



Report Title: DREAM
(Defence Related
Environmental
Assessment Methodology)

**Questions and Guidance
Notes
REPORT**

**Question Set : Minor
Refurbishment - Refurbishment
Version: 6**

Stage: Survey

Biodiversity & Environmental Protection - Survey

code	title	credits
S-BI 4.2	<p>Preliminary Ecological Appraisal</p> <p>Aim: To ensure compliance with statutory obligations to conserve biodiversity and encourage ecological enhancement of the site, and to minimise impacts on wildlife habitat.</p> <p>Credit Criteria: One credit can be awarded if a competent person undertakes a PEA. A competent person is someone with appropriate qualifications who is also a Member of the Institute of Ecology and Environmental Management (IEEM) (Associate or above) or an equivalent organisation. The person should be licensed if appropriate and necessary. The competent person should follow IEEM “Guidelines for Ecological Impact Assessment”, or guidelines of a similar standard.</p> <p>If appropriate, the PEA should include a desk study, extended phase one Habitat Survey, Ecological Constraints and Opportunities Plan and Ecological Impact Assessment to identify constraints and requirements for further survey, assessment and approvals. This could also be a site wide survey carried out in the last 12 months or where the survey is older steps must have been taken to verify its accuracy. The report will need to record how the</p>	2

project is going to impact on the exact site location.

A further credit can be awarded if the ecological appraisal concludes that the site is of low ecological value.

If the project may impact on a statutory designated site, or protected species, additional statutory assessment and mitigation requirements exist, and must be addressed. Specialist advice from DIO Safety, Environment and Engineering Team should be sought in these instances.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The design team should provide a copy of the ecologist's report.

Further Information:

Biodiversity & Environmental Protection - Survey

code	title	credits
S-BI 5.2	<p data-bbox="358 493 1182 575">Protection and Enhancement of the Historic Environment</p> <p data-bbox="358 583 448 619">Aim:</p> <p data-bbox="358 630 1276 711">To protect and enhance the historic environment and to ensure its sustainable future.</p> <p data-bbox="358 762 631 798">Credit Criteria:</p> <p data-bbox="358 808 1276 1247">To award the credit, the assessor should establish that the historic environment features on the site are known; the likely impacts of the project on those features have been identified together with the necessary mitigation measures; and the necessary permissions obtained (E.G. Listed Building Consent). It should also be necessary to demonstrate that the appropriate documents and Subject Matter Experts (SME) have been considered or consulted. This could include:</p> <ul data-bbox="391 1339 1247 1999" style="list-style-type: none"> • SEE Historic Environment Teams (Archaeology Team and Historic Buildings Team) • Relevant Services' historic branches • Heritage Statutory Bodies (through Historic Environment Teams) • Local Planning Authority • Statements of Significance • Conservation Management Plan • Heritage components of Environmental Management Systems; • Integrated Land/Rural Management Plans or • Integrated Estate Management Plans. • Quadrennial Inspections (QI) • Quinquennial Inspections of Scheduled Monuments. 	1

- National Planning Policy Framework, Chapter 12
- Institute of Field Archaeologists Code of Practice
- Historic archives and plans

This could also be a site wide survey conducted within the last 12 months.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The project team should ensure that the historic environment features are reflected within the Construction Environmental Management Plan (CEMP) together with any mitigation measures. Evidence of any necessary consents should also be presented to the DREAM Assessor.

Further Information:

Energy - Survey

code	title	credits
S-EN 1.2	<p data-bbox="358 493 763 535">Energy Infrastructure</p> <p data-bbox="358 541 446 577">Aim:</p> <p data-bbox="358 583 1242 714">To ensure that the energy needs of the project can be met and opportunities for onsite renewable energy and low emission generation are identified.</p> <p data-bbox="358 762 630 804">Credit Criteria:</p> <p data-bbox="358 810 857 846">One credit is awarded when:</p> <ul data-bbox="391 934 1274 1759" style="list-style-type: none"> <li data-bbox="391 934 1226 1245">• the local electricity and gas suppliers and distributors, Maintenance Management Organisation and/or the DIO Area Utilities Manager have been consulted, to confirm that there is sufficient capacity within the local electricity and gas infrastructure to meet the demands of the project and; <li data-bbox="391 1360 1274 1759">• the site has been assessed for the potential for renewable energy generation to reduce the demand on grid electricity and mains gas. Energy from renewable sources means energy from non-fossil fuel sources, such as wind, solar, geothermal, hydropower, biomass and sewage treatment plant gas. The assessment should determine whether any of the above are feasible and provide detail on: <ol data-bbox="370 1879 1234 2009" style="list-style-type: none"> <li data-bbox="370 1879 1112 1963">1. Potential contribution to the reduction in regulated carbon dioxide emissions <li data-bbox="370 1969 1234 2009">2. Potential contribution to overall building energy 	1

demand

3. Lifecycle cost of each technology, including payback period
4. Constraints – e.g. local planning conditions, operational restrictions etc...
5. Opportunities – available grants, tariffs etc...
6. Existing site technologies

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit is difficult or costly to achieve. A full justification of why NA has been selected should be provided.

Credit Evidence:

Evidence of discussions with local electricity and gas suppliers and distributors, Maintenance Management Organisation and/ or the DIO Area Utilities Manager, should be provided. This could be in the form of correspondence or meeting minutes. In addition, a renewable energy report should be provided, summarising all reviews undertaken and the outcomes of these reviews.

Further Information:

Procurement - Survey

code	title	credits
S-PR 1.1	<p>Sustainable Development Specialist</p> <p>Aim: To identify key sustainability opportunities, with an aim to achieving best practice design standards.</p> <p>Credit Criteria: The survey team should receive input from a competent person with proven skills and abilities in the design and delivery of sustainable buildings. The competent person could be a DREAM / BREEAM / CEEQUAL accredited assessor and will be required to help facilitate the successful achievement of the target DREAM rating.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: Evidence could include a letter of appointment or a report from the sustainable development specialist, along with details of the specialist's qualifications and experience in sustainable development.</p> <p>Further Information:</p>	1

Procurement - Survey

code	title	credits
S-PR 2.1	<p>Desktop Surveys</p> <p>Aim: To ensure that all relevant information, findings and recommendations from previous and current studies, surveys, assessments and management systems are incorporated into the project.</p> <p>Credit Criteria: The following studies, surveys, assessments and management systems should be collected (where relevant):</p> <ul style="list-style-type: none"> • Sustainability Appraisal (SA) • Environmental Impact Assessment (EIA) • Strategic Environmental Assessment (SEA) • Natural Environment Clearance & Consents • Historic Environment Clearance & Consents • Flood, Marine & Coastal Consents • Climate Impact Risk Assessment (CIRAM) • Geotechnical surveys • Site travel plans • Site energy management plans • Environmental Management System (EMS) • Integrated Environmental Management Plan (IEMP) • Integrated Land Management Program (ILMP) • Integrated Rural Management Plan (IRMP) • Review of public access arrangements <p>These studies and surveys should be reviewed, and all recommendations should be identified for incorporation into the remaining stages of the</p>	1

project.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The Project Manager should confirm in writing which studies and surveys have been collected, and provide a summary of all findings and recommendations which are relevant to the later stages of the project. The assessor should use his/her judgement to evaluate whether the summary is sufficient for handover to the design, construction and operation teams

Further Information:

