SUSTAINABLE DEVELOPMENT STRATEGY

A SUB-STRATEGY OF THE STRATEGY FOR DEFENCE

2011 – 2030

PART 1 - STRATEGY

1. INTRODUCTION

This Defence Sustainable Development[1] (SD) Strategy provides direction on what Defence must do to become increasingly sustainable during the period 2011-2030.

It is a sub-strategy of the Strategy for Defence (SfD), drawing on the Defence Strategic Direction (DSD) and the Defence Plan 2011. It takes account of the outcomes of the Strategic Defence and Security Review 2010 (SDSR 2010).

The document comprises two parts: the Strategy, a policy-compliant and resource-aware document which looks out 20 years; and the Plan, which provides the detail for the first four years (2011 to 2015).

This Strategy supersedes the previous MOD SD Strategy and the MOD Sustainable Procurement Strategy.

2. BACKGROUND

2.1 DEFINITIONS

At the global and national level, SD and sustainability are about striking a balance between environmental protection (EP), economic development and social progress which results in '*development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.* [2]

SD in Defence is more specifically defined by two **Defence SD Principles**:

Principle 1: Defence must be resilient to current and future environmental, social and economic threats (adaptation).

Principle 2: Defence must realise the positive and minimise the negative impacts that Defence activities can have on the environment, people and the economy in the UK and overseas (mitigation).

2.2 CONTEXT

The contents of this document have been informed by three key drivers: legislation, Government policy and the benefits of SD to Defence.

2.2.1 Legislation

The starting point for this strategy must be compliance with relevant legislation. Defence will continue to adhere to current and future legislative requirements: a commitment which is reflected in both Part 1 and 2 of this strategy.

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[1] The term SD includes Environmental Protection (EP).
[2] Our Common Future (The Brundtland Report) – Report of the 1987 World Commission on the Environment.

2.2.2 Government policy

The UK Government's approach to SD extends beyond legislative compliance to performance improvement based on achieving a vision of:

> *'stimulating economic growth and tackling the deficit, maximising wellbeing and protecting our environment, without negatively impacting on the ability of future generations to do the same'*[3].

The Government is seeking to achieve this vision by 'mainstreaming' SD so that it is integral to the way Departments make policy, run their buildings and purchase goods and services.[4] This SD Strategy and Delivery Plan will ensure that Defence makes its contribution to the Government's mainstreaming approach.

2.2.3 The benefits of SD to Defence

While external requirements provide an important context for this strategy, there is also an overwhelming business case for SD in Defence.

Global environmental, social and economic pressures pose real threats to Defence's ability to meet its strategic objectives. For example, challenges such as climate change, natural resource depletion, water scarcity and energy and resource security are potential catalysts for increased unrest or armed conflict. The 2010 National Security Strategy acknowledges this threat:

> *'the physical effects of climate change are likely to become increasingly significant as a 'risk multiplier' exacerbating existing tensions around the world.'*[5]

A changing climate, reduced resource availability etc, will also present fresh demands on our capability (people, infrastructure and equipment).

Embracing SD throughout Defence will ensure that we are prepared for these challenges **(adaptation)** and that we play our part in reducing the severity of any environmental, social or economic threats to Defence capability in the first place **(mitigation).**

Other important benefits of SD to Defence include:

- Less reliance on fossil fuels in theatre will reduce the amount of fuel that has to be transported to the front line; a costly, risky and logistically resource-intensive activity that can undermine operational continuity.

- Using fewer natural resources, less energy, fuel and water and producing less waste will save money across Defence, especially if we take a through-life value-for-money approach to investments in equipment and infrastructure.

- Considering issues such as the effects of climate change and resource availability in our equipment, infrastructure, training and policy planning, and adjusting and adapting our behaviour now, will cost less than trying to adapt in the future.

- Acting more sustainably has the potential to increase support for Defence, which could generate more favourable conditions in which to conduct our UK business, as well as potentially contribute to the success of military operations and aid recruitment and retention.

- Giving appropriate consideration to the impacts of Defence decisions on the UK economy could contribute to the maintenance of a healthy UK industry in the defence and security

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[3] Defra, 2011. Mainstreaming SD – The Government's vision and what this means in practice.

[4] Ibid.

[5] HM Government, Oct 2010. A Strong Britain in an Age of Uncertainty: The National Security Strategy.

sectors, as a source of innovation and supply, and for the wider economic benefits this brings in terms of providing jobs and maintaining skills.

The importance of SD to Defence is recognised by the inclusion of SD as one of seven Defence priorities[6] in the MOD's Business Plan 2011-2015 and Defence Strategic Direction 2011:

> *'Defence Priority 7:*
>
> *To deliver Defence in the most effective, efficient and sustainable way by meeting benchmarking, efficiency and Government sustainable development targets, building on the Defence Reform Unit's review'.*

3. VISION AND OBJECTIVES

3.1 VISION

This Strategy's vision also reflects the benefits of SD to Defence:

> **Defence capability is more resilient, effective, efficient and responsible because SD principles are an integral part of all Defence business.**

We will achieve this vision by working towards the following strategic objectives, using the delivery strategy outlined at Section 4.

