

# Leaflet 6 – Ozone Depleting Substances and Fluorinated Greenhouse Gases Policy

**Part 1: Directive.** This part provides the direction that **must** be followed in accordance with statute or policy mandated by Defence or on Defence by central Government.

**Part 2: Guidance.** This part provides the guidance and best practice that **should** be followed and will help you to keep to this policy.

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## Amendment Record

Amendments will be staffed by Directorate of Energy, Environment and Infrastructure (DEEI) together with the leading areas, relevant subject matter experts and key stakeholders.

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0.1	June 2025	Consolidated version of Leaflet 6 (2016) and Leaflet 7 (2026) drafted with SME support.	DEEI
1.0	January 2026	Publishing of Leaflet 6.	DEEI

## Key terms and definitions

The definitions of key Defence environmental terms are contained in the JSP 418 master glossary.

For this leaflet, the following definitions are used:

- a. **F Gases.** Fluorinated greenhouse gases (F Gases) are a family of chemicals that contain fluorine. Most F Gases are very powerful greenhouse gases that contribute to climate change and global warming if emitted to the atmosphere.
- b. **Ozone depleting substances.** Ozone depleting substances (ODS) are substances which deplete the ozone layer. Previously, they were widely used in refrigerators, air-conditioners, fire extinguishers, in dry cleaning, as solvents for cleaning, electronic equipment and as agricultural fumigants.

## Must and should

Where this chapter says '**must**', this means that the action is a compulsory requirement. Where this chapter says '**should**', this means that the action is not a compulsory requirement but is considered best practice to comply with the policy.

## Scope

This policy applies to all those employed by Defence (military or civilian) as well as those working on behalf of Defence (for example, contractors). It applies to all Defence activities conducted in any location (UK or overseas).

# Part 1: Directive

## Introduction

1. The aim of this leaflet is to define the environmental requirements for through life management of Ozone depleting substances (ODS) and Fluorinated greenhouse gases (F Gases) in compliance with legislation, regulations, and statutory requirements, and reduce the emissions of these harmful substances to the environment. Where the use of both ODS and F Gases are restricted or, in some cases, prohibited, Defence can utilise military disapplications, exemptions and derogations (DEDs) for the continued use of these substances. This leaflet applies to all personnel who manage the procurement, use and disposal of F Gases and ODS, which includes infrastructure, platforms, systems, or equipment. Shortfalls in the management of these gases can result in poor performing equipment, early obsolescence, release of restricted and/or prohibited substances, and unnecessary impacts to the environment. Failure to comply with legislation can also leave staff liable to personal civil litigation or the MOD to crown censure.
2. Specific policy and guidance on Hazardous Substances and Restricted Materials are covered separately in JSP 418 Leaflet 5. Waste management is also covered separately in JSP 418 Leaflet 3.
3. Reference **should** also be made to JSP 850 for Infrastructure and Estate Policy, Standards and Guidance.
4. References to [Defence] 'Products, Systems and Services (PSS)', 'capability', 'materiel' and 'equipment' are applicable to infrastructure, platforms and systems.
5. References to environmental cases includes, cases, assessments and other such instruments used to demonstrate the level of environmental impact and legal compliance as described in Def Stan 00-051.

## Background

6. ODS and F Gases can significantly harm the environment. ODS are manufactured chemicals that damage the ozone layer, and many ODS have been prohibited under the Ozone Depleting Substances Regulations 2015 due to their harmful effects when released. Within Defence, ODS and F Gas are predominantly used in PSS, whether equipment-based such as high-voltage switchgears or fire suppressant systems, or service based such as refrigerants or in air conditioning systems in buildings and infrastructure.
7. F Gases are a family of manufactured chemicals which contain fluorine, developed as substitutes for ODS. F Gases are classified as both hazardous substances and restricted materials. They are regulated under the Fluorinated Greenhouse Gases Regulations (2015) due to their status as potent greenhouse gases, which trap heat from the sun in the atmosphere. This contributes to global warming and accelerates climate change. The warming potential of F Gases is often thousands of times greater than that of carbon dioxide (CO<sub>2</sub>).
8. PSS procured for Defence may use F Gases and ODS for construction, manufacturing, maintenance or in operational use. Emission to the environment may result from normal use (e.g., operations and maintenance activities) or during accidental or abnormal circumstances.