Travel - Survey

code	title	credits
S-TR 1.2	<p>Green Travel Plan</p> <p>Aim: To encourage people to walk or cycle and reduce dependence on individual motorised transport means.</p> <p>Credit Criteria: Green Travel Plans should identify the specific required outcomes, targets and measures, and set out clear future monitoring and management arrangements all of which should be proportionate.</p> <p>As a minimum, the Green Travel Plan should :</p> <ul style="list-style-type: none"> • benchmark travel data • forecast the level of trips by all modes of transport likely to be associated with the development; • provide relevant information about existing travel habits on site and in the surrounding area; • explain how safe pedestrian and cycle routes from the development to other onsite facilities will be provided; • include proposals to reduce the need for travel to and from the site via all modes of transport; • include proposals to enhance the use of public transport services and facilities for cycling and walking; and • consider parking strategy options <p>The credit may be awarded if an existing site wide Green Travel Plan has been consulted and updated</p>	1

accordingly.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

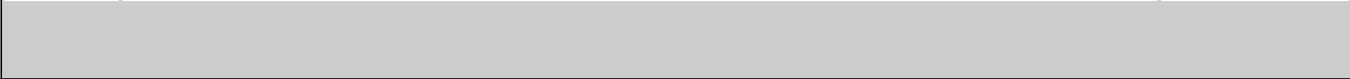
The team should provide a copy of the Green Travel Plan.

Further Information:

Water - Survey

code	title	credits
S- WR 1.1	<p>Water Infrastructure</p> <p>Aim: To ensure that the water needs of the project can be met.</p> <p>Credit Criteria: One credit can be awarded for consulting the appropriate water authority to confirm that there is sufficient capacity within both the local water supply and wastewater disposal infrastructure to meet the demands of the project during its projected lifecycle. This should include consideration of future climate change.</p> <p>For projects on Aquatrine sites, the DIO PFI Aquatrine Team / Aquatrine Service Provider should be contacted to determine future demand availability / waste water capacity.</p> <p>For projects on non-Aquatrine sites, the incumbent statutory undertaker (i.e. Water Company) should be contacted to determine future demand availability / waste water capacity.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: To achieve this credit, evidence of discussions with the appropriate water authority, should be provided. This could be in the form of correspondence or meeting minutes.</p>	1

Further Information:



Waste - Survey

code	title	credits
S-WS 1.1	<p>Waste Infrastructure</p> <p>Aim: To ensure that the waste recycling and disposal needs of the project can be met.</p> <p>Credit Criteria: One credit can be awarded for consulting the local authority, or site utility or infrastructure manager, to confirm that collection of wastes and recyclable materials is available to meet the demands of the project.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit is difficult or costly to achieve. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: Evidence of discussions with the local authorities, or site utility or infrastructure manager, should be provided. This could be in the form of correspondence or meeting minutes.</p> <p>Further Information:</p>	1

Stage: Design

Biodiversity & Environmental Protection - Design

code	title	credits
D-BI 2.1	<p data-bbox="358 638 1182 722">Protection and Enhancement of the Historic Environment</p> <p data-bbox="358 730 444 766">Aim:</p> <p data-bbox="358 774 1279 858">To protect and enhance the historic environment and to ensure its sustainable future.</p> <p data-bbox="358 909 630 945">Credit Criteria:</p> <p data-bbox="358 953 1279 1121">To award the credit, the assessor should ensure that the heritage integrity of the site is considered and where possible enhanced by the design of the construction. This includes:</p> <ul data-bbox="391 1213 1279 1787" style="list-style-type: none"> • Location and layout • Special features including proximity to a historic feature • Sympathetic colour schemes and construction materials • Stakeholder consultation • Vernacular architecture, landscape and townscape • Historic maps, plans and archives on site should be referred to the Historic Environment Teams • The relevant heritage sections of the Design Excellence Evaluation Process (DEEP) have been followed and taken into consideration. <p data-bbox="358 1879 1279 2005">The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being</p>	1

assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The project team should demonstrate that the heritage of the site has been actively considered within the design phase of the project. They should provide evidence of consultations and how the various aspects as outlined above have been considered.

Further Information:

External EQ - Design

code	title	credits
D-EEQ 1.2	<p>Reducing Global Warming Potential</p> <p>Aim: To reduce the amount of Global Warming substances potentially released to the atmosphere. Air-conditioning systems, if required, should avoid the use of substances with high GWP.</p> <p>Credit Criteria: It is MOD policy not to specify air conditioning for buildings. Three credits are achieved if air conditioning is designed out.</p> <p>One credit can be awarded if all other cooling techniques (i.e. insulation, passive cooling) have been proven unacceptable and it can be demonstrated through thermal modelling or engineering calculations that the space in question will exceed 30 °C for more than 2 .5% or for 8 or more days over the peak summer month. The assessor must be provided with proof that any specific design or operational requirement has followed the guidelines of “Design and Maintenance Guide 07 – Justifying the Provision of Air Conditioning”. If air conditioning is specified it should have a good leak prevention / detection system and use refrigerant with a GWP of less than 5.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence:</p>	3

The assessor should be provided with the appropriate calculations / modelling results demonstrating the air conditioning is not required or, if appropriate, specifications stating the type of refrigerant as evidence.

Further Information:

External EQ - Design

code	title	credits
------	-------	---------

**D-
EEQ
2.1**

NOx emissions of heating source

Aim:

To reduce the nitrogen oxides emitted into the atmosphere.

Credit Criteria:

Credits can be achieved as follows:

- <100 mg/kWh output energy = 1
- <70 mg/kWh output energy = 2
- <40 mg/kWh output energy = 3

This should also include the emission of a heat source if it is from central services providing it is quoted in the same rates/ units.

Note:

- These are dry NOx emissions at 0% oxygen.
- The boiler or calorifier NOx emission rating that is the greatest should be selected for assessment.
- No credits permitted for the use of electricity sourced from the National Grid for space heating.
- Where district CHP or heating only is provided, the performance of the central plant should be considered.
- Manufacturer's specifications should be used to determine mg/kWh.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA

3

should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The design team should provide a copy of the specification stating the type of plant (make and model), and evidence of the maximum NO_x emission rate from the manufacturer (eg correspondence, literature, specifications)

Further Information:

External EQ - Design

code	title	credits
D-EEQ 3.1	<p>Zero ODP and SWP <5 Insulants</p> <p>Aim: To reduce the amount of ozone depleting substances and substances with global warming potential to the atmosphere.</p> <p>Credit Criteria: Some blown insulation products contain gases that are harmful to the ozone layer, such as chlorofluorocarbons (CFCs) or hydro chlorofluorocarbons (HCFCs), or have a global warming potential, such as hydrofluorocarbons (HFCs). The design team should specify insulants which have zero ODP and GWP less than five. This should include all insulation products applied to building services systems as well as the building fabric insulation.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide copies of the specification clauses stating all types of insulation to be used within the building, and evidence from the manufacturers (e.g. correspondence, literature, specifications) which confirms that the insulation is zero ODP and GWP less than five. Note: Where insulation is inherently zero ODP and GWP less than five (mineral wool, glass fibre), evidence from the manufacturers is not required.</p>	1

Further Information:



Energy - Design

code	title	credits
D-EN 3.1	<p data-bbox="358 491 1110 537">Low or Zero Carbon (LZC) Technologies</p> <p data-bbox="358 539 448 577">Aim:</p> <p data-bbox="358 581 1227 684">To reduce CO₂ emissions to atmosphere and maximise sourcing of energy from LZC resources.</p> <p data-bbox="358 730 631 768">Credit Criteria:</p> <p data-bbox="358 772 1206 905">Credits can only be awarded if LZC technologies recommended in the LWZ feasibility study conducted at S-EN1 have been specified.</p> <ul data-bbox="391 993 1273 1346" style="list-style-type: none"> <li data-bbox="391 993 1273 1167">• One credit can be awarded when the LZC technology specified contributes >5% of overall building energy demand or result in >5% reduction in regulated carbon dioxide emissions. <li data-bbox="391 1171 1273 1346">• Two credits can be awarded when the LWC technology specified contributes >10% of overall building energy demand or result in >10% reduction in regulated carbon dioxide emissions. <p data-bbox="358 1430 1240 1518">Any installation should be done in consultation with the site manager and/or Area Utilities Manager.</p> <p data-bbox="358 1564 1260 1829">The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p data-bbox="358 1875 672 1913">Credit Evidence:</p> <p data-bbox="358 1917 1252 2005">The assessor should provide calculations showing the estimated output of the LWC technology and its</p>	2

contribution to overall building energy demand and/or reduction in regulated carbon dioxide emissions. The assessor should also provide copies of meeting minutes or notes relating to discussions with site manager / Area Utilities manager.

