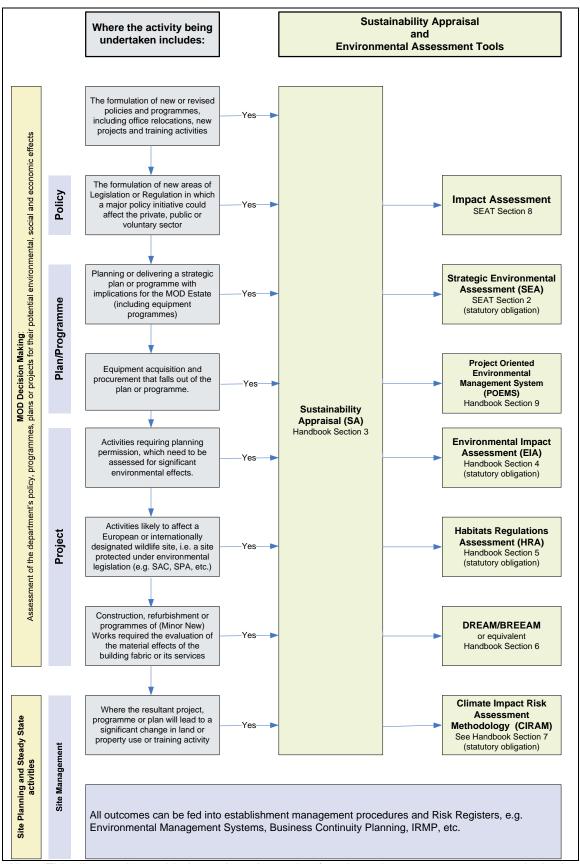
Senior Environmental Planner

Contact: 94325 4665

Investment Appraisal and Evaluation

Good appraisal is vital to aid decision-making and achieving value-formoney. It identifies the benefits and how they are secured. Additional guidance is provided in <u>JSP 507 MOD Guide To Investment Appraisal and Evaluation</u>.

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 that one assessment may be required dependent upon the nature and scale of the activity (refer to Tables 1.1 to 1.8).

STATUTORY AND POLICY MANDATES

1.8 Legal Requirements 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 (85/337/EEC) 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 Statutory Assessments, Consents and Licences**A checklist to support the decision-making process is provided at <u>Appendix 3B</u> to Section 3 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** The SofS for Defence has stipulated in the Safety, Health, Environmental Protection and Sustainable Development in Defence Policy Statement that MOD should undertake assessment of the effects of the Department's projects and activities¹. In order to ensure compliance with legislation, MOD is required to: "Carry out sustainability appraisals and environmental assessments, as appropriate, for new or revised policies, programmes (including acquisition programmes) office relocations, new projects and new training activities."
- 1.11 **Defence Exemptions** For those plans, programmes and projects, "serving national defence purposes and in the opinion of the Secretary of State compliance with these Regulations would have an adverse effect on those purposes" there are exemptions available within the SEA and EIA Directives (Article 3(8) and Article 2(3) respectively). Specific criteria and authorisation have to be met for the exemption to apply. This clearance must be obtained well before any programme, plan or project is adopted; passing through approval committees or any Ministerial announcements. There is no defence exemption from the requirement for HRA.
- 1.12 The SofS Policy Statement specifies that, "Where there are exemptions or derogations from either domestic or international law applicable to Defence, we introduce standards and management arrangements that produce outcomes that are, so far as reasonably practicable, at least as good as those required by legislation."

¹ Safety Health, Environmental Protection and Sustainable Development in the Ministry of Defence: A Policy Statement by the Secretary of State for Defence dated <u>2010</u>

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 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. Further information is contained within the respective sections of the Handbook.

WHEN APPRAISALS SHOULD BE COMPLETED AND BY WHOM

- 1.14 Sustainability Appraisal is not an isolated exercise, but should evolve and be revisited as a proposal is more defined. The Programme or Policy Leader or Project Manager is responsible for understanding the requirement for undertaking and implementing additional assessment in support of the activity (see paragraph 1.7).
- 1.15 Undertaking the Assessments is a collaborative exercise, requiring input from the project team, delivery contractors, Estates Surveyors, environmental advisors and external bodies.
- 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. This network of environmental specialists advises on the level of technical detail and quality of detail essential to the completed assessment and provides support for their implementation.
- 1.17 DIO Secretariat provides policy advice on the application of appraisal tools, the defence exemption process and practitioner guidance.