## Legislation

9. In line with the Secretary of States' (SofS's) Environmental Protection (EP) Policy Statement, MOD policy mandates compliance with all applicable legislation, including laws that implement the UK's international obligations. When operating overseas, and despite state immunity under customary international law, Defence is required to apply UK standards where reasonably practicable, address the relevant EP expectations of host nations, and cooperate with their respective EP authorities. Defence environmental regulations are established by the Defence Safety Authority (DSA) through Defence Safety Authority Regulatory Publications (DSRPs).

10. Environment and climate change are a devolved matter and part of assimilated EU law. The objective of the regulations is to reduce emissions through several mechanisms. The legal frameworks supporting this include the Fluorinated Greenhouse Gases Regulations 2015, UK commitments under the UN Montreal Protocol on substances that deplete the ozone layer, and the Ozone Depleting Substances Regulations 2015.

11. In 2019 the UK government and devolved administrations committed to legally binding targets to bring greenhouse gas emissions to net zero by 2050. This builds on the Climate Change Act 2008 which committed the UK to reducing greenhouse gas emissions by 80% by 2050. The Climate Change Act includes F Gases in the definition of greenhouse gases and sets emissions target on these gases.

12. There is legislation applicable to England; Northern Ireland; Scotland; Wales, and the European Community (EC).

## Assurance

13. **Assurance.** The application of this policy **must** be assured using the Three Lines of Defence (LOD) model (Orange Book<sup>1</sup> – Principles and Concepts of Risk Management).

- a. The first LOD (1LOD) **must** be provided by those responsible for delivering the activity (normally within the Chain of Command/Management Chain; at ship, unit or establishment level) to reinforce the policy, ensuring it is followed during the activity, and that associated risks are being managed.
- b. The second LOD (2LOD) **must** be provided by the chain of command, separate from the assurance given by those responsible for delivering the activity and in line with formal Military Command or Defence organisation assurance mechanisms. 2LOD **should** make use of 1LOD evidence and bring additional subject matter expertise and process excellence to support the 1LOD to ensure all ODS and F Gas related risks are being managed and reported effectively.
- c. The third LOD (3LOD) **must** be provided as an independent audit function at Defence level by, for example, Government Internal Audit Agency (GIAA), Defence Safety Authority (DSA).

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<sup>1</sup> Expanded further in JSP 901.

## Roles and Responsibilities

14. The Accountable Person **must** ensure that the use of ODS or F Gases in their infrastructure, platforms and systems is actively managed with assessments into alternatives made throughout its service life to ensure sound environmental performance is met.

15. Everyone within Defence has a responsibility to minimise negative impacts on the environment and improve environmental performance by adhering to the MOD ODS and F Gases policy. This responsibility extends to suggesting changes to improve the policy where appropriate.

## Policy Statements

16. Defence has established the following policy statements to provide direction on the management and minimisation of F Gases and ODS in equipment (PSS) and infrastructure, which **must** be followed:

**Policy Statement 1.** Defence organisations **must** minimise the use of F Gases and avoid the use of ODS wherever technically and economically feasible. Procurement processes **must** assess environmental impact over the full lifecycle of equipment.

- a. **F Gas** - Defence organisations **must** ensure new equipment uses alternative technologies with lower global warming potential (GWP) and zero ozone depletion potential.
- b. **ODS – Should** be avoided wherever feasible. Where ODS is required, it **must** be compliant with Annex 6 of the ODS Regulations 2015 (critical uses).

**Policy Statement 2.** Defence organisations and contractors **must** maintain up-to-date declaration information of equipment details for all systems containing F Gases or ODS. This means ensuring all equipment containing F Gases or ODS is properly labelled and declared in line with legal requirements.

- a. Defence organisations **must** implement clear responsibilities for updating and verifying their declaration of equipment details.
- b. Defence organisations **must** ensure that the installed quantity and emissions of F Gases and ODS is made annually to DE&S Quality, Safety, Environment and Engineering (QSEE).

**Policy Statement 3.** For Defence to deliver operational capability, some UK F Gas and ODS legislation allows Defence to apply Disapplications, Exemptions or Derogations (DEDs), however:

- a. Those DEDs **must** only be used when operational capability cannot be practicably met by any other means.
- b. Where these DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, equivalent to those required by UK legislation.