Further Information:



Energy - Design

code	title	credits
------	-------	---------

D-EN 4.2	<p data-bbox="354 489 1110 531">Reduction of Carbon Dioxide Emissions</p> <p data-bbox="354 537 448 575">Aim:</p> <p data-bbox="354 579 1187 623">To reduce the emissions of CO2 to atmosphere</p> <p data-bbox="354 667 631 709">Credit Criteria:</p> <p data-bbox="354 716 1230 936">Credits will be given to reduce the energy demand and hence CO2 emissions through specifying techniques for heat recovery or passive design. Either one or all of the options can be used within the project.</p> <ul data-bbox="391 1020 1281 1640" style="list-style-type: none"> <li data-bbox="391 1020 1281 1331">• 2 credits for heat recovery, or re-use initiatives. These credits may be awarded if heat generated from any process where the heat would otherwise be lost is collected and meaningfully re-used. Sources of waste heat or energy might include refrigeration units, boilers, power generation plant etc. <li data-bbox="391 1335 1281 1640">• 2 credits for passive design measures. These credits may be awarded if building energy demands (heating, cooling, lighting etc...) are meaningfully reduced through the use of passive design measures. Passive design can include consideration of building orientation, shading, material selection etc... <p data-bbox="354 1724 1263 1990">The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p>	4
-----------------	---	---

- 2 credits for heat recovery, or re-use initiatives. These credits may be awarded if heat generated from any process where the heat would otherwise be lost is collected and meaningfully re-used. Sources of waste heat or energy might include refrigeration units, boilers, power generation plant etc.
- 2 credits for passive design measures. These credits may be awarded if building energy demands (heating, cooling, lighting etc...) are meaningfully reduced through the use of passive design measures. Passive design can include consideration of building orientation, shading, material selection etc...

Credit Evidence:

Evidence shall be provided of; a) energy recovery and reuse from the waste heat generated b) passive design measures within the building through provision of drawings, specifications etc.

Further Information:

Energy - Design

code	title	credits
D-EN 6.3	<p>Lighting levels</p> <p>Aim: To minimise energy use in lighting and thus reduce CO2 emissions.</p> <p>Credit Criteria: To ensure occupant comfort while minimising energy consumption in lighting, the lighting levels from the relevant CIBSE Lighting Guide should not be exceeded.</p> <p>If you are required by contractual arrangements to work to JSP scales, this credit is not applicable.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit is difficult or costly to achieve. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: To gain the credit, specification and schematic drawing evidence should be supplied to show the lighting levels of all areas within the building. If this credit is not applicable, the assessor should be provided with the extract from the contract which applies JSP scales.</p> <p>Further Information:</p>	1

Energy - Design

code	title	credits
D-EN 7.1	<p>Internal and External Luminaires</p> <p>Aim: To maximise energy efficiency in lighting and reduce CO2 emissions.</p> <p>Credit Criteria: To exceed standards laid down in the latest relevant devolved administration building regulations To award this credit, a lighting plan should be developed, in consultation with a CIBSE Qualified Lightening Engineer (e.g. Member of the Society of Light and Lighting (MSLL), that includes appropriate lighting layout and method of controls (switches - including remotely controlled switches). The plan should include a luminaire schedule that shows the efficacy of each lamp and how that corresponds to the luminaires specified.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide a copy of the lighting plan and supporting calculations</p> <p>Further Information:</p>	1

Energy - Design

code	title	credits
D-EN 8.1	<p>Carbon Rating of Heating Fuel</p> <p>Aim: To reduce carbon emissions from space heating.</p> <p>Credit Criteria: Two credits can be awarded where the entire space heating load is met by energy sources other than National Grid generated electricity.</p> <p>One credit can be awarded where the space heating base-load is met by energy sources other than National Grid generated electricity</p> <p>An exception would be where a purchasing agreement has been arranged with electricity suppliers to provide from renewable sources generated within 10 miles from the site, or where the electricity has been generated on site through renewable sources. 'Green' tariff electricity sourced from the grid is not eligible.</p> <p>Heat pump installations will also be eligible for this credit provided a COP (ratio of kW of heat delivered: kW of electrical power) of > 3 is achieved.</p> <p>This is based on the following statistics:</p> <ul style="list-style-type: none"> • National Grid = 0.519 kg CO₂ / kWh • Oil = 0.298 kg CO₂ / kWh • Gas = 0.216 kg CO₂ / kWh • Biomass = 0.016 kg CO₂ / kWh 	2

(Figures from Building Regulations Approved Document Part L2)

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The design team should demonstrate via drawings and/or specification clauses the type of fuel being used for space heating purposes

Further Information:

Energy - Design

code	title	credits
D-EN 10.1	<p>Boiler Efficiency</p> <p>Aim: To ensure the specification of energy efficient heat generating plant and reduce CO2 emissions.</p> <p>Credit Criteria: Credits can be awarded if the summer and winter operating efficiency of the project boilers meets the following values:</p> <p>One credit:</p> <ul style="list-style-type: none"> • Natural Gas - 91% • LPG - 93% • Oil - 84% • Biomass - 75% <p>Two credits:</p> <ul style="list-style-type: none"> • Natural Gas - 95% • LPG - 97% • Oil - 87% • Biomass - 78% <p>One credit will be awarded if it is necessary to use an existing site wide scheme, and the main boiler is of low efficiency, but contact has been made with the site manager suggesting that improvements be made.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not</p>	2

been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

Specification clauses and/or equipment schedules confirming the types of boilers being installed, and supporting technical evidence from the manufacturers should be provided to confirm the efficiency

Further Information:

Energy - Design

code	title	credits
D-EN 11.1	<p>Domestic Hot Water Production</p> <p>Aim: To avoid dependence on central systems for small out-of-hours demand for hot water.</p> <p>Credit Criteria: The design team should be able to demonstrate that a simple control system for daytime and out of hours hot water use is available. The system should be designed to heat sufficient domestic hot water for the anticipated out of hours demand without the need for the primary heat source to operate.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: A schematic drawing and specification clause outlining the operation of the control system should be provided to the assessor</p> <p>Further Information:</p>	1

Energy - Design

code	title	credits
D-EN 12.1	<p>Energy Efficiency in Periods of Low Demand</p> <p>Aim: To reduce energy use, CO2 emissions and running costs during times of low occupancy or building usage.</p> <p>Credit Criteria: The design team should demonstrate that there is a control strategy in place that provides flexible systems so that processes can be independently controlled.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: A schematic drawing and specification clause should be provided to demonstrate this credit</p> <p>Further Information:</p>	1