COMPLETION OF THE APPRAISAL

- 1.18 Appraisal tools inform decision-making and support applications made to planning and approving authorities. The appraisal methods integrate sustainable development 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.
- 1.19 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.
- 1.20 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.
- 1.21 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?	Sustainability Appraisal (SA) is a mandated policy commitment; the process is designed to assess the potential environmental, social and economic effects of a plan, programme or project against a series of key sustainability objectives.	Handbook Section 3 Chapter 3.1 Page 1
	The evaluation uses a matrix consisting of the key themes and objectives which is used to assess the potential impacts and suggest management measures or additional actions in support of the activity.	Appendix A
When?	Sustainability Appraisal must be applied early in the process and evolve with the lifecycle of the plan, programme or project, e.g. programmes (including acquisition programmes and minor new works), office relocations, new projects and new military training activities.	Section 3 Chapter 3.1 Page 5
	The Appraisal should be used to identify legal obligations and statutory assessments and influence decisions, evaluate management options and implement sustainable solutions.	
Who?	The Project team leader, lead decision-maker or project manager responsible for each stage in the decision-making process.	Section 3 Chapter 3.2
How?	Sustainability Appraisal has four key stages: Stage A Preparation of the initial user requirement to assess the option(s) and requirement for statutory assessments. Stage B Detailed Appraisal using the appraisal checklists for each sustainability theme. Stage C Implementation and assessment of mitigation measures. Stage D Monitoring of measures taken to offset the adverse impacts of the plan, programme or project.	Section 3 Chapter 3.2 Section 3 Appendix E
Links to other Tools	Strategic Environmental Assessment (SEA) may be required for certain plans and programmes. Environmental Impact Assessment (EIA) will be required if a project is likely to have significant environmental effects and requires planning permission. Habitats Regulations Assessment (HRA) will be required if the project is likely to impact upon a European or internationally designated site of ecological importance. Defence Related Environmental Assessment Methodology (DREAM) will integrate sustainability into the design and material specification of construction and refurbishment projects.	

Table 1.2 Impact Assessments (IA)

Decision Making	Procedure	Reference
What?	Impact Assessments (IA) is a government-wide requirement designed to identify risks and impacts of a new policy or proposals on the public, private and third (voluntary) sectors.	Section 8
	IA assesses and presents the likely costs and benefits of a proposed policy	
	IA is an ongoing process designed to explain:	
	why government is proposing to intervene	
	the main options under consideration	
	where the impact may fall, i.e. on business, the public sector, the voluntary sector or other groups	
When?	IA is required when developing primary and secondary legislation, codes of practice or guidance leading to new regulatory costs and funding revisions.	
	The IA must be completed alongside each stage of the policy development work.	
	Following implementation, the policy should be evaluated using Policy Implementation Review	
Who?	The IA must be completed by the team developing the policy.	BIS Guidance
How?	A template and guidance is provided by the Department for Business Innovation & Skills.	Preparing Impact Assessments
	Refer to the <u>Treasury Green Book</u> Appraisal principles	Assessments
Links to other Tools	Sustainability Appraisal can be used as a high-level screen to consider the potential impacts and interventions to integrate sustainable development issues.	
	Strategic Environmental Assessment (SEA) may need to be applied to the plans and programmes that result from new policy.	

Table 1.3 Strategic Environmental Assessment (SEA)

Decision Making	Procedure	Reference
What?	Strategic Environmental Assessment (SEA) SEA is a legal requirement to assess the significant environmental effects of certain plans and programmes.	Section 2, Chapter 2.1
	SEA is a staged process designed to enable consultation with stakeholders, comprising: Screening Scoping Impact assessment and a Comparison of alternatives	
	A plan or programme will comprise a series of options, activities or proposals, e.g. basing reviews, estate rationalisation studies, new military training activities, etc.	
	Failure to carry out the SEA in accordance with the Directive may leave the plan open to a legal challenge.	
When?	The process of SEA should start as early as possible in the preparation of the plan or programme and continue throughout its development.	Section 2 Chapter 2.1
Who?	The Senior Responsible Officer (SRO) in charge of strategic planning and programme work, e.g. the Project Team Leader.	Section 2 Chapter 2.1
	Professional and Technical Services (Environmental Planners) and the Policy and Strategy Sustainable Development team.	
How?	The SEA process is divided into the screening and subsequent stages: A. Scoping B. Assessment of Alternatives C. Preparation of the Environmental Report D. Consultation E. Monitoring	Section 2 Chapters 2.1 & 2.3 – 2.7 Figure 2.1 & 2.4
	All MOD plans and programmes must be screened using MOD Form 1923	
Links to other Tools	Sustainability Appraisal can provide a description of the environmental factors where the SEA will be focused or developed where a Strategic Sustainability Appraisal must be applied.	
	Environmental Impact Assessment (EIA) may be required for any projects that fall out of the plan or programme that require planning permission.	
	Habitats Regulations Assessment will be required if the plan or programme is likely to have significant effects on a European or internationally designated site of ecological importance.	
	Defence Related Environmental Assessment Methodology (DREAM) will integrate sustainability into the design and material specification of construction and refurbishment projects.	