3.2 STRATEGIC OBJECTIVES

By 2030, Defence will have achieved the following objectives:

3.2.1 Key objective

Objective 1 - To have ensured that environmental, social and economic threats, impacts and opportunities are fully taken into account in Defence decisions and in the management of Defence activities.

3.2.2 Other objectives

Objective 2 - To have significantly reduced the Armed Forces reliance on fossil fuels to provide operational energy, thereby mitigating operational and financial risk.

Objective 3 - To have significantly reduced Greenhouse Gas (GHG) emissions from Defence infrastructure and business related transport to ensure that Defence is able to deliver its contribution to the legislative requirement to have reduced UK GHG emissions by 80% by 2050[7].

Objective 4 - To have significantly reduced waste[8] production, and increased waste recovery, to enable Defence to become a zero-waste to landfill organisation.

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[6] **Other six Defence priorities**
1. To succeed in Afghanistan – the main effort for the MOD.
2. To continue to fulfil our standing commitments, including strategic intelligence, the strategic nuclear deterrent, defence against direct threats to the UK and its overseas territories, counter-terrorism and military aid to the civil authorities.
3. To succeed in other operations we are required to undertake.
4. To promote defence exports consistent with export control criteria
5. To implement the SDSR by restructuring the Armed Forces and capabilities; rebuilding the Armed Forces Covenant; and developing a New Employment Model.
6. To deliver the Defence Reform Unit's review.

[7] Against a 1990 baseline.
[8] Controlled waste

Objective 5 - To have significantly reduced water consumption in line with Government best practice benchmarks.

Objective 6 -To have reduced our key suppliers' waste, water use and GHG emissions.

3.2.3 Other Commitments

In addition to meeting these headline objectives, Defence will also continue to meet all relevant legislative requirements and take steps to address the following Government commitments[9]:

Commitment a - Adapting the estate to a changing climate**.**

Commitment b - Promoting conservation and enhancing biodiversity and the natural environment.

Commitment c - Improving the sustainability of the procurement of food and catering services.

Commitment d - Sustainable construction**.**

Commitment e - Reporting on social and environmental assessments of office relocations and action taken to promote staff wellbeing.

4. DELIVERY STRATEGY

The achievement of the objectives in this strategy and the supporting Part 2 Plan, will be delivered through:

- Mainstreaming Defence SD principles within Defence strategies, policies, decision-making processes and associated programmes, projects and activities. (4.1);

- Defence-wide behaviour change (4.2);

- All sites, activities and equipment being covered by an Environmental Management System (EMS) (4.3);

- Producing a 2030 SD Roadmap which sets out the longer term, post-2015 milestones that we need to need to achieve to deliver against the 2030 objectives in this Strategy (4.4).

A summary of these approaches is set out below. Detailed supporting tasks are contained within the Part 2 Plan.

4.1 MAINSTREAMING DEFENCE SD PRINCIPLES

Improvements in SD performance will not be achieved solely by the actions of staff in 'niche' areas of the Department. The Defence SD principles need to be mainstreamed in all Defence strategies, policies, decision-making processes and associated programmes, projects and activities. For the purposes of this document, these strategies etc can be divided into the following two groups.

4.1.1 Group A: Priority SD areas

The MOD has identified three priority, high sustainability impact areas of Defence business where Defence SD principles will be mainstreamed to facilitate material improvements in SD performance (as defined by the objectives in this strategy).

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[9] Defra, 2011. Greening Government commitments.

Defence equipment

The MOD is planning to spend between £14bn and £16bn a year on the acquisition of military equipment between 2011/12 and 2014/15. The acquisition, through-life management, use and disposal of military equipment has a number of material sustainability impacts, notably the consumption of large amounts of natural resources and fuel (currently around 1bn litres per year, producing in excess of 3 million tonnes of CO_2) and the production of significant amounts of waste.

These impacts will be addressed by mainstreaming principles within the strategies, policies, decision-making processes, programmes, projects and activities associated with the acquisition, management and use of Defence equipment[10]. This will also help improve the resilience of Defence equipment to the effects of climate change, resource depletion and resource competition.

Defence Infrastructure

The MOD is one of the largest landowners in the country, with a diverse array of built, training and housing infrastructure. This infrastructure uses significant amounts of energy and water and is potentially vulnerable to the physical effects of climate change. Defence sites are also situated close to civilian communities, which creates social and economic benefits and impacts such as the creation of jobs, access to facilities, increased noise and traffic and the presence of large numbers of military personnel in towns.

Mainstreaming SD principles within strategies, processes, activities etc associated with the acquisition, management, maintenance and use of Defence infrastructure[11] will address these impacts whilst also ensuring that our infrastructure is resilient to future sustainability challenges. This will also make a major contribution to meeting the DIO's aim: 'to deliver infrastructure to Defence in the most effective, efficient and sustainable way to meet Defence needs'.

Information and Communications Technology (ICT) equipment, systems and services

ICT is widely used throughout Defence. The use, manufacture and disposal of ICT equipment emits CO_2, uses natural resources, consumes water and generates waste, some of which is hazardous.