Energy - Design

code	title	credits
D-EN 13.1	<p>Energy Metering</p> <p>Aim: To facilitate energy management and saving initiatives, thus reducing CO2 emissions.</p> <p>Credit Criteria: Metering should be provided to all incoming supplies of gas and electricity. In addition, sub-metering to all major energy uses within the building should be provided in compliance with the appropriate Building Regulations</p> <p>The metering of major energy uses should allow >90% of energy use to be captured.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: Type and location of meters should be indicated on drawings together with supporting evidence to demonstrate compatibility of data to BMS requirements</p> <p>Further Information:</p>	2

Energy - Design

code	title	credits
D-EN 17.1	<p>Energy Efficient Equipment</p> <p>Aim: To encourage the procurement of energy efficient equipment</p> <p>Credit Criteria: Two credits can be awarded when the following appliances achieve the Government Buying Standard Best Practice Level:</p> <ul style="list-style-type: none"> • Chest freezers, fridge freezers, upright freezers and refrigerators must have an 'A++' rating for energy efficiency. • Dishwashers must be 'A+++' energy labelled. • Domestic electric ovens must have an 'A' rated energy label • Commercial ovens must meet Energy Star or equivalent criteria. • Vented and Condensing tumble dryers must be 'A+' rated or above. • Washer dryers must have an 'A' rating. • Domestic washing machines must be A+++ rated for Energy Efficiency. <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence:</p>	2

The design team should provide the specifications of the proposed appliances, including confirmation of their ratings from the manufacturers.

Further Information:

Internal EQ - Design

code	title	credits
D-IEQ 1.1	<p>Environmental Comfort - Meet Standards</p> <p>Aim: To provide a comfortable and healthy environment.</p> <p>Credit Criteria: Credit will be awarded if the internal and external design conditions used in the design calculations for heating and ventilation systems comply with guidance outlined in CIBSE Guide A.</p> <p>If you are contractually required to work to JSP scales, this credit is not applicable.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide the internal and external design conditions for the heating and ventilation systems, and demonstrate that these comply with guidance outlined in CIBSE Guide A. If this credit is not applicable, the assessor should be provided with the extract from the contract which applies JSP scales.</p> <p>Further Information:</p>	1

Internal EQ - Design

code	title	credits
D-IEQ 2.2	<p>Day lighting</p> <p>Aim: To reduce artificial lighting requirements and thus reduce CO2 emissions.</p> <p>Credit Criteria: Two credits can be achieved if the daylight factor is equal to or greater than 5% across 80% of the floor area of the building. This should be assessed at a height of 2m for hangars and workshops and 800mm for all other buildings.</p> <p>One credit may be achieved where the daylight factor is greater than or equal to 2%, but less than 5%, in those circumstances where design constraints make a higher daylight factor unachievable.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should demonstrate compliance by providing daylighting calculations</p> <p>Further Information:</p>	2

Internal EQ - Design

code	title	credits
D-IEQ 3.1	<p>Safe Lighting Conditions</p> <p>Aim: To promote a healthy indoor environment by reducing health and safety risks associated with low frequency lighting. High frequency lighting is also more energy efficient.</p> <p>Credit Criteria: Where fluorescent luminaries are specified they should be fitted with high frequency electronic ballasts.. Illuminance levels should be appropriate to the tasks undertaken, for example, in office areas, high frequency lighting impacts less upon visual health, whilst in hangar and workshop areas, high frequency lighting poses less risk of stroboscopic effects when operating machinery.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide specifications and/or drawings to confirm that high frequency electronic ballasts are installed to fluorescent luminaires in all working areas</p> <p>Further Information:</p>	1

Internal EQ - Design

code	title	credits
D-IEQ 4.1	<p>Thermal Zone</p> <p>Aim: To provide local control according to different load conditions and optimise staff comfort levels. The ability to provide out-of-hours local heating to spaces and separate zones independently of one another should also be provided to optimise energy usage.</p> <p>Credit Criteria: The design team should demonstrate that appropriate thermal zoning has been provided, incorporating the following:</p> <ul style="list-style-type: none"> • Local heating control to different areas should be easy to understand with manual operation such that occupants have a satisfactory level of local control over their environment. An appropriate system would be TRV control of radiators. The control system should also include a manual override facility for out-of-hours use. • Space heating systems designed with an understanding of the likely occupancy types and patterns of different zones. • Space heating systems for larger areas should have a simple, easy to use control system to provide manual override of heating program for out-of-hours use. The larger spaces should have separate thermal control zones of 200m² to allow for operations in one area of the process area only. This will be best achieved through the use of a radiant heating system. <p>The option of selecting NA is also available for this</p>	1

question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For local heating control and space heating systems the design team should provide evidence of the proposed method of control, including specification clauses and schematic drawings

Further Information:

Internal EQ - Design

code	title	credits
D-IEQ 5.1	<p>Acoustic Design</p> <p>Aim: To ensure a safe and comfortable working or living environment, and enable intelligible speech in the offices.</p> <p>Credit Criteria: Predicted internal noise levels should be in accordance with noise levels and level ranges as stated in BS8223:2014. Where a minimum level is also specified, this it so ensure reasonable privacy in shared areas.</p> <p>Noise emissions from plant or from processes within the building should be in compliance with local authority standards where applicable.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide calculations or a written statement from an acoustician to demonstrate that internal noise levels to unoccupied spaces do not exceed the criteria</p> <p>Further Information:</p>	3

Internal EQ - Design

code	title	credits
D-IEQ 7.1	<p>Internal Emissions</p> <p>Aim: To prevent emissions of air pollutants and encourage healthy internal environments.</p> <p>Credit Criteria: One credit can be awarded for developing a plan that specifically addresses indoor air pollution. The plan should consider how contaminant sources will be managed, how air pollution will be tested and how air quality will be maintained once the building is occupied.</p> <p>A further two credits can be awarded if the internal finishes comply with the following performance standards:</p> <ul style="list-style-type: none"> • Paints and varnishes –should be ‘no’ or ‘low’ VOC and comply with EU Directive 2004/42/CE ('Paints Directive') • Wood panels –should be low emission formaldehyde (e.g. class E1 or better), be ‘no’ or ‘low’ VOC and comply with BS EN 13986:2004 +A1:2015 Wood-based panels for use in construction • Timber structure –should be low emission formaldehyde (e.g. class E1 or better) and comply with BS EN 14080:2005 Timber structures - Glues laminated timber • Wood Flooring – should be low emission formaldehyde (e.g. class E1 or better), be ‘no’ or ‘low’ VOC and comply with BS EN 14342:2005+A1:2008 Wood flooring - Characteristics, evaluation of conformity and marking. • Resilient textile and laminated floor coverings – should be low emission formaldehyde (e.g. class E1 	3

or better), be 'no' or 'low' VOC and comply with BS EN 14041:2006 Resilient, textile and laminate floor coverings - Essential characteristics

- **Flooring adhesives** – should be 'no' or 'low' VOC and comply with BS EN 13999-1:2013 Adhesives
- **Wall coverings** – should be low emission formaldehyde (e.g. class E1 or better) and comply with BS EN 233:1999 Wallcoverings in roll form - Specification for finished wallpapers, wall vinyl's and plastic wall coverings.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For the first credit a copy of the air pollution plan should be provided. For the second and third credits, the design team should provide specifications, drawings or testing results which confirm that the internal finishes comply with the compliant performance standard listed above.