**Policy Statement 4.** Defence organisations **must** ensure that systems containing F Gases or ODS are regularly inspected and maintained to prevent leakage. Defence organisations **must** ensure that:

- a. Systems containing F Gases or ODS **must** be leak-tested at legally mandated intervals, and any detected leaks must be repaired without delay.
- b. Systems containing F Gases or ODS **must** keep service, maintenance and repair records.

**Policy Statement 5.** Defence organisations **must** ensure that all MOD personnel and contractors working with F Gases or ODS hold the necessary qualifications and training required under UK law.

**Policy Statement 6.** Defence organisations **must** apply lifecycle thinking in managing F Gases and ODS, from acquisition to disposal. Emissions to the atmosphere **must** be minimised.

**Policy Statement 7.** Defence organisations **must** conduct regular reviews of compliance processes, supported by audits and performance reporting. Where breaches occur, root cause analysis and corrective action **must** be implemented promptly.

**Policy Statement 8.** Defence organisations **must** ensure that all equipment containing F Gases or ODS is decommissioned and disposed of safely and in accordance with environmental regulations.

- a. Defence organisations **must** ensure that gases are recovered by certified technicians using approved methods and offered to the MOD Montreal Protocol Substance Bank. If not required authorised waste handlers or authorised contractors **must** be appointed for reuse, recycling, reclamation or disposal.

## Policy Statement 1

Defence organisations **must** minimise the use of F Gases and avoid the use of ODS wherever technically and economically feasible. Procurement processes **must** assess environmental impact over the full lifecycle of equipment.

- a. **F Gas** - Defence organisations **must** ensure new equipment uses alternative technologies with lower global warming potential (GWP) and zero ozone depletion potential.
- b. **ODS – Should** be avoided wherever feasible. Where ODS is required, it **must** be compliant with Annex 6 of the ODS Regulation 2015 (critical uses).

17. Defence organisations **should** consult equipment specifications and engage with procurement teams early to identify and select technologies that use low or zero-GWP alternatives and ozone depleting potential substances. Defence organisations **should** use procurement checklists that flag high-impact substances and review suppliers' environmental declarations.

18. When contracting for PSS, contracting staff **must** ensure contracts include the obligation to ensure all Defence materiel meets UK legislation, regulations, and statutory requirements as a minimum standard, including identifying requirements for DEDs where relevant, and host nation legislative requirements where these are more stringent, for the management of F Gases or ODS through life.

19. Before accepting materiel or services, the Accountable Person **must** ensure all contractual requirements for all legal compliance of F Gases or ODS is in place and provisions have been met, identify requirements for DEDs where relevant, and if not, reject the goods or service in accordance with DEFCON 524.

20. If a DED is required it **must** be in place **before** the equipment is accepted into service (for example E7 Wedgetail use ODS in fixed fire suppression systems with end/cut off dates for use). Legal definitions **should** be considered, as some equipment may be labelled as 'new equipment' if it is modified, for example a new radar is bolted on. If legal compliance is claimed through use of a DED, refer to Policy Statement .

21. Defence organisations **should avoid** purchasing new equipment that uses banned or heavily restricted substances, unless no viable alternative exists. If a DED is necessary, Defence organisations **must** ensure local guidance is available outlining the correct approach to take when dealing with DEDs to ensure any necessary approval is obtained, and any applicable conditions are met, prior to contract award.

22. Suppliers **must** declare the type and quantity of F Gases or ODS used in PSS. Decisions on new purchases **should** consider future compliance costs and disposal requirements. Defence organisation staff **must** consult technical advisors to identify approved alternatives during procurement.

23. The Accountable Person for staff transporting, storing, handling, using and disposing of Defence PSS containing F Gases or ODS **must** ensure, the activity is compliant with applicable legislation, regulations and statutory requirements.

24. Personnel and end users **must** follow the processes and procedures implemented to ensure the activity is compliant with applicable legislation, regulations and statutory requirements.

25. Specific obligations **should** be placed on suppliers through the use of DEFCONs, Def Stans and equivalent contractual mechanisms. Government-to-Government procurement Memorandums of Understanding (MOU), e.g., Foreign Military Sales (FMS), **should** ensure that the bespoke nature of these agreements does not lessen these requirements. Including obligations such as:

- Provision of environmental impact information **should** be sought from suppliers through application of Def Stan 00-051 and other contractual requirements.
- Minimisation of GWP of gases used.
- Resilience of supply of F Gases and ODS.

26. Defence organisations **must** ensure that records are kept for at least 5 years, including contractor use on behalf of Defence.