Table 1.4 Environmental Impact Assessment (EIA)

Decision Making	Procedure	Reference
What?	Environmental Impact Assessment (EIA) is a statutory assessment process for projects likely to have significant environmental effects, required before development consent is granted, i.e. EIA gathers data and evaluates the effects of the proposal on a	Handbook Section 4 Chapter 4.1 Page 1
	range of environmental receptors specified in legislation, including, but not limited to; flora and fauna, air, water, climactic factors and archaeology and landscape.	
	The findings assess the inter-relationships between these factors and are presented in an Environmental Statement, which can be made available to the public.	
	Failure to comply with the procedural requirements can cause delays and quash development consent.	
When?	 Schedule 1 projects', for which EIA is required in every case; that include, but are not limited to, large-scale infrastructure projects, new building developments over a certain size, land reclamation, agricultural intensification and harbour works 	Section 4 Chapter 4.1 Section 4 Page 7 & Figure 4.2
	`Schedule 2 projects', for which EIA is required, only if the particular project in question is judged likely to give rise to significant environmental effects.	
Who?	The Project Manager/Project Team has responsibility for screening and undertaking an EIA.	Section 4 Chapter 4.1
	DIO specialists can guide, review and approve the stages of the EIA.	
How?	The EIA process is split into 6 stages, each of which results has a key output in terms of a product, action or decision.	Section 4 Chapter 4.1 & 4.2
Links to Other Tools	Sustainability Appraisal can provide a description of the environmental factors where the EIA will be focused, e.g. air quality, landscape, noise, land condition, utilities and community involvement, etc.	
	Habitats Regulations Assessment will be required if the project is likely to impact upon a European or internationally designated site of ecological importance.	
	Defence Related Environmental Assessment Methodology (DREAM) will integrate sustainability into the design and material specification of construction and refurbishment projects.	

Table 1.5 Habitats Regulations Assessment (HRA)

Decision Making	Procedure	Reference
What?	 Habitats Regulations Assessment (HRA) is required by the EC 'Habitats' Directive (92/43/EEC) and the UK 'Habitats' Regulations for any plan or project likely to have significant effect on a European or internationally important site for nature conservation, e.g. Natura 2000 sites: Special Protection Areas (SPAs) - classified under the EC Birds Directive Special Areas of Conservation (SACs) - designated under the EC Habitats Directive, or Wetlands of International Importance (Ramsar Sites) - Wetlands of International Importance are designated under the Ramsar Convention (1971) Failure to comply with the procedures for assessing plans and projects under the Habitats Regulations can result in refusal of planning permission, a potentially unlimited fine, Public Inquiry or Judicial Review. 	Handbook Section 5 Chapter 5.1 Box. 5.1 Figure 5.1
When?	HRA needs to be undertaken for any plan or project, which, either alone or in combination, could significantly affect the special features of a SPA or SAC. This will include estate development or rationalisation, changes in or intensification of training patterns, type of vehicles being used and changes to land management regimes.	Section 5 Chapter 5.1
Who?	The Project Team Leader or Project Manager is responsible for considering the requirement for HRA and where appropriate, ensuring that one is undertaken. MOD's registered Competent Individuals must be contacted to undertake or guide, review and seek approval (through consultation) to the stages of the HRA process.	Section 5 Chapter 5.1 Page 6 & Appendix 5C
How?	The potential for significant effects is assessed using a 'Judgement of Likely Significant Effects'. If significant effects are considered likely, this will then have to be followed by a full Appropriate Assessment (AA).	Section 5 Chapters 5.1 & 5.2 Figure 5.1 & Page 7
Links to Other Tools	SEA can be undertaken in conjunction with the screening process to evaluate possible environmental impacts. Sustainability Appraisal reviews and assesses the areas where the HRA should focus, e.g. potential environmental impacts. EIA can run concurrently, where the Regulations apply, to address all significant environmental effects.	