Further Information:

Procurement - Design

code	title	credits
D-PR 1.3	<p>Innovation in Sustainable Construction</p> <p>Aim: To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by DREAM.</p> <p>Credit Criteria: The credits awarded for up to five separate instances, where the performance of the project significantly exceeds the requirements of DREAM. For example, this could be an advanced energy, water or waste saving measure. Any sustainability enhancements that have not been given credits elsewhere in the DREAM assessment tool should be given a score in this section.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: For each credit the design team should propose in writing to 'DIO-DREAM@mod.gov.uk';</p> <ul style="list-style-type: none"> • The aim of the innovation and the proposed requirement for achieving the credit. • The design approach for achieving this credit should be submitted through written or drawn information. 	5

Before submitting a proposal for consideration the assessor should be content that the innovation significantly exceeds DREAM requirements and be satisfied that those objectives can be achieved. Previously approved credits can be supplied on request.

Further Information:



Procurement - Design

code	title	credits
D-PR 2.1	<p>Sustainable Development Construction Specialist</p> <p>Aim: To identify key sustainability opportunities, with an aim to achieving best practice design standards.</p> <p>Credit Criteria: The design team should receive input from a competent person with proven skills and abilities in the design and delivery of sustainable buildings. The competent person could be a DREAM / BREEAM / CEEQUAL accredited assessor and will be required to help facilitate the successful achievement of the target DREAM rating.</p> <p>Good design should:</p> <ul style="list-style-type: none"> • Make a positive addition to the location, the environment and the community • Add value and reduce whole life costs • Create built environments that are safe to construct and safe to use • Create flexible, durable, sustainable and ecologically sound environments for the community • Minimise waste of materials, energy and pollution both in construction and in use • Be attractive and healthy for users • Contribute to construction that is quick, safe and efficient • Produce a facility that is easy and cost effective to manage, clean and maintain 	1

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

Evidence could include a letter of appointment or a report from the sustainable development specialist, along with details of the specialist's qualifications and experience in sustainable development.

Further Information:

Procurement - Design

code	title	credits
D-PR 4.2	<p>Evaluation of Local Supply Chain for Local Procurement</p> <p>Aim: To mitigate transportation energy use and costs, and negate unnecessary use of transport.</p> <p>Credit Criteria: Materials originating from within 50 miles of the site should be selected and incorporated into the design wherever possible.</p> <p>One credit is awarded where written evidence is provided of the following: A review should be undertaken to identify opportunities for use of local suppliers providing products that have originated within 50 miles of the site.</p> <p>This should cover the following building elements:</p> <ul style="list-style-type: none"> • Structure • Masonry • Flooring • Windows • Cladding <p>At least 30% of materials by mass should have the potential to be supplied from local sources. As well as newly manufactured building products, this may include re-used or recycled materials or building elements. All local timber should meet the requirements of credit D-PR 10.</p>	1

Where buildings are required in remote areas, and the review of local suppliers shows that it is not possible to purchase at least 30% of materials by mass within 50 miles, then this credit may be awarded by default.

This credit should also take into account off-site or modular building manufacturer which should also be included within the 50 mile radius. In exceptional circumstances, where products which have a demonstrable through-life benefit for sustainability, these may be procured outside the quoted radii and the credits awarded by default.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

Written confirmation of the origins of products shall be obtained from the suppliers (e.g. websites, correspondence etc... showing addresses of sources). In cases where products are procured outside the quoted radii there shall be written evidence demonstrating their superior sustainability performance.

Further Information:

Procurement - Design

code	title	credits
D-PR 5.1	<p data-bbox="358 491 993 533">Environmental Profile of Materials</p> <p data-bbox="358 537 448 575">Aim:</p> <p data-bbox="358 579 1185 667">Reduce waste; save energy; reduce landfill and mitigate transportation costs.</p> <p data-bbox="358 716 631 753">Credit Criteria:</p> <p data-bbox="358 758 1250 934">Two credits can be awarded when all construction elements (listed below) related to the refurbishment activity, have an 'A' or 'A+' rated environmental performance.</p> <ol data-bbox="358 1020 1185 1423" style="list-style-type: none"> 1. Roofs - 90% 'A' or 'A+' rated 2. External Walls - 90% 'A' or 'A+' rated 3. Upper floors - 90% 'A' or 'A+' rated 4. Windows - 90% 'A' or 'A+' rated 5. Insulation - 90% 'A' or 'A+' rated, zero ODP, GWP<5 6. Floor finishes - 90% 'A' or 'A+' rated 7. Internal walls - 90% 'A' or 'A+' rated 8. Hard landscaping - 90% 'A' or 'A+' rated <p data-bbox="358 1507 1276 1726">Where materials have been reused from an existing building, or where major building elements have been retained (e.g. the refurbished building uses the existing external walls), these materials automatically achieve an 'A' rating.</p> <p data-bbox="358 1774 1273 1950">Where a construction element contains more than one specification, it is permissible to calculate the average rating by taking account of the relative area of each individual specification.</p>	2

Where specialist buildings have an outer building envelope, these criteria can be applied to the outer building only.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The design team should provide specifications or drawings which detail all types of materials to be used. The assessor should use discretion where construction types vary slightly from those specified in the Green Guide.

Further Information:

Procurement - Design

code	title	credits
D-PR 7.2	<p>Recycled Content of Building Materials</p> <p>Aim: To encourage the reuse and recycling of building materials.</p> <p>Credit Criteria: Encouraging the reuse and recycling of building materials reduces consumption of primary resources and minimises the quantity of UK waste being sent for disposal in landfill. Reuse / recycling of materials can also reduce costs by avoiding landfill disposal charges and minimising transportation. Options include: reuse of reclaimed products; local recycling of construction and demolition waste; and the selection of manufactured products containing a higher fraction of recovered materials. This objective links to good practice in site waste management.</p> <p>Use the online tool developed by WRAP (the Waste & Resources Action Programme) to determine the value of recycled content used and the top ten opportunities to increase this outcome.</p> <p>The minimum outcome is 10% recycled content as a proportion of the total value of materials used on the project. The Quick Wins are the largest contributors to the potential increase in recycled content for the project, going from baseline/standard practice to cost-neutral good practice. They involve simple substitution of one product/material by an equivalent mainstream alternative (e.g. a competing brand with higher recycled content).</p>	1

The Credit is awarded for implementing five of the top ten Quick Win opportunities PROVIDING the projected recycled content of the project is at least 10%.

Note that reuse of a product or material (such as demolition waste used as fill) is attributed 100% recycled content by value, and should be preferentially investigated as a potential Quick Win.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The team should provide the standard report from the WRAP tool quantifying the projected overall level of recycled content by value and identifying the top ten Quick Win opportunities for the project. Details of the Quick Wins selected for implementation should be specified within this report. Evidence of the actual use of higher recycled content products for the selected Quick Wins may be sought during the construction phase (e.g. through review of product data sheets, delivery notes or invoices

Further Information:

Procurement - Design

code	title	credits
D-PR 9.2	<p>PVC Minimisation</p> <p>Aim: To avoid the use of PVC materials.</p> <p>Credit Criteria: PVC is an inappropriate material to use in areas of high UV exposure due to degradation of the material.</p> <p>A review of material specifications for the following products should be undertaken to identify alternatives to PVC:</p> <ul style="list-style-type: none"> • Window frames • Floors • Wall and surface finishes • Water tanks • Drainage pipes • Conduits <p>Furthermore, to achieve the credit, PVC use in non-exposed areas needs to be considered and alternatives specified where suitable.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide specifications</p>	1

and/or drawings which demonstrate that alternative materials to PVC have been selected and specified. Where PVC has been used in non-exposed areas, the design team should demonstrate that alternatives are not suitable.