## Policy Statement 2

Defence organisations and contractors **must** maintain up-to-date declaration information of equipment details for all systems containing F Gases or ODS. This means ensuring all equipment containing F Gases or ODS is properly labelled and declared in line with legal requirements.

- a. Defence organisations **must** implement clear responsibilities for updating and verifying their declaration of equipment details.
- b. Defence organisations **must** ensure that the installed quantity and emissions of F Gases and ODS is made annually to DE&S QSEE.

27. Defence organisations **must** ensure that all equipment has legible, tamper proof labels clearly showing the type of F Gas or ODS, charge amount and relevant hazard classification. Labels **should** be visible without opening or disassembling the unit.

28. Defence organisations **must** ensure all such systems are recorded in a central database or local inventory and updated annually, or after any significant change (e.g. retrofit, recharge or disposal).

29. Accountable Persons **must** assess their obligations when interpreting and specifying F Gas or ODS equipment requirements for PSS, as manufacturers, importers, and suppliers of military PSS have legal duties, which may vary with the place of manufacture, supply, or operation.

- a. This **must** include the need for a supplier to provide essential information on any F Gas or ODS present, including any environmental impact information.

30. Accountable Persons **must** submit required data during MOD reporting cycles and provide updates for central tracking systems. Labels and records **should** be verified and reported to central tracking systems during routine inspections or audits.

31. All potential environmental impacts of using F Gases and ODS in equipment **must** be recorded in the Environmental Management System (EMS).

32. Defence organisations **must** ensure that the installed quantity and emissions of F Gases and ODS is **made annually** to DE&S QSEE 'DES-EngSfty-QSEESSA-HazMat@mod.gov.uk' on the proforma made available on the DE&S controlled gases intranet page (available on the [MOD SharePoint](#)), to ensure that all **reporting obligations** regarding the use of F Gases and ODS is made in full and on time to the appropriate body. This requirement is in addition to the more detailed statutory reporting requirements in Policy Statement 4.

33. Proper declaration of equipment maintenance ensures legal compliance, facilitates inspections, and supports informed decision-making during servicing, retrofitting, or disposal. Defence organisations **must** implement clear responsibilities for updating and verifying their declaration of equipment details.

### Policy Statement 3

For Defence to deliver operational capability, some UK F Gas and ODS legislation allows Defence to apply Disapplications, Exemptions or Derogations (DEDs), however:

- a. Those DEDs **must** only be used when operational capability cannot be practicably met by any other means.
- b. Where these DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, equivalent to those required by UK legislation.

34. A Technical Dossier **must** be produced where a Defence DED<sup>2</sup> is required (for example for a halon derogation to Defra. Refer to JSP 418 Leaflet 5 for Technical Dossier Guidance).

35. The times a DED may be used are as follows:

- a. Those DEDs **must** only be used when operational capability cannot be practicably met by any other means;
- b. Any application for a Defence DED **must** be justified, documented, and approved through the appropriate internal governance and in line with relevant UK legislation;
- c. DEDs **should not** be used to delay best environmental practices or avoid sustainable alternatives. Where a DED is in place, the Defence organisations **must** ensure that all other aspects of environmental performance—such as containment, leak prevention, and proper training—are maintained to the highest practicable standard;

<sup>2</sup> JSP 418 Leaflet 5 Annex B sets out what a 'Defence DED' is.

d. Where these DEDs are employed, departmental arrangements **must** be introduced to produce equivalent outcomes which are at least as good as those required by UK legislation<sup>3</sup>;

e. All DEDs **must** be reviewed regularly to assess continuing need and **must** be withdrawn when alternative solutions become feasible. Defence organisations **must** ensure full traceability and maintain records of any equipment or systems operating under a DED, including relevant correspondence and expiry dates; and

f. This policy ensures that exemptions remain exceptional and temporary, supporting MOD's commitment to environmental stewardship while maintaining operational effectiveness.

36. All project teams **must** be aware if any equipment which they are using or procuring contains F Gases or ODS. If any equipment contains F Gases or ODS and the restriction status is known or not, then complete a Technical Dossier and keep this as a record.

37. If Defence organisations are using a Defence DED, they **must** inform the relevant Defence regulators and adhere to any relevant regulations.

38. Defence organisations are required to regularly review the continued relevance of any active DEDs, and ensure all supporting documentation is available for audit. Wherever feasible, a plan **should** exist to phase out DEDs by adopting compliant alternatives.