The mainstreaming of Defence SD principles within Defence ICT business will reduce these negative impacts, as well as ensure that the positive effects of ICT on SD performance are realised. For example, the use of virtualization and simulation instead of a piece of equipment, and the utilization of video telephone conference (VTC) and online capabilities for meetings instead of travelling, can dramatically decrease CO_2 emissions.

4.1.2 Group B: Other areas of Defence business

Although taking action in the above priority areas will directly drive improvements in SD performance, all other areas of Defence activity have the potential to make a major contribution to achieving this Strategy's objectives. For example, it is vital that processes such as Finance and those for Service Personnel and the Civilian Workforce are adapted to help enable change towards sustainability.

4.2 BEHAVIOUR CHANGE

Mainstreaming SD principles in Defence strategies, policies, processes etc is a key step towards becoming a more sustainable organisation. However, it will only be possible to achieve a step-change in SD performance if all service and civilian personnel modify their behaviour to accept and then respond to these mainstreaming developments.

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[10] Principally, Acquisition, Capability, Commercial, Logistics, Science and Technology, DE&S, Defence Industrial and Front Line Command strategies.

[11] DIO and other TLB strategies

The approaches outlined in section 4.1 will be key enablers of behaviour change. However, to bring about lasting changes in behaviour they will need to be complemented by the following, widely tested, techniques.

4.2.1 Senior leadership commitment to SD

The commitment of an organisation's leaders is widely regarded as the most crucial driver of change for SD. Defence leaders will, therefore, personally lead by example by applying the Defence SD principles to their areas of work and by requiring that their staff do the same.

4.2.2 Reflecting Defence SD principles within Defence values

Individual and organisational values influence behaviours. Defence SD principles will, therefore, be integrated within Defence values at all levels of the organisation.

4.2.3 Effective engagement and training

Engaging and training different stakeholder groups is essential to changing behaviours. Engagement strategies and plans will be used to engage different stakeholder groups with targeted, appropriately timed, messages. Defence training courses will also be reviewed to ensure they include an appropriate level of detail on SD.

4.2.4 Better understanding of the benefits of improved SD performance and development of incentives to encourage organisations and individuals to act more sustainably.

A lack of understanding of the financial and non-financial value of SD to the MOD can be a barrier to change towards sustainability, as can a lack of incentives for taking action. Addressing these issues will form key elements of SD engagement strategies and work on improving our understanding of SD costs and benefits (see section 6).

4.2.5 A network of SD champions throughout the organisation

SD champions act as leaders and ambassadors for SD and, as such, can make a significant contribution to changing behaviours. A review of the use of SD champions in Defence will be undertaken to identify the most appropriate individuals to carry out this role.

4.2.6 Improving responsibility, accountability and transparency for SD delivery

Individuals and organisations are more likely to adopt sustainable behaviours if they are given clear responsibility (and are held to account) for doing so. SD roles, responsibilities, accountabilities and reporting mechanisms are summarised in Section 8 of this Strategy. They will also form a key part of a new SD Management Framework (SDMF) which will be the SD Process Owner's high-level guidance document.

The SDMF will contain an overview of all SD

- governance arrangements, boards and delegations;
- management documents;
- reporting and assurance processes; and
- capacity building processes.

4.2.7 Improving the quality and coverage of data

It is difficult to manage SD performance if SD impacts cannot be measured effectively. Work will therefore be undertaken to improve the quality and coverage of data, particularly in the key SD areas of energy, waste, water and fuel use.

4.3 ENVIRONMENTAL MANAGEMENT SYSTEMS

Environmental Management Systems (EMS) are already used in Defence to help achieve and demonstrate sound environmental legislative compliance and performance. It is a requirement of this strategy that all Defence sites and activities should be covered by an EMS to the standard of ISO14001 and that all equipment should be covered by a Project Oriented EMS (POEMS).[12]

4.4 2030 ROADMAP

A detailed 2030 SD roadmap will be developed to ensure that the longer-term objectives in this strategy are achieved. This will define a vision of what SD 'success' will look like for the different business areas of Defence in 2030. It will also set out the key milestones and actions that need to be achieved to ensure that this vision is realised.

5. STRATEGIC RISKS

The key risks to the delivery of this strategy are as follows:

Risk 1: Lack of funding available to invest upfront in spend-to-save SD measures.

Risk 2: Lack of buy-in from Defence leaders and other groups of Defence personnel prevents behaviour change.

Risk 3: Reductions in staff numbers and a lack of SD expertise result in insufficient resource to implement the SD Strategy and Delivery plan.

Risk 4: Poor data quality and coverage limits confidence in performance assessments and hinders the ability to manage SD impacts.

Risk 5: Insufficient clarity over roles, responsibilities and accountabilities leads to confused or inadequate action in managing SD impacts.

The mitigation strategies for each of these risks are set out in the Part 2 Delivery Plan.

6. COST AND BENEFITS

The general **benefits** of SD in Defence have already been outlined in Section 2.2.3 of this strategy.