Further Information:



Procurement - Design

code	title	credits
D-PR 11.1	<p>Building Manual</p> <p>Aim: To ensure that the building users understand the building and its systems, and how to operate the building efficiently to minimise resource consumption and other environmental impacts.</p> <p>Credit Criteria: One credit can be awarded when the design team prepare a draft manual which describes building systems and how to operate the building most efficiently. The manual should cover the following as a minimum:</p> <ul style="list-style-type: none"> • Non-technical description of the building, including heating and cooling strategy, BMS, energy efficiency measures, water systems, waste facilities, emergency systems, ventilation, lighting. • Contact details for suppliers of installed equipment. • Maintenance requirements. • Plans showing locations of meters and equipment. • Sample tables for monitoring and reporting gas, electricity and water usage. • Detail on how users can operate the building efficiently to help reduce energy, waste and water usage. <p>A further credit can be awarded if a training schedule is prepared for building users around handover. The training should, as a minimum:</p> <ul style="list-style-type: none"> • introduce the Building Manual; 	2

- explain key building systems and how they operate;
- demonstrate how to operate the building efficiently.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For the first credit the design team should provide a draft copy of the manual. For the second credit a copy of the training schedule should be provided.

Further Information:

Procurement - Design

code	title	credits
D-PR 13.1	<p>Supply Chain</p> <p>Aim: To ensure that the supply chain is aware of the environmental requirements of the project and will commit to managing the environmental consequences of their activities.</p> <p>Credit Criteria: All Government Departments and all contractors operating on behalf of Government Departments are required to manage the impacts of their supply chain activities and make green purchases whenever possible. Suppliers should be assessed on their capabilities to address the consequences throughout the supply chain of all design, non-renewable material use, manufacture and production methods, packaging, logistics, service delivery, operation, maintenance, reuse, recycling and disposal options. One credit can be awarded if the project team can demonstrate their ability to influence the environmental performance of the supply chain.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The project team should provide copies of their procurement and supply chain strategy / management programme and supplier evaluation questionnaires.</p> <p>Further Information:</p>	1



Procurement - Design

code	title	credits
D-PR 15.1	<p>Internal Robust Design</p> <p>Aim: To avoid costly on-going maintenance.</p> <p>Credit Criteria: One credit is gained if 50% of the key heavy activity area is made durable and another credit is obtained if 100% of the key heavy activity area is made durable. Durable finishes, fixtures and fittings should be specified. It should be clearly shown that Whole Life Costing (WLC) has been considered and appropriately applied.</p> <p>These measures should include:</p> <ul style="list-style-type: none"> • Walls specified to Severe Duty as per BS 5234 -2 • Impact protection on doors • Floors should have durable finishes and be easy-to-wash in heavy duty and high circulation areas. <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide specifications and drawings that demonstrate durability measures which have been incorporated into the design. A summary of the Whole Life Costing analysis should also be provided</p>	2

Further Information:



Procurement - Design

code	title	credits
D-PR 16.1	<p>Responsible Sourcing</p> <p>Aim: To encourage the use of responsible sourced materials.</p> <p>Credit Criteria: Two credits can be awarded where it can be shown that 50% of the materials that make up the following elements have been responsible resourced according to BES 6001:2008.</p> <ul style="list-style-type: none"> • Windows • Doors • Floors • Roofs • Ceilings • Internal & external walls • Insulation <p>Three credits can be awarded where it can be shown that 75% of the materials have been responsibly resourced.</p> <p>BES 6001:2008 Framework Standard for Responsible Sourcing of Construction Products provides a framework for the assessment and certification of the responsible sourcing of construction products. To comply with the standard a product must meet a number of mandatory criteria. To view a list of products approved to BES 6001 and additional information about the standard visit: GreenBook Live</p> <p>The option of selecting NA is also available for this</p>	3

question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For each credit, the team should provide calculations showing all the constituent materials of each element specified and the % of those materials that have achieved a performance rating of Pass or higher according to BES 6001:2008 Framework Standard for Responsible Sourcing of Construction.

Further Information:

Procurement - Design

code	title	credits
D-PR 17.1	<p>Life Cycle Analysis</p> <p>Aim: To promote economic sustainability through the use of life cycle analysis.</p> <p>Credit Criteria: Three credits can be awarded if a Life Cycle Cost (LCC) Plan has been developed and can be shown to have influenced the design. The LCC Plan should be developed in line with BCIS 'Standardised method of life cycle costing for construction procurement' and cover the buildings:</p> <ul style="list-style-type: none"> • structure • envelope • services • finishes <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: A copy of the LCC Plan covering each of the above features should be provided. In addition, the assessor should provide evidence of how the LCC Plan has been used to influence design and specification.</p> <p>Further Information:</p>	3



Water - Design

code	title	credits
D- WR 1.2	<p>Low Flow Rate Taps</p> <p>Aim: To reduce water consumption for sanitary use in buildings.</p> <p>Credit Criteria: Where kitchen taps are specified they should have flow rates of <5 litres/minute with all mixers having a clear indication of hot and cold with hot tap or lever position to the left. Flow rates of less than 4 litres/minute are not recommended for kitchen taps.</p> <p>Where hand basin taps are specified they should have flow rates of <4 litres/minute delivered through either hand detecting spray taps or push button spray taps with timed shut-off.</p> <p>All fittings must be Water Regulations Advisory Service (WRAS) approved.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The assessor should ensure that the design and construction specifications and drawings specify the appropriate sanitary ware/fittings.</p> <p>Further Information:</p>	1



Water - Design

code	title	credits
D- WR 2.1	<p>WCs</p> <p>Aim: To reduce water consumption in toilets.</p> <p>Credit Criteria: All WC's should have an effective flush volume of <4 litres.</p> <p>All fittings must be Water Regulations Advisory Service (WRAS) approved.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The assessor should confirm that all WC's have an effective flush volume of <4 litres and that they are specified in the design and construction specifications and drawings.</p> <p>Further Information:</p>	1

Water - Design

code	title	credits
D- WR 3.2	<p>Urinals Control</p> <p>Aim: To reduce water losses in urinals.</p> <p>Credit Criteria: Urinals should be 1.5 litre/flush user sensor or <10 litre/hour max auto control flush.</p> <p>All fittings must be Water Regulations Advisory Service (WRAS) approved.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The assessor should ensure that the design and construction specifications and drawings determine that all urinals are fitted with user sensor or appropriate maximum auto control.</p> <p>Further Information:</p>	1

Water - Design

code	title	credits
D- WR 4.1	<p>Water Meter</p> <p>Aim: To both reduce water consumption and allow all water consumption to be managed and monitored.</p> <p>Credit Criteria: The building design and construction specifications and drawings should stipulate the fitting of meters for the main incoming supply, all areas of major water consumption, for example process areas and accommodation blocks. The meters should be capable of being monitored via a BMS.</p> <p>For Aquatrine sites, installation of meters should be done in consultation with the Aquatrine Service Provider.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The design team should provide drawings which show the locations and types of all water meters, including the capability of being monitored via a BMS</p> <p>Further Information:</p>	1