39. Legislation often includes DEDs where it recognises certain applications or sectors may not be able to comply with the statutory requirements. There are typically four scenarios which may be encountered when assessing the use of DEDs within Defence, and legislative compliance:

a. Use of F Gas and ODS currently compliant with all UK legislation and MOD Policy;

b. DED written into legislation around the use of F Gas or ODS, and is not specific to Defence, and **does not** require external approval;

c. DED specific to Defence is written into legislation and **does not** require external approval (refer to JSP 418 Leaflet 5 for the DED process); and

d. DED is written into the legislation and **does** require external approval, or the use of the F Gas or ODS substance requires a change in legislation.

40. DEDs **must** only be employed when necessary to deliver or maintain an operational capability. Where legislative DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by the underlying legislation.

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<sup>3</sup> In line with SofS's Environmental Protection Policy Statement.

## Policy Statement 4

Defence organisations **must** ensure that systems containing F Gases or ODS are regularly inspected and maintained to prevent leakage. Defence organisations **must** ensure that:

- a. Systems containing F Gases or ODS **must** be leak-tested at legally mandated intervals, and any detected leaks **must** be repaired without delay.
- b. Systems containing F Gases or ODS **must** keep service, maintenance and repair records.

41. Where possible (and required in legislation), Defence organisations **should** install automatic leak detection systems on equipment which contain F Gases or ODS. Engineering units are responsible for following strict servicing protocols and using certified personnel. Preventive maintenance and proper design practices **must** be applied to reduce risk of emissions of F Gases or ODS.
42. ODS requirements need to be requested from the MOD's Montreal Protocol Substance Bank (MPSB). Contact the Operational Energy Authority Technical Team multi-user address ([ukstratcom-defsp-oeadftatech@mod.gov.uk](mailto:ukstratcom-defsp-oeadftatech@mod.gov.uk)). Defence organisations **should** submit recovered gases to the MPSB for reclamation and potential reuse.
43. Defence organisations engineering and facilities unit staff **must** ensure that all systems containing F Gases or ODS (e.g. refrigeration, air conditioning, fire suppression) are routinely inspected at intervals required by law.
44. Defence organisations **must** use certified personnel for leak checks and repair work. All inspections and repairs in maintenance logs **must** be recorded in line with statutory requirement as well as any use of DEDs. Where frequent leaks occur, assess whether it is economically or environmentally feasible to replace or upgrade the system. Defence organisations **must** incorporate automatic leak detection technology into higher-risk or critical systems.
45. The Accountable Person **must** ensure potential impacts to the environment caused using F Gases and ODS in PSS are assessed, and appropriate actions taken to minimise these impacts to support the claim of sound environmental performance, Building Research Establishment (BRE) or Sustainability and Environmental Appraisals Tool (SEAT) Handbook. Regular checks and inspections **must** take place to prevent leakage of F Gases or ODS. Defence organisations **should** install automatic leak detection systems where possible.
46. Environmental impacts and management activities identified and documented in Policy Statement 4 **must** be communicated to end users, providing sufficient information to enable the activity to be conducted in accordance with applicable legislation, regulations and statutory requirements.
47. Environmental cases for equipment or buildings **must** include all potential environmental impacts, including the use of F Gases or ODS, and demonstrate how the solution supports sound environmental performance.
48. Defence organisations **must** keep records for all equipment required to be checked for leaks under the F Gas Regulations as outlined in legislation.

## Policy Statement 5

Defence organisations **must** ensure that all MOD personnel and contractors working with F Gases or ODS hold the necessary qualifications and training required under UK law.

49. Defence organisations **must** ensure that only certified technicians carry out installation, servicing, maintenance, or decommission of applicable systems containing F Gases or ODS.
50. Defence organisations **must** ensure that appropriate training on the management of F Gases or ODS systems through-life is provided to all staff involved in F Gas or ODS system management.
51. Defence organisations **must** ensure training records are maintained and up to date. Regular refresher training and updates on regulatory changes **must** be provided. Defence is responsible for ensuring compliance and verifying contractor credentials.
52. Defence organisations **must** ensure that in addition to personnel certification, contractors working on stationary refrigeration, air-conditioning and heat pumps (RACHP) systems have a Company Certificate.
53. Where contractors are employed and providing a service to Defence, organisations **must** have a process in place to ensure compliance. For assurance purposes contractors staff training and records need to be examined/requested as Defence will not hold records for contracting staff.
54. Defence organisations **must** ensure that training records are kept, and due diligence **must** be undertaken for staff members.