In terms of financial benefits, mainstreaming SD is widely acknowledged to have the potential to produce significant savings for an organisation, and Defence is no exception to this rule. Indeed, between 2007 and 2011 approximately £18.7 million has been spent on energy efficiency measures for around 120 Defence Infrastructure projects. This has delivered ongoing approximate annual savings of £5 million. However, the potential for future savings is significantly greater – for example, with the cost of energy required to power Defence equipment currently running at around £450M a year, even relatively modest reductions in energy use would generate substantial savings over the long term, while also mitigating the impact of expected increases in future oil prices.

The **costs** of delivering this strategy are more difficult to quantify, as delivering SD is predominantly about integrating sustainable features throughout all areas of Defence business, rather than undertaking a series of separate activities. Where SD costs and benefits can be identified, they will be captured within other sub-strategies and plans and summarised in future versions of the SD Strategy and Plan.

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[12] EMS should be proportionate to the risk associated with the size of the site and the types of activities undertaken by the site. Under certain circumstances, eg smaller or low risk sites, it may be appropriate for them to be covered by either a nearby site EMS or as part of a higher level EMS ie TLB level (JSP418, Leaflet 1)

Further work will also be undertaken to develop our understanding of SD costs and benefits in order to improve this process of cost capture, and to help ensure that delivery of this strategy is adequately funded. This will also improve our ability to take SD into account in Defence decision making processes, including investment appraisals.

7. STAKEHOLDERS

The key internal and external stakeholders for the SD Strategy and Delivery Plan are as follows:

Internal

Ministers.
Defence Board members.
Chief Executive Defence Infrastructure Organisation (CE DIO), Chief of Defence Materiel (CDM), Chief Information Officer (CIO), Director Defence Safety and Environment Authority (D DSEA), and their supporting staffs.
All other Defence sub-strategy/process owners and supporting staffs responsible for mainstreaming SD in strategies, decision making processes etc.
Top Level Budget (TLB) holders, Trading Fund Agencies (TFAs) and their supporting SD staffs.
TLB SD Champions.
All other MOD civilian and military personnel.

External

Defra.
Department for Energy and Climate Change (DECC).
Department for Transport.
The Cabinet Office/Efficiency Reform Group.
International Maritime Organisation
Supplier and Industry partners.
Regulatory bodies including Local Authorities.
Civilian communities.
Non-Governmental Organisations.
Trade Unions.
Host nations.

8 GOVERNANCE

8.1 ROLES AND RESPONSIBLITIES

8.1.1 Process and sub-strategy owner

2nd PUS is appointed by PUS as the SD Sub-Strategy and Process Owner.

2nd PUS is responsible for developing Defence SD strategy, policy, standards and rules which ensure that external SD compliance requirements (Government targets and legislation) are met and that SD contributes to Defence capability being more resilient, effective, efficient and responsible.

2nd PUS primarily carries out this role by:

- Overseeing formally delegated SD Strategy responsibilities to individuals in the SD priority areas (see 8.1.2 below).

- Ensuring that the Defence SD principles are mainstreamed in all Defence strategies, polices, decision-making processes and associated programmes and projects.

- Overseeing Defence-wide behavioural change.

- Ensuring that Defence organisations comply with relevant legislation.

Director Business Resilience (SSD&C) will support 2nd PUS in carrying out these roles.

8.1.2 SD priority areas

2nd PUS will delegate authority and responsibility for delivering distinct parts of this strategy to individuals in the three SD priority areas.

- **CDM** will be delegated responsibility for delivering specific SD tasks relating to the acquisition, through-life management and disposal of Defence equipment, as set out in the Part 2 Plan and the SDMF.

- **CE DIO** will be delegated responsibility for delivering specific SD tasks relating to the acquisition, management and maintenance of the built and rural Defence Infrastructure, as set out in the Part 2 Plan and the SDMF.

- **CIO** will be delegated responsibility for delivering specific SD tasks relating to the acquisition, design, manufacture and disposal of ICT equipment, systems and services, as set out in the Part 2 Plan and the SDMF.

8.1.3 All other TLB holders, TFAs and/or Defence Sub-Strategy owners

2nd PUS will require all **other TLB holders, TFAs and Defence sub-strategy owners** to comply with relevant legislation and to develop and implement a SD plan which sets out how they intend to deliver the tasks allocated to them in the Part 2 Plan. These include mainstreaming SD principles within their policies, decision-making processes and associated programmes, projects, activities and behaviours.

8.1.4 Director General Strategy

DG Strategy is responsible for providing the Defence Board (DB) with assurance that the SD sub-strategy meets the requirements of the SfD/DSD and DP11 and is coherent with the other sub-strategies.

8.2 BOARDS

A SD Process Owner Board will oversee the delivery of this sub-strategy. The formal membership of the Board will consist of 2nd PUS (Chair), CDM, CE DIO, CIO, D DSEA and other TLB holders. TFAs and other sub-strategy owners will be invited to attend as necessary.

The SD Board members will be required to have suitable governance arrangements to discharge their delegated responsibilities. These could be based on existing Board structures within their organisations or specific arrangements could be developed to address their SD responsibilities.

8.3 REPORTING

8.3.1 Performance Reporting

Annual performance reporting will be required to measure progress against the objectives in this strategy and plan. More frequent reporting may be required against specific parts of the plan to meet other internal and external reporting requirements.

Performance against the objectives in this strategy will form the basis of the annual holding to account process. SD performance figures will also be included as part of the Annual Report and Accounts.