Water - Design

code	title	credits
D- WR 7.1	<p>Showers</p> <p>Aim: To reduce water consumption for sanitary use in buildings.</p> <p>Credit Criteria: Where showers are specified they should have flow rates of <6 litres/min.</p> <p>All fittings must be Water Regulations Advisory Service (WRAS) approved.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The assessor should ensure that the design and construction specifications and drawings specify the appropriate sanitary ware/fittings.</p> <p>Further Information:</p>	1

Water - Design

code	title	credits
D- WR 8.1	<p>Water Using Appliances</p> <p>Aim: To reduce consumption rates from appliances that use water.</p> <p>Credit Criteria: Where the following appliances are specified, the following consumption rates must be achieved.</p> <ul style="list-style-type: none"> • Domestic sized dishwasher (up to 14 place settings) - volume per (typical) cycle must not exceed 8 litres. • Commercial sized dishwasher – volume per rack must not exceed 4 litres. • Domestic sized washing machine (up to 5kg load capacity) - volume per (typical) cycle must not exceed 35 litres. • Commercial sized washing machine - volume per kg must not exceed 5 litres. • Waste disposal unit – volume per minute must not exceed 0 litres <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p> <p>Credit Evidence: The assessor should ensure that the designs specify the appropriate appliances.</p>	1

Further Information:



Waste - Design

code	title	credits
D-WS 1.2	<p>Storage and Collection of Food & Recyclable Wastes</p> <p>Aim: To reduce items sent to landfill and reduce the requirement for the use of virgin materials through recycling.</p> <p>Credit Criteria: The credit can be awarded where the building design allows for the on-site secure disposal, segregation, storage and collection of recyclable and compostable wastes.</p> <ul style="list-style-type: none"> • Collection bins should be placed in prominent positions throughout the building for personnel to dispose of paper, plastic, metal, glass and general waste. • Secure, labelled storage space for paper, plastic, metal, glass, compostable and general waste should be allocated in close proximity to the buildings food preparation and dining areas in an internal or external service area, with easy access for collection. • Sufficient space allocation (1m² per 1000m² of floor area, minimum 5m² , maximum 10m²). • Compostable food wastes, where produced, should be stored separately in the external service area in a well ventilated, covered and secure storage container before being collected and transported to nearby composting facilities either on site or in the local community. The food waste storage should be secure from vermin or local wildlife. <p>This credit can also be awarded where establishment</p>	1

wide recycling facilities already exist and are used or where offsite segregation and recycling is already in place.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The assessor should be provided with (1) layout drawings which show the locations, numbers and types of collection bins throughout the building, or (2) general arrangement drawings which show the location and size of the establishment recycling facility, or (3) details of off site segregation and recycling arrangements.

Further Information:

Stage: Construction

Biodiversity & Environmental Protection - Construction

code	title	credits
C-BI 1.1	<p data-bbox="358 638 1024 680">Construction Pollution Control Plan</p> <p data-bbox="358 684 448 726">Aim: Reduce the potential for pollution to water sources, air, land and soil during construction.</p> <p data-bbox="358 863 631 905">Credit Criteria: Minimisation of the following is required through site practices;</p> <ul data-bbox="391 1079 1279 1209" style="list-style-type: none"> • Pollution to air through dust emissions • Pollution of water courses and ground water; and • Pollution of soil and land through spills. <p data-bbox="358 1293 1279 1734">A site-specific sedimentation, air pollution and spill control plan should be developed and implemented. This document should highlight methods of preventing loss of materials during construction by stormwater runoff and/or wind erosion, preventing sedimentation of particulates in surface water sewers or watercourses, preventing air pollution with dust and particulate matter and preventing spills of substances such as fuel and paint which can result in soil contamination.</p> <p data-bbox="358 1787 1279 2005">The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification</p>	1

of why NA has been selected should be provided.

Credit Evidence:

A site-specific sedimentation, air pollution and spill control plan, which meet the requirements listed in the criteria section above, should be provided by the contractor. Further to this, evidence should be provided that the plan has been implemented and confirmed at post construction review.

Further Information:

Biodiversity & Environmental Protection - Construction

code	title	credits
C-BI 2	<p>Protection and Enhancement of the Historic Environment</p> <p>Aim: To protect and enhance the historic environment and to ensure its sustainable future.</p> <p>Credit Criteria: To award the credit, the Assessor should establish that the heritage features are appropriately protected during the construction of the structure. This includes ensuring that:</p> <ul style="list-style-type: none"> • Action plans are in place to protect features from physical damage (including direct and indirect impacts of construction activities e.g. vibration); • A recording methodology should be in place to record any historic/archaeological features; • Conditions made in relevant planning permissions, listed building or scheduled monument consents are adhered to; • If archaeology is discovered during the construction phase, then advice should be sought from the DIO Historic Environment TEam. National Planning Policy Framework procedures must be consulted and followed where necessary; and; • If any historic artefacts or treasure are found then the find must be reported to the site Estate Surveyor and the Archaeology Advisor. The Estate Surveyor should follow procedures outlined in JSP 362 Ch.6 (to be superseded by JSP 850) and the Defence Estates Guide Ch.24. 	1

If the historic environment assessment carried out at S-BI-5 found no historic environment features and no further features were discovered during construction please select NA.

Credit Evidence:

The project team should demonstrate that the heritage of the site has been actively protected within the construction phase of the project and any heritage issues that have arisen have been managed according to MoD policy.

Further Information:

Procurement - Construction

code	title	credits
C-PR 1.1	<p>Commissioning Quality</p> <p>Aim: To ensure that all building services systems are commissioned correctly by appropriately trained personnel.</p> <p>Credit Criteria: To obtain two credits the contractor must confirm that all commissioning has been carried out in accordance with the latest Building Regulations, CIBSE and BSRIA guidelines</p> <p>For specialist items of plant, an appropriate commissioning specialist must be appointed to manage or oversee the commissioning of these systems. These systems should include:</p> <ul style="list-style-type: none"> • Process ventilation equipment. • Air-conditioning systems. • Mechanical ventilation systems. • Gas-fired radiant heating systems. • Building management systems and associated controls. • Any other innovative systems (eg geothermal cooling) <p>Commissioning should be done in collaboration with the future building managers, facilities management team etc...</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is</p>	2

not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The contractor must provide (1) a copy of the specification which requires that commissioning will be carried out in accordance with the latest CIBSE Codes and BSRIA Guides, (2) a copy of the letter of appointment to the commissioning specialist, which outlines all responsibilities, and (3) a copy of all of the commissioning results, confirming that commissioning was undertaken in accordance with the latest CIBSE Codes and BSRIA Guides.

The assessor should also see evidence that appropriate time allowances have been made within the project

Further Information:

Procurement - Construction

code	title	credits
C-PR 7.1	<p>Pre-handover Review</p> <p>Aim: To ensure that the works conforms to design specification and handover responsibility for DREAM assessment.</p> <p>Credit Criteria: To obtain this credit a documented post construction review meeting and works inspection should be undertaken with the existing Project phase DREAM Lead Assessor and the new Operation phase Lead Assessor* at the end of the construction process, prior to handover of the building. * NB: Operation phase Lead Assessor to be Facilities Manager, Building Manager or appropriate responsible person</p> <p>Credit Evidence: The Project phase Lead Assessor should confirm in the Assessors Notes that he/she has undertaken a post-construction review of the works and associated documentation (eg building manual, commissioning log, chain of custody records for sustainably sourced timber etc), and is satisfied that the works conforms to the design specification. Where it does not conform to the design specification, the Lead Assessor should note where variations occur, and, if possible, reasons for variations. Additionally it should be stated that the Operation phase Lead Assessor has received pre-handover of the building and the DREAM assessment. NB: Once the pre-handover has been completed you</p>	1

will need to ensure that the Operation phase Lead Assessor obtains a DREAM log in. You will need to select them as the Lead Assessor for the Operation stage. If this is not done you will be unable to submit the Construction stage DREAM assessment.