## Policy Statement 6

Defence organisations **must** apply lifecycle thinking in managing F Gases and ODS, from acquisition to disposal. Emissions to the atmosphere **must** be minimised.

55. Defence organisations **must** include environmental impact assessments, leak risk, maintenance requirements, and end-of-life treatment from the outset of any project or building which requires the use of F Gases or ODS.
56. Defence organisations **must** ensure that lifecycle assessments are embedded in procurement decisions, supported by sustainability and cost-benefit analysis. Engineering and facilities teams **must** collaborate to ensure that replacement planning, retrofitting, and recovery are aligned with MOD sustainability goals.
57. Defence organisations **must** keep up to date with changes in UK regulations and MOD policy by reviewing official guidance and participating in internal training or briefings. Regular self-assessments, audits, and contract reviews **should** be used to monitor compliance.
58. Horizon scanning **should** be undertaken to assess and better understand potential future changes from regulatory, supply chain, technology or other factors which may impact the viability of the use of F Gases or ODS.

59. MOD project and asset managers **must** consider environmental impacts of F Gases and ODS at each stage, from procurement through operation to disposal. Plans **should** be made for system upgrades, maintenance, and end-of-life disposal from the outset. Tools such as Whole Life Costing and Equipment Lifecycle Management Plans can be used to help embed long-term thinking. Environmental advisors **should** be liaised with for support in evaluation.

60. If the case has been made to continue using F Gases or ODS PSS within Defence materiel, the use **must** be actively managed throughout its life and critically in its disposal phase.

### Policy Statement 7

Defence organisations **must** conduct regular reviews of compliance processes, supported by audits and performance reporting. Where breaches occur, root cause analysis and corrective action **must** be implemented promptly.

61. Defence organisations **must** keep up to date with changes in UK regulations and MOD policy by reviewing official guidance and participating in internal training or briefings. Regular self-assessments, audits, and contract reviews **should** be used to monitor compliance.

62. JSP 418 Leaflet 13 Incident Reporting and MySafety is a MOD tool which **should** be used for reporting of environmental incidents. Records and end times of environmental incidents **should** be reported and shared for lessons to be learned.

63. Defence organisations **must** report non-compliance or environmental incidents promptly and address them using corrective action plans.

64. If an incident occurs regarding F Gases or ODS, the incidents **must** be reported as a non-compliance and/or environmental incidents promptly and they **should** be addressed using corrective action plans.

65. Lessons learned **should** be shared across the MOD via relevant environmental protection governance boards to enable continual improvement.

### Policy Statement 8

Defence organisations **must** ensure that all equipment containing F Gases or ODS is decommissioned and disposed of safely and in accordance with environmental regulations.

a. Defence organisations **must** ensure that gases are recovered by certified technicians using approved methods and offered to the MOD Montreal Protocol Substance Bank. If not required authorised waste handlers or authorised contractors **must** be appointed for reuse, recycling, reclamation or disposal.

66. Defence organisations **must** have a live through life management plan that implements the waste hierarchy for the compliant reclamation and disposal of F Gases and ODS. This **must** be maintained. There **should** be a disposal plan at the beginning of a project or procurement (i.e. covering 40 years) with financial mechanisms included in the plan for in-service and end of life disposal costs.

67. F Gases and ODS that are **recovered** during maintenance procedures or from decommissioned systems **must** be recovered for recycling, reuse or safe disposal. If not needed by the user concerned, the substances shall be offered, in the first instance, to the MOD's Montreal Protocol Substance Bank (MPSB) ([ukstratcom-defsp-oadftatech@mod.gov.uk](mailto:ukstratcom-defsp-oadftatech@mod.gov.uk)) for reclamation and potential reuse in support of other MOD applications.

68. If F Gases or ODS need to be disposed, Defence organisations **must** arrange for end-of-life equipment containing F Gases or ODS to be handled only by authorised waste contractors. Recovery of F Gases and ODS **must** occur before disposal. Disposal receipts and documentation **must** be kept on file.

69. Where equipment is removed from service Defence organisations **must** ensure it is tagged and isolated until qualified personnel can safely recover the F Gases or ODS. Disposal procedures **should** be built into decommissioning and contract close-out plans.

