Sustainability & Environmental Appraisal Tools Handbook

Section 6: Defence Related Environmental Assessment Methodology (DREAM)
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How to use this Guidance

This guidance forms Chapter 6 of the MOD Sustainability and Environmental Appraisal Tool Handbook (‘the Handbook’). It provides information on the Defence Related Environmental Assessment Methodology (DREAM).

Section 6.1: Introduces the policy and circumstances where DREAM may be needed and who should undertake DREAM.

Section 6.2: Illustrates the DREAM structure.

Who is the guidance aimed at?

This guidance provides a basic level of understanding to meet the requirements for policy compliance within MOD and is targeted at Requirement Managers, Project Managers and Project Team Leaders.

Box 6.1 – DREAM Guidance and Policy

DREAM Guidance and Implementation:
DIO Sustainable Development Support: DIO-DREAM@mod.gov.uk

DREAM Policy
JSP 850 – Infrastructure and Estate Policy – Awaiting Publication. Please refer to JSP 418
FMC Infrastructure

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.gov.uk
What is DREAM?

6.1.1 DREAM is an environmental performance assessment tool for new build and refurbishment projects. It enables MOD to meet its policy requirements [Box 6.2] whilst ensuring clients, designers and project managers deal positively with environmental issues.

6.1.2 DREAM was designed and developed by the Defence Infrastructure Organisation to specifically address the unique nature of MOD buildings and provide the MOD with an equivalent to the industry standard (see 6.1.4). DREAM is a free, web based tool, which comprises of a series of modules for defence building types. No formal accreditation is required to conduct an assessment; however, assessors are required to have a full understanding of the DREAM process.

6.1.3 It is estimated that DREAM can be applied to 80% of MOD buildings. Wherever possible, DREAM should be used in preference to other assessment methodologies, however, in circumstances where DREAM is considered inappropriate but an environmental performance assessment is required then one of the following equivalents may need to be used.

Building Research Establishment's Environmental Assessment (BREEAM)

6.1.4 [BREEAM] offers a fully certified environmental performance assessment of construction projects and can be used to assess a range of building types including: Offices, Industrial Units, Retail Units and Schools. To date the majority of Defence projects where BREEAM has been used have required the commissioning of a bespoke version (Project SLAM, Allenby Connaught, Neptune etc.). Assessments must be carried out by independent assessors who are trained and licensed by the Building Research Establishment (BRE).

Civil Engineering Environmental Quality (CEEQUAL)

6.1.5 The [CEEQUAL] Award is designed to address the environmental quality of civil engineering projects. It is applicable to all types and sizes of civil engineering projects and works. In the MOD this would be appropriate for project works including Aircraft Runways, Dockyards and Car Parks.

Home Quality Mark (HQM)

6.1.6 The [Home Quality Mark] (HQM) is a national standard for new homes, which uses a simple 5-star rating to provide impartial information from independent experts on a new home's design, construction quality and running costs. DREAM is appropriate for assessments on large living accommodation projects such as Single Living Accommodation.

Code for Sustainable Homes

6.1.7 The Code for Sustainable Homes is an environmental assessment of new housing. Assessments are carried out in two phases, an initial assessment at the design stage, and then a final assessment after construction. Assessments are carried out by independent assessors who are trained and licensed by BRE. Until March 2015, the code could be mandatory in England, Wales and Northern Ireland if it was a requirement of a local authority's local plan. The Code is still operational, but is now generally voluntary.
Figure 6.1 – Key Stages of DREAM

<table>
<thead>
<tr>
<th>Key Stages</th>
<th>Key Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey Stage</strong></td>
<td>DREAM SURVEY STAGE RATING</td>
</tr>
<tr>
<td>Lead Assessor reviews DREAM credits which address: site selection; current state of existing site; capacity and local infrastructure; collation of relevant environmental information for handover to the design team.</td>
<td></td>
</tr>
<tr>
<td><strong>Design Stage</strong></td>
<td>DREAM DESIGN STAGE RATING</td>
</tr>
<tr>
<td>Lead Assessor reviews DREAM credits which address minimising the environmental impacts of the building throughout its life through efficient and innovative design.</td>
<td></td>
</tr>
<tr>
<td><strong>Construction Stage</strong></td>
<td>DREAM CONSTRUCTION STAGE RATING</td>
</tr>
<tr>
<td>Lead Assessor reviews DREAM credits which address managing, monitoring and preventing environmental impacts associated with construction activities.</td>
<td></td>
</tr>
<tr>
<td><strong>Operation Stage</strong></td>
<td>DREAM OPERATION STAGE RATING</td>
</tr>
<tr>
<td>Lead Assessor reviews DREAM credits which address implementing and maintaining systems to monitor, reduce and report environmental impacts associated with operation of the building.</td>
<td></td>
</tr>
</tbody>
</table>
Why undertake DREAM?