Further Information:

Waste - Construction

code	title	credits
C-WS 1.3	<p>Construction Waste Management</p> <p>Aim: To avoid unnecessary landfill and transport requirements and negate the necessity to use virgin materials and energy. To demonstrate a strategy whereby the use of reclaimed and recycled materials is considered at the construction planning stage.</p> <p>Credit Criteria: Three credits can be achieved for developing and implementing a site waste management plan. This plan should include (but not be limited to):</p> <ul style="list-style-type: none"> • who will be responsible for resource management; • what types of waste will be generated; • how will it be managed – will it be reduced, reused or recycled; • which contractors will be used to ensure the waste is correctly recycled or disposed of responsibly and legally; • how the quantity of waste generated by the project will be measured; • what targets will be set and what actions will be needed to meet them. <p>The Waste and Resources Action Programme (WRAP) can provide advice on how to develop and implement a site waste management plan.</p> <p>A maximum of two further credits can be awarded if it can be shown that:</p>	5

- >90% of non-hazardous construction waste by volume has been diverted from landfill – one credit
- >95% of non-hazardous construction waste by volume has been diverted from landfill – two credits

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For the first three credits the contractor should provide a copy of the site waste management strategy, and evidence of its implementation on site (i.e. records of waste volumes, including types and amounts of materials recycled, and actions undertaken to meet waste targets etc.). For the two further credits, the contractor should provide documented evidence of the amount of waste generated and the % diverted from landfill.

Further Information:

Stage: Operation

Biodiversity & Environmental Protection - Operation

code	title	credits
O-BI 1.2	<p>Site Ecology Management</p> <p>Aim: To encourage conservation and improvement of the site ecology, and to reduce impact on wildlife habitat.</p> <p>Credit Criteria: The credit is achieved for developing and implementing an ecological management plan, which covers the following as a minimum:</p> <ul style="list-style-type: none"> • Description of habitat areas; • Ecological management principles; • Objectives; • Management specifications; • Monitoring programme; and • Enhancement programme. <p>Any relevant biodiversity maintenance requirements should be integrated into site management systems i.e. EMS or Integrated Rural/Land Management Plan (IRMP/ ILMP). EMS is most appropriate for sites with minimal biodiversity requirements. Sites with major biodiversity requirements should have a specific component plan as part of an IRMP/ILMP, Specialist advice from the DIO Safety, Environment and Engineering Team should be sought in ensuring maintenance requirements are integrated into IRMP/ILMP.</p>	1

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

The assessor should be provided with a copy of the ecological management plan, and evidence to demonstrate how it has been integrated into the EMS, IRMP or ILMP. The assessor should confer with the project ecological consultant (IEEM registered or equivalent) to confirm the suitability of the ecological management plan. NB plans can be site wide.

Further Information:

Biodiversity & Environmental Protection - Operation

code	title	credits
O-BI 2.2	<p>Protection and Enhancement of the Historic Environment</p> <p>Aim: To protect and enhance the historic environment and to ensure its sustainable future.</p> <p>Credit Criteria: To award the credit, the assessor should establish whether the historic environmental features on site are proactively considered and managed within the operational phase of the project. Such features are incorporated into relevant management plans for the site/building (e.g. EMS; IEMP) and that relevant inspections are carried out (e, g, Quadrennial Inspections) and that any repairs are carried out in a timely fashion. Any maintenance works or installations need to be sympathetic to the heritage integrity of the site. The relevant consents may be required if statutorily protected buildings are altered for operational reasons. Historic buildings or scheduled monuments should not become 'at risk'.</p> <p>If the historic environment assessment carried out at the survey stage (S-BI-5) found no historic environment features and no further features were discovered during construction (C-BI-2) NA may be selected for this credit.</p> <p>Credit Evidence: The project team should demonstrate that the historic environment is incorporated within the relevant management plans and demonstrate that a system is in place for condition surveys (QI's) where necessary. The project team should also</p>	1

demonstrate that any repairs identified (e.g. through condition surveys) have been carried out in a timely manner (e.g. forward maintenance Register). The project team should provide evidence of any consents granted.

Further Information:



Internal EQ - Operation

code	title	credits
O-IEQ 1.1	<p>Building Manual</p> <p>Aim: To ensure that the building users understand the building and its systems, in order to optimise user comfort, health, safety and productivity, while minimising resource consumption and other environmental impacts.</p> <p>Credit Criteria: The first credit is available if a building manual describing building systems and how to operate the building most efficiently has been developed. The manual must be available to all staff and should cover the following as a minimum:</p> <ul style="list-style-type: none"> • Non-technical description of the building, including heating and cooling strategy, BMS, energy efficiency measures, water systems, waste facilities, emergency systems, ventilation, lighting. • Contact details for suppliers of installed equipment. • Maintenance requirements. • Plans showing locations of meters and equipment. • Sample tables for monitoring and reporting gas, electricity and water usage. • Detail on how users can operate the building efficiently to help reduce energy, waste and water usage. <p>A further credit can be awarded if building users were trained during handover. The training should, as a minimum:</p>	1

- introduce the Building Manual
- explain key building systems and how they operate
- demonstrate how to operate the building efficiently.

The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.

Credit Evidence:

For the first credit the assessor should be provided with a copy of the manual. The Facilities Manager should also demonstrate how occupants are informed about the manual (e.g. inductions) and how occupants can access the manual (e.g. intranet). For the second credit a copy of the training schedule should be provided.

Further Information:

Internal EQ - Operation

code	title	credits
O-IEQ 2.1	<p>Occupant Comfort</p> <p>Aim: To optimise the comfort of occupants in the building.</p> <p>Credit Criteria: One credit can be achieved for carrying out an annual survey of the building's occupants to assess comfort within the building. The survey should cover the following as a minimum:</p> <ul style="list-style-type: none"> • Temperature / thermal comfort • Ventilation • Air quality • Lighting levels • Glare problems • Acoustics • Workstation comfort (for offices) • Proximity to amenities • Views out (for offices) <p>The second credit can be achieved by demonstrating that the results of the survey have been collated, and measures identified and implemented to improve user comfort.</p> <p>The option of selecting NA is also available for this question but should only be chosen if this issue is not relevant to the building or activity being assessed. NA should not be selected just because the credit has not been achieved. A full justification of why NA has been selected should be provided.</p>	2

Credit Evidence:

The results of the most recent survey should be provided, along with measures identified and implemented as a result of the outcomes of the survey.

Further Information:



Procurement - Operation

code	title	credits
O-PR 4.1	<p data-bbox="358 491 1089 533">Maintenance Contracts and Schedules</p> <p data-bbox="358 537 448 575">Aim:</p> <p data-bbox="358 579 1227 709">To maximise efficiency of all building systems and hence minimise resource consumption and emissions of pollutants.</p> <p data-bbox="358 758 631 800">Credit Criteria:</p> <p data-bbox="358 804 1273 934">The credit is achieved where maintenance contracts and schedules have been established for the following systems (where applicable):</p> <ul data-bbox="391 1020 984 1419" style="list-style-type: none"> • Energy supplies; • Space and hot water heating; • Chillers; • Ventilation; • BMS; • Lighting (including cleaning); • Water supplies; • Wastewater services; • Drainage (surface water runoff); 	2