2nd PUS will be held to account by PUS and CDS for delivery of this sub-strategy. 2nd PUS will, in turn, hold the SD Board members to account for their formally delegated responsibilities.

8.3.2 Assurance reporting

Assurance reporting will also be required annually to provide an assessment of current SD compliance and to provide assurance that the systems and processes are in place to ensure future compliance. The assurance report will be submitted from 2nd PUS to the Defence Audit Committee as part of the process of generating the Statement of Internal Control.

8.3.3 Data gathering

The information and evidence for performance and assurance reporting will be gathered by SSD&C from the relevant areas of the Department responsible for delivering different parts of the strategy and plan.

9. EQUALITY AND DIVERSITY

This Strategy has been equality and diversity impact assessed in accordance with Departmental policy. This resulted in a Part 1 screening only completed (no direct discrimination or adverse impact identified).

PART 2: PLAN

1. INTRODUCTION AND CONTEXT

This document, the Defence Sustainable Development (SD) Plan, provides direction for the period 2011-2015

It forms part of a sub-strategy of the Strategy for Defence (SfD) and reflects the Part 1 Strategy and Defence Plan 2011.

It follows the direction provided in the Defence Strategic Direction (DSD), which in turn reflects the outcome of the Strategic Defence and Security Review (SDSR).

2. OBJECTIVES

The following objectives represent the key milestones that need to be achieved by 2015 to ensure Defence remains on course to deliver against the 2030 objectives in the Part 1 Strategy.

2.1 Key Objective

Objective 1 - To have ensured that all key Defence decision-making processes include, by March 2012, a requirement to assess and manage environmental, social and economic threats, impacts and opportunities.

2.2 Other Objectives

Objective 2 - To have set targets, by March 2012, for reducing the Armed Forces' reliance on fossil fuels to provide operational energy.

Objective 3 - To have cut Greenhouse Gas emissions from the estate and business-related transport in line with Government 2015 targets.

    Objective 3a - To have cut domestic business travel flights by 20% by March 2015 (from a 09/10 baseline).

Objective 4 - To have reduced the amount of waste Defence generates by 25% (from a 09/10 baseline) and to have met the Government 2015 target for diverting waste from landfill.

    Objective 4a - To have cut paper use by 10% by March 2012.
    Objective 4b - To have reused or recycled responsibly redundant ICT equipment (within government, the public sector or wider society).

Objective 5 - To have progressively reduced water consumption in offices between April 2011 and March 2015 (from a 2009/10 baseline) and to have made annual reports against Government best practice benchmarks[13].

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[13] Assuming 220 working days p.a:
- ≥ 6 m^3 water consumption per FTE poor practice
- 4m^3 to 6m^3 per FTE good practice
- ≤ 4m^3 per FTE best practice
- ≤ 4m^3 new builds/major refurbishments

Objective 5a - To have achieved a 7% reduction in water consumption[14] on the non-office estate by March 2015 (against a 09/10 baseline), focussing in particular on areas which are subject to high water stress.

Objective 6 - To have agreed targets for reducing our key suppliers' GHG emissions by March 2014, and reducing their water consumption and waste by March 2015.

Objective 6a - To fully comply with Government Buying Standards in departmental and centralised procurement contracts.

2.3 Other commitments

In addition to meeting these headline objectives, Defence will also continue to meet all relevant **legislative requirements** and take steps to address the following **Government commitments**[15]:

Commitment a - Adapting the estate to a changing climate.

Commitment b - Promoting conservation and enhancing biodiversity and the natural environment.

Commitment c - Improving the sustainability of the procurement of food and catering services.

Commitment d - Sustainable construction.

Commitment e - Reporting on social and environmental assessment of office relocations and taking action to promote staff wellbeing.

3. DELIVERY

The objectives in this plan will be achieved by implementing the tasks at **Annex A**. These tasks have been grouped under the four delivery strategy approaches outlined in Section 4 of the Part 1 Strategy:

- Mainstreaming Defence SD principles within Defence strategies, policies, decision-making processes and associated programmes, projects and activities;

- Defence-wide behaviour change;

- All sites, activities and equipment being covered by an Environmental Management System (EMS); and

- Producing a 2030 SD Roadmap.

Responsibility for delivering these tasks falls to different individuals and organisations within Defence. These responsibilities are listed against each task at Annex A.

Progress against the objectives in this plan will be reported on annually and this will be the basis on which 2nd PUS, as sub-strategy owner, will be held to account by PUS/CDS.

Progress against the detailed tasks at Annex A will be assessed by the SD Board at least biannually.

4. RISKS TO DELIVERY

Managing risk effectively is crucial to the delivery of the SD Strategy objectives. Risks will be captured and managed in accordance with JSP892 on Risk Management.

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[14] consumption is defined as total water into supply.

[15] Defra, 2011. Greening Government commitments.

The SD risks will be detailed in the SD Risk Register. The key top-level risks for the period 2011-2015 are as follows:

Risk 1: Lack of funding available to invest upfront in spend to save SD measures.