Table 1.6 Defence Related Environmental Assessment Methodology (DREAM)

Decision Making	Procedure	Reference
What?	Defence Related Environmental Assessment Methodology (DREAM) is a policy mandated environmental performance assessment tool for the built environment that enables the MOD to ensure clients, designers and contractors deal positively with environmental issues relevant to the project, e.g. energy consumption, carbon emissions and climate change resilience. DREAM gives a performance rating at various project and post project stages throughout the development. This ensures that best value, high performing standards for building performance are obtained.	Section 6 Chapter 6.1
When?	DREAM is specifically triggered during the four key phases of the construction or refurbishment project: Survey Design Construction Operation	Section 6 Chapter 6.1 Box 6.3
Who?	Responsibility for undertaking an assessment relates to the project stages. Project Phases: Project Team Leaders or Project Managers are responsible for assessing whether a DREAM assessment (or equivalent) is required. Operation Phase: once the development has been commissioned, responsibility for undertaking the Post-Occupancy Review transfers to the person(s) responsible for managing the building, such as the Facilities or Building Manager.	Section 6 Chapter 6.1.14
How?	DREAM should be completed in accordance with Section 6 of the handbook and guidance contained within: https://www.dreamassess.com/PDFs/User%20Handbookv3-2.pdf	Section 6
Links to Other Tools	Sustainability Appraisal can be used to identify sustainable development themes for incorporation into the DREAM assessment. Climate Impact Risk Assessment Methodology can be used to assess weather related hazards and substantial site risks improving design resilience.	

Table 1.7 Climate Impact Risk Assessment Methodology (CIRAM)

Decision Making	Procedure	Reference
What?	Climate Impact Risk Assessment Methodology (CIRAM) is designed to improve the resilience of MOD establishments to weather related hazards, ensuring the continuity of defence outputs. This requirement is part of the MOD Climate Change Strategy.	Handbook Section 7 Chapter 7.1
When?	 The CIRAM tool can be applied to build resilience into: Plans, programmes or projects with implications for the MOD Estate Strategic development of an establishment e.g. Establishment Development Plan (EDP) Development of large-scale initiatives e.g. core sites, relocations or extensive garrison developments As part of the Strategic Environmental Assessment (SEA) 	Section 7 Chapter 7.1
Who?	Each TLB will nominate a Climate Change Adaptation Focal Point (CCAFP) that will be responsible for ensuring HoEs undertake a CIRAM assessment of their defence critical establishments by March 2013.	Section 7 Chapter 7.1
How?	The CIRAM process involves four stages which focus around the delivery of a risk assessment workshop and the production of the risk register: Stage A Pre-workshop Preparation: involves identifying the establishment's objectives and critical functions, which will govern the scope of the assessment. Stage B Risk Workshop: involves the identification of climate risks to the establishment, risk management actions and risk owners and processes. Stage C Post Workshop Review: involves reviewing and consulting the CIRAM risk register with the relevant stakeholders, clarifying the risks, actions and ownership. The risk register is then agreed and adopted by the establishment. Stage D Implementation: involves the integration of the risk actions into the establishment's processes for delivery.	Section 7 Chapter 7.2 Figure 7.2
Links to Other Tools	CIRAM can be used to inform SEA, POEMS and depending on the scale of the development be related to SA and DREAM assessments. CIRAM can be incorporated into site-wide Business Continuity Planning to ensure a resilient management plan is in place.	

Table 1.8 Project Oriented Environmental Management System (POEMS)

Decision Making	Procedure	Reference
What?	Project Oriented Environmental Management System (POEMS) procedures have been designed to provide DE&S Project Teams with an "ISO14001" compliant methodology for the management of environmental performance and environmental liabilities throughout the acquisition of equipment process and through life. POEMS examines the specific environmental considerations or performance requirements of equipment or services to: identify adverse environmental impacts; apply appropriate mitigation measures identify and manage residual impacts; and enhance positive environmental impacts	DE&S ASEMS Audit Tools
When?	The POEMS procedures are designed to be applied throughout the cycle of acquisition projects.	
Who?	All DE&S Project Teams	
How?	The procedures within POEMS fall into three blocks, these are: • The Core Procedures; • The Support Procedures; • The Assurance and Audit Procedures POEMS should be completed in accordance with http://www.asems.dii.r.mil.uk/	
Links to Other Tools	Strategic Environmental Appraisal may be required to assess the environmental impacts from in-service and disposal stages developed for the equipment or services. Environmental Impact Assessment may be required to assess environmental impacts on land and property specific to infrastructure support requirements for new equipment and services. Sustainability Appraisal will be integrated within procedures and documentation to supporting the use, maintenance and subsequent disposal of the equipment or termination of the service.	