6.1.8 The built environment has a huge impact on sustainable development and our lives. It makes heavy demands on our natural resources, is energy intensive and, if poorly managed, can have adverse effects on our communities and businesses. The MOD recognises these impacts and the need for effective management in this area. Environmental measures implemented at design, construction and through the whole life use of a facility will mitigate this damaging impact, reduce running costs and help create better working and living conditions.

6.1.9 Whilst it is not a legislative requirement to undertake an environmental performance assessment, it is often required as part of the Town & Country planning process. The removal of crown immunity from Town & Country Planning legislation in June 2006 has brought, and will continue to bring, increasing requirements for assessments to be completed as a prerequisite to planning approval.

6.1.10 The requirement for undertaking DREAM for MOD projects is driven by the Government Buying Standard for New Build Construction and Major Refurbishments (outlined in Box 6.2).

Box 6.2 – Government Buying Standard

The Government Buying Standard for New Build Construction and Major Refurbishments requires that:

- An appropriate environmental assessment method such as BREEAM or an equivalent (e.g. CEEQUAL, DREAM etc.) appropriate to the size, nature and impact of the project must be carried out on all projects using the Treasury Green Book or other appropriate guidance provided by government.

- Where BREEAM is used, all new projects are to achieve an “excellent” rating and all major refurbishment projects are to achieve a “very good” rating, unless site constraints or project objectives mean that this requirement conflicts with the obligation to achieve value for money. Where an alternative environmental assessment methodology is used, projects should seek to achieve equivalent ratings.
When should a DREAM assessment be undertaken and on what activities?

6.1.11 When deciding which tool to apply the following criteria should be used:

- **New build projects that fit one of the DREAM building types.** A full assessment is required using the most appropriate DREAM module. There are six standard modules that cover a range of MOD building types. Projects are to achieve an “excellent” rating.

- **New build projects that don’t fit one of the DREAM building types.** An assessment is still required; however, a bespoke assessment should be created using the DREAM ‘Minor New Build’ Module. Projects are to achieve a minimum 70% of the available credits achieved (equivalent to an ‘excellent rating’).

- **Major refurbishment projects that fit one of the DREAM building types.** A full assessment is required using the most appropriate DREAM module. Major refurbishment is defined as refurbishment where construction results in the remodeling or adaptation of existing elements of the building envelope, structure and renewal of key building services. Projects are to achieve at least a “very good” rating.

- **Partial refurbishment projects.** A DREAM ‘Minor Refurbishment’ assessment is required. Partial refurbishment is defined as refurbishment where only individual elements of the structural / building envelope (e.g. windows or roofs) or individual services elements (e.g. heating, lighting or air-conditioning) are being replaced or upgraded. Projects are to achieve a minimum 70% of the available credits (equivalent to an ‘excellent rating’).

6.1.12 Project teams should remain pragmatic when considering whether to use a formal assessment tool and each activity should be judged independently. The level of opportunity to address environmental issues should be considered and an assessment tool should not be used where it is not appropriate for the project.

6.1.13 For some construction activities, there may be an additional requirement to complete Environmental Impact Assessments, Environmental Assessments or Habitat Regulations Assessments. DREAM will also provide a partial support in achieving the requirements of the Government Soft Landings requirements identified in JSP 850 (Awaiting Publication).

6.1.14 If Project Managers are unsure on whether DREAM should be applied to their project they should email DIO-DREAM@mod.gov.uk.

Who is responsible for undertaking DREAM?