Mitigation:

- Spend to save measures included by TLBs and/or sub-strategy owners in the PR process.
- Work will also be undertaken to develop our understanding of SD costs and benefits in order to help provide the financial data needed to support the inclusion of SD measures in projects.
- Formation of the DIO will help drive efficiencies and better co-ordinate investment across the defence estate

Risk 2: Lack of buy-in from leaders and other groups of Defence personnel prevents behaviour change.

Mitigation:

Clear and proactive senior leadership combined with the development and implementation of an effective engagement strategy.

Risk 3: Reductions in staff numbers and a lack of SD expertise result in insufficient resource to implement the SD Strategy and Delivery plan.

Mitigation:

- Impact of staff reductions on Strategy implementation included in impact statements.
- SSD&C to assist TLBs/TFAs and other Sub-Strategy owners with mainstreaming and behaviour change.
- Investigate Head of Profession post/s related to SD.

Risk 4: Poor data quality and coverage limits confidence in performance assessments and hinders the ability to manage SD impacts.

Mitigation:

- Work towards improved/automated data collection in priority SD areas.
- Target staff resource to improve data and incident reporting processes and behaviours.

Risk 5: Insufficient clarity over roles, responsibilities and accountabilities leads to confused or inadequate action in managing SD in Defence.

Mitigation: Roles and responsibilities clarified as part of the structural changes throughout Defence and through the development of the SD Management Framework (SDMF).

5. COSTS AND BENEFITS

As noted in Section 1 of this Strategy, the costs and benefits associated with this strategy will predominantly be mainstreamed within other sub-strategies, plans etc.

The only areas in which we can currently attribute costs to the SD Strategy are specific SD staff and programme management costs. These are listed at **Annex C**.

6. DEPENDENCIES

The SD Strategy has a number of key interdependencies with other sub-strategies, either in a supporting or supported role. **Annex B** lists the priority interdependencies and records agreement reached between the respective areas.

DELIVERY PLAN

A	B	C	D	E	F	G
No.	**Key Tasks**	**Defence Priority**	**Relevant SD objective** **(from Part 2 Plan)**	**Milestones and Performance Indicators**	**Resources**	**Responsibility**
MAINSTREAMING DEFENCE SD PRINCIPLES						
1.	Mainstream SD principles within Defence strategies, policies, decision-making processes and associated programmes, projects and activities.	7	All	Ongoing up to March 2015		DG Strategy, all sub-strategy owners and other TLB holders /TFAs
	- Defence sub-strategies (and other top-level TLB strategies[16]) include, as a minimum, a commitment to contribute to the achievement of Defence Business Plan Priority 7.			When published		All sub-strategy owners and other TLB holders
	- Defence sub-strategy Part 2 Plans (and other top-level TLB plans) include a commitment to develop and implement a SD plan which sets out how SD principles will be mainstreamed within their policies, decision making processes and associated programmes, projects and activities to			When published		All sub-strategy owners and other TLB holders

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[16] If TLB does not have a Defence sub-strategy.

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
	contribute to the objectives in Part 2 of this strategy. - Develop SD Plans. - Implementation of actions in plans.			Ongoing up to March 2012 Ongoing up to March 2014		All sub-strategy owners and other TLB holders
2.	To have set targets, by March 2012, for reducing the Armed Forces'reliance on fossil fuels to provide operational energy.	7	2	By March 2012	DE&S SD Staff and Programme costs of approx £2.56M up to 2015	CDM
3.	Baseline and set targets for reducing our equipment key suppliers' waste, water use and GHG emissions.	7	6	GHG emissions – March 2014. Waste and water use – March 2015		CDM
4.	All new contracts to include relevant Government Buying Standard.	7	6a	By 2012.	All other resource implications will be contained within the DE&S strategy and plan	CDM

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
5.	Capability planning and procurement processes ensure that impacts from climate change, resource availability, etc. are assessed and managed. As a minimum, projects are assessing and managing sustainability impacts at Initial and Main Gate approval points.	7	1	March 2012		CDM and DCDS(Cap)
6.	Develop and implement a plan to reduce estate carbon emissions to meet Government 2015 targets. The plan will include: - 'Spend to save' investment injected into estate delivery. - Embed energy management within Next Generation Estate contracts. - Roll-out of the Strategic Energy Management pProgramme (SEMP) across all the Regional Prime contracts. - Implementation of infrastructure behavioural change strategy.	7	3	Develop plan by June 2011. Meet milestones in plan between June 2011-Mar 2015. To commence April 2011 September 2011 April 2012 To commence April 2011	Resource implications will be included within DIO sub-strategy and plan.	CE DIO with input from TLB site users

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
	- Implementation of a renewables strategy for the defence estate.			Strategy targets met. Key Milestone: Government March 2015 target met.		
7.	Develop and implement a plan to ensure continued water consumption reduction across the estate up to 2015 Key tasks in the plan to include: - Repositioning the 3 Aquatrine contracts to increase supplier incentives to support MOD sustainability objectives - Ensuring the Aquatrine contracts and Next Generation Contracts are aligned to deliver building consumption reductions through better managed systems. - Ensure that WRAP best practice is followed for water and waste water fittings across the estate.	7	5	Develop plan by June 2011. Meet milestones in plan between June 2011 and March 2015 June 2013 June 2013 Ongoing Key Milestone: Water consumption has progressively reduced year on year up to 2015.		CE DIO with input from TLB site users