70. Financial provision **must** be included for each type of disposal, covering the equipment as a whole and any special requirement for F Gases or ODS, including sampling and testing. For PSS, the Accountable Person **must** have a funded disposal plan prior to initial delivery of the subject materiel.

71. Where disposal involves sale or gifting of equipment or infrastructure at the end of its service life, legal obligations involving putting equipment/buildings containing F Gases or ODS on the market, informing the recipient of such hazard, and relevant licences (including export licences) **must** be considered by the Accountable Person. Provision **should** be made for a scenario where sale is not possible, with alternative solutions included in the disposal plan.

72. JSP 418 Leaflet 3 (Waste Management) **must** be followed to ensure compliance with waste management legislation and the safe management of waste.

73. Cross contamination of containment vessels and mixing of gases recovered during maintenance procedures **must** be avoided. This is to ensure the substances can be easily recycled and reclaimed. If the substances are mixed, they cannot be recycled and reclaimed.

## Part 2: Guidance

This Part provides the guidance and best practice that **should** be followed and will help you meet the Defence F Gas and ODS policy.

### Annex A: Further Guidance on Policy Statements

1. This guidance section provides further information and guidance on individual policy statements. The guidance underneath each policy statement is specific to points made under the policy statements in Part 1 of this Leaflet.
2. An awareness of legislative requirements is vital to ensure sustained performance and reliability of military capability through life on use of F Gases and ODS.

#### Policy Statement 1

3. To document that the use of F-Gases and ODS in new equipment is necessary, in line with policy statement 1, a MOD Technical Dossier can be used to record the information necessary to support the justification for the use of a F-Gas or ODS. It can also demonstrate that the mitigation measures in place are suitable and proportionate to ensure safe and environmentally sound use of a gas.
4. A Technical Dossier provides a single document that can be used to demonstrate that the activities required for the sound management of F Gases and ODS have been completed, and to pull these disparate documents and work packages into a single body of evidence supporting the justification for the use of F Gases and ODS. This Technical Dossier can then aid inclusion of this information into the relevant environmental case.
5. A Technical Dossier template and additional guidance on how to complete a Technical Dossier can be found in 'MOD Hazardous Substances and Restricted Materials Technical Dossier and Guidance'.
6. Environmental cases or safety and environmental cases can be used to assess the environmental impact over the full lifecycle of equipment.

#### Policy Statement 2

7. To support policy statement 2 and ensure compliance with statutory reporting requirements for all systems containing F Gases or ODS, annual statutory reporting requirements are outlined within the supplementary Annex C. Additionally, reporting requirements for individual equipment may be included as part of management plans to streamline compliance and recordkeeping.
8. Responsibilities for reporting declarations can be included as part of an environmental case or EMS.

#### Policy Statement 3

9. To enable Defence to deliver operational capability, legislation permits the application of DEDs. Further details on DEDs, can be found in JSP 418 Leaflet 5 Annex B: Derogations, Exemptions and Disapplications.

10. While JSP 418 Leaflet 5 Annex B specifically addresses Hazardous Substances and Restricted Material's (HSRM), the principles outlined in this annex equally apply to the use of DEDs for F Gases and ODS, as these are also classified as Restricted Materials.

#### **Policy Statement 4**

11. **F Gas statutory requirements:** Guidance on requirements for leak-tests, the installation of automatic leak detection systems, and the maintenance of service and repair records is published by the Environment Agency (EA) and the Department for Environment, Food & Rural Affairs (DEFRA). The latest guidance can be accessed online at GOV.UK by searching “Fluorinated gas (F gas): guidance for users, producers and traders”.

12. **ODS statutory requirements:** Guidance on requirements for ODS leak-tests, service, maintenance and repair records is also published by the EA and DEFRA. The latest guidance can be accessed online at GOV.UK by searching “ozone-depleting substances: guidance for users, producers and traders”.

13. **Critical Systems in Defence:** In the Defence context, critical systems involving F Gases and ODS are those essential for operational capability and for which no alternative solution exist. These systems are typically eligible to utilise Defence DEDs due to their critical role in ensuring national security.

14. **Higher-Risk Systems in Defence:** In the Defence context, higher-risk systems involving F-Gases or ODS are mission-critical systems whose failure or inability to operate due to gas shortages or environmental regulatory breaches, without the use of DEDs, would compromise Defence operational capability or result in significant financial or reputational consequences.