6.1.15 Responsibility for undertaking an assessment is split into two project stages.

**Project Phases**

6.1.16 The Requirements / Project Manager should assess, at the earliest opportunity, whether a DREAM assessment is required. DREAM was designed to be used by Project Managers to enable them to make decisions which will benefit both the building and the environment. Alternatively Project Managers could use external assistance to undertake the assessments.
6.1.17 The Customer should be involved throughout the assessment to ensure that their requirements are being met. Within the Construction phase there is a mandatory credit where the building documents and associated DREAM assessment is handed over to the Customer. Following this the Customer takes on responsibility for the remaining DREAM assessment phase.

**Operation Phase**

6.1.18 The Operation stage of the assessment transfers to the appropriate person responsible for the building e.g. Facilities Manager, Building Manager or appropriate responsible person. It is recommended that this is undertaken one year after construction.

**What are the likely timeframes and resource requirements for DREAM?**

6.1.19 The time taken to complete an assessment will depend on the following factors:

- The stability of the project’s scope/outputs, such as the building’s design.
- Provision of the necessary evidence and information in support of the credits.
- Experience in using the DREAM tool, or equivalent environmental assessment tool.

6.1.20 As an estimate, a project with an unchanged scope, where all information was provided to the Lead Assessor when requested, and the Lead Assessor has experience in using an environmental performance assessment tool, then we can estimate that each stage of the DREAM stage would take approximately 2 days to complete. This time does not include conducting and producing any additional reports required by DREAM.

**What assistance is available to help understand the requirements of DREAM?**

6.1.21 A DREAM User Handbook is available on the front page of the DREAM website.

**How do I obtain a DREAM Log In?**

6.1.22 Visit the DREAM website [www.dreamassess.com](http://www.dreamassess.com)

**How is DREAM's integrity assured?**

6.1.23 The Lead Assessor must ensure that all the necessary evidence has been gathered and submitted appropriately. To check the integrity of the DREAM, DIO undertake a programme of audits.

**DREAM Structure**

6.1.24 This chapter provides guidance on the structure of the DREAM tool.

**DREAM Ratings**

6.1.25 DREAM assessments are rated on the following scale:

- Excellent 70%
- Very Good 55%
- Good 40%
• Pass 25%

**DREAM Modules**

6.1.26 DREAM consists of fourteen modules that cover eight building types each designed to cover a range of MOD buildings.

**Box 6.3 – DREAM Modules**

<table>
<thead>
<tr>
<th>Module Name</th>
<th>Function / Primary Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hangars and Workshops – New Build</td>
<td>Hangars, Workshops, Fire Stations, Warehouses, Large Open Plan Gyms</td>
</tr>
<tr>
<td>Hangars and Workshops – Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Kitchen and Dining Facilities – New Build</td>
<td>Messes, Kitchens, Restaurants, Canteens, Bars</td>
</tr>
<tr>
<td>Kitchen and Dining Facilities - Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Commercial Space – New Build</td>
<td>Offices, Conference facilities, Educational facilities</td>
</tr>
<tr>
<td>Commercial Space – Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Living Accommodation – New Build</td>
<td>Single Living Accommodation</td>
</tr>
<tr>
<td>Living Accommodation – Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Mediterranean Living Accommodation - New Build</td>
<td></td>
</tr>
<tr>
<td>Mediterranean Living Accommodation - Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Mediterranean Kitchen and Dining – New Build</td>
<td>Messes, Kitchens, Restaurants, Canteens, Bars, Educational facilities</td>
</tr>
<tr>
<td>Mediterranean Kitchen and Dining – Refurbishment</td>
<td></td>
</tr>
<tr>
<td>Minor New Build - New Build</td>
<td>New build projects that do not fit one of the above building types</td>
</tr>
<tr>
<td>Minor Refurbishment – Refurbishment</td>
<td>Where individual elements of the structural / building envelope or individual services elements are being replaced or upgraded</td>
</tr>
</tbody>
</table>
Environmental Categories

6.1.27 Within the four stages (outlined in Figure 6.1) the DREAM questions are arranged under the following environmental categories:

- Biodiversity and Environmental Protection
- External Environmental Quality
- Energy
- Internal Environmental Quality
- Procurement
- Travel
- Water
- Waste

6.1.28 A full description of DREAM, it's structure, and the requirements necessary to complete an assessment can be found in the DREAM User Handbook [www.dreamassess.com](http://www.dreamassess.com)