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
8.	Implement the MOD SSSI Programme	7	Commitment b.	Achieve 2012 & 2015 milestones within the SSSI programme.		CE DIO
9.	Complete an overarching climate change strategic risk assessment for the MOD estate.	7	Commitment a.	By end 2013		CE DIO
10.	Complete risk assessments and develop, implement, monitor and review establishment action plans to improve the estate's preparedness for the impacts of changes in climate on Defence sites.	7	Commitment a.	Defence critical sites by March 2013 Other key operational sites by 2015		CE DIO
11.	All new build and major refurbishment projects to achieve "Excellent" DREAM (or equivalent) rating.	7	3 & Commitment d.	Ongoing		CE DIO
12.	Undertake social and environmental assessments of office relocations	7	1 & Commitment e.	Ongoing		TLBs

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
13.	Review and implement the MOD waste strategy and delivery plan to ensure that the amount of waste we generate by 2015 is reduced by 25% from a 2009/10 baseline and that the Government 2015 target for diverting waste from landfill is met. Key tasks in the plan will include: - Accurate weighed waste arisings data is available from each specific waste stream (residual and recycling) - Ensure each Key site[17] has a waste management plan integrated into its EMS	7	4	March 2012. 70% by March 2012 By March 2012 Key milestone: The amount of waste we generate is reduced by 25% from a 2009/10 baseline by March 2015.	0.5 C1	SSD&C
14.	Cut paper use by 10%	7	4	By March 2012		SSD&C with CDM
15.	Subject to HMG maturity matrix, approve a sustainable ICT maturity matrix model with agreed metrics against which we can internally and	7	3,4	September 2011	£0.024M staff costs per annum up to 2015	CIO

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[17] As defined by TLBs

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
	externally verify achievement of progress against sustainability.				Any additional resource implications will be included within the ICT sub-strategy and plan.	
16.	Delivery of an integrated print service through DII(F) Increment 3, initially to Air Command, and then to a wider MOD implementation.	7	3,4	September 2011.		DES ISS
17.	Refresh the Sustainable ICT Policy	7	2,6	April 2012		CIO
18.	Ensure that redundant ICT equipment is re-used (within Government, the public sector or wider society) or responsibly recycled.	7	4,4b	Ongoing		DES DSA
19.	Contribute to reducing travel emissions to meet Government 2015 target by: - Develop a plan for the exploitation of collaboration tools in MOD, eg white boarding, document sharing, desk top VTC. - Delivery of collaboration tools (R2B) by DII(F), eg MOSS	7	3	 Dec 2011 Dec 2012		 CIO DES ISS

A	B	C	D	E	F	G
No.	**Key Tasks**	**Defence Priority**	**Relevant SD objective** **(from Part 2 Plan)**	**Milestones and Performance Indicators**	**Resources**	**Responsibility**
20.	Ensure resource sharing and virtualisation technologies eg servers, storage, are used for all suitable services.	7	3,4	Mar 2012		DES ISS
21.	Through the International Climate Change Programme Board, participate in the process of identifying and subsequently responding to the risks that issues such as climate change, resource availability and energy security pose to the UK and its overseas interests.	7	1	Ongoing		DG Strategy
22.	Promote staff wellbeing through Civilian Workforce and Service Personnel Strategies.	7	Commitment e.	See Civilian Workforce and Service Personnel Strategy	Resource implications contained within civilian workforce and service personnel strategies and plans.	DGHR&CS and DCDS(Pers)
23.	Participate in Government Big Society (including volunteering agenda)	7	Commitment e.	Meet Cabinet Office requirements		DGHR&CS

A	B	C	D	E	F	G
No.	**Key Tasks**	**Defence Priority**	**Relevant SD objective** **(from Part 2 Plan)**	**Milestones and Performance Indicators**	**Resources**	**Responsibility**
	BEHAVIOUR CHANGE					
	SENIOR LEADERSHIP COMMITMENT TO SD.					
24.	Regular Defence-wide statements of the importance of SD to Defence from senior board members.	7	All	Annual statements from March 2011 to March 2015.	Part of £0.613M approximate Head office SD staff costs	SSD&C to coordinate
	ENSURING SD BECOMES AN ESSENTIAL PART OF DEFENCE VALUES					
25.	Single Service ethos and values statements support Defence SD principles.	7	All	Dec 2012		Front Line Command TLBs
26.	Behaviour/values resulting from Defence Reform support Defence SD principles.	7	All	Mar 2012	Part of £0.613M approximate Head office SD staff costs	SSD&C & DRU
	EFFECTIVE ENGAGEMENT					
27.	Review and implement communication/engagement strategies.	7	All	Review by August 2011 Implement July 2011-March 2015.		SSD&C, CE DIO, CDM and TLBs/TFAs

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
	ENSURING THAT THE FINANCIAL AND NON-FINANCIAL BENEFITS OF IMPROVED SD PERFORMANCE ARE BETTER UNDERSTOOD				Other costs contained within other sub-strategies and plans	
28.	Undertake work to better understand SD costs and benefits. This could include: - Providing a Defence-wide picture of the financial costs and savings associated with meeting specific objectives in the SD Strategy and Plan. - Improving understanding of who owns the costs and savings associated with meeting future SD objectives. - Developing a mechanism for informing decision-making on where to integrate SD measures	7	All (priority 2,3,4,5)	March 2013		SSD&C with CE DIO, CDM and TLBs
	APPROPRIATE TRAINING FOR ALL STAFF					
29.	Defence training courses to include an appropriate level of detail on SD	7	All	March 2013		Training Sponsors with input from SSD&C, DE&S and DIO

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
30.	Investigate the need for Head of Profession post/s relating to SD	7	All	March 2013		SSD&C, DE&S and DIO
	A NETWORK OF SUSTAINABILITY CHAMPIONS					
31.	Review SD Champion framework following Defence Reform	7	All	Dec 2011		SSD&C with TLBs
32.	Implement recommendations from the review of SD Champion Framework.	7	All	Mar 2012		SSD&C & TLBs/TFAs
	IMPROVING RESPONSIBILITY, ACCOUNTABILITY AND TRANSPARENCY FOR SD DELIVERY					
33.	Develop a SD Management Framework	7	All	December 2011		SSD&C

A	B	C	D	E	F	G
No.	**Key Tasks**	**Defence Priority**	**Relevant SD objective** **(from Part 2 Plan)**	**Milestones and Performance Indicators**	**Resources**	**Responsibility**
	IMPROVEMENTS TO THE QUALITY AND COVERAGE OF DATA					
34.	Gain a better understanding of sustainability performance through improved reporting of data. - Accurate weighed waste data is available from each specific waste stream (residual and recycling) - Progressively improve the accuracy and coverage of energy, fuel, and water data.	7	All	70% coverage by March 2012 Annually up to March 2015		SSD&C, CE DIO and DE&S.
	ENVIRONMENTAL MANAGEMENT SYSTEMS					
35.	Ensure that <u>all</u> MOD sites, activities and equipment are covered by an appropriate EMS.	7		Ongoing up to 2015		Activities and sites – CE DIO, TLBs, TFAs. Equipment – CDM

A	B	C	D	E	F	G
No.	Key Tasks	Defence Priority	Relevant SD objective (from Part 2 Plan)	Milestones and Performance Indicators	Resources	Responsibility
2030 SD ROADMAP						
36.	Define 2030 SD vision and map out major milestones towards achieving it.	7		March 2015	Part of £0.613M approximate Head Office SD staff costs	SSD&C

DEPENDENCIES

The table below outlines the key interdependencies between sub-strategies and records the agreement reached between areas. Only the priority interdependencies are listed.'

Strategy	2nd PUS (with the assistance of DBR) as SD Sub-Strategy Owner to provide support to	2nd PUS as Sub Strategy Owner to request support from	Agreement reached?
Strategy for Defence, all Defence sub-strategies and other top-level TLB/TFA strategies	**All sub-strategy owners and other TLB holders** by: - setting Defence-wide SD Strategy; - monitoring SD compliance and performance and coordinating the development of SD performance and assurance reports; - ensuring the overall integrity of the SD delegation framework, including addressing potential gaps and overlaps of responsibility; and - overseeing a Defence-wide behavioural change programme. - providing advice on how to mainstream SD principles within their areas of business to support the achievement of the objectives in the SD Strategy and Plan.	**CDM** who has delegated responsibility for delivering SD tasks relating to the acquisition, through-life management and disposal of Defence equipment, as set out in the Part 2 Plan and the SDMF.	Yes
		CE DIO who has delegated responsibility for delivering SD tasks relating to the acquisition, management, and maintenance of built and rural Defence Infrastructure, as set out in the Part 2 SD Plan and SDMF.	Yes
		CIO who has delegated responsibility for delivering SD tasks relating to the acquisition, design, manufacture, use/reuse and disposal of ICT equipment, systems and services, as set out in the Part 2 Plan and SDMF.	Yes
		All sub-strategy owners, other TLB holders, TFAs and DG Strategy in complying with relevant legislation and mainstreaming Defence SD principles within their strategies, policies, decision-making processes, programmes, projects, activities and behaviours to support the achievement of the objectives and task in the SD Strategy and Plan.	Yes (with exception of strategies that are still in the early stages of development)

SD Staff Costs

Note 1: There are also SD staff in DIO and the TLBs but these cannot currently be costed until the DIO operating model has been finalised.
Note 2: These costs are subject to change post Defence-reform
Note 3: These costs may be duplicated in other Defence sub-strategies

Head Office Sustainable Development Team staff costs

Year	Current £M	2011 onwards £M
Team Costs	Approx 0.613 (with several gapped posts_	Approx 0.613 (under review)

Sustainable Procurement Team

Year	2011/12 £M	2012/13 £M	2013/14 £M	2014/15 £M
Team Costs	0.448	0.365	0.351	0.334
Programme Costs	0.333	0.305	0.314	0.319
Total	0.781	0.670	0.665	0.653

CIO resource costs in support of SD

Year	Current £M	2011 onwards £M
Team Costs	0.024	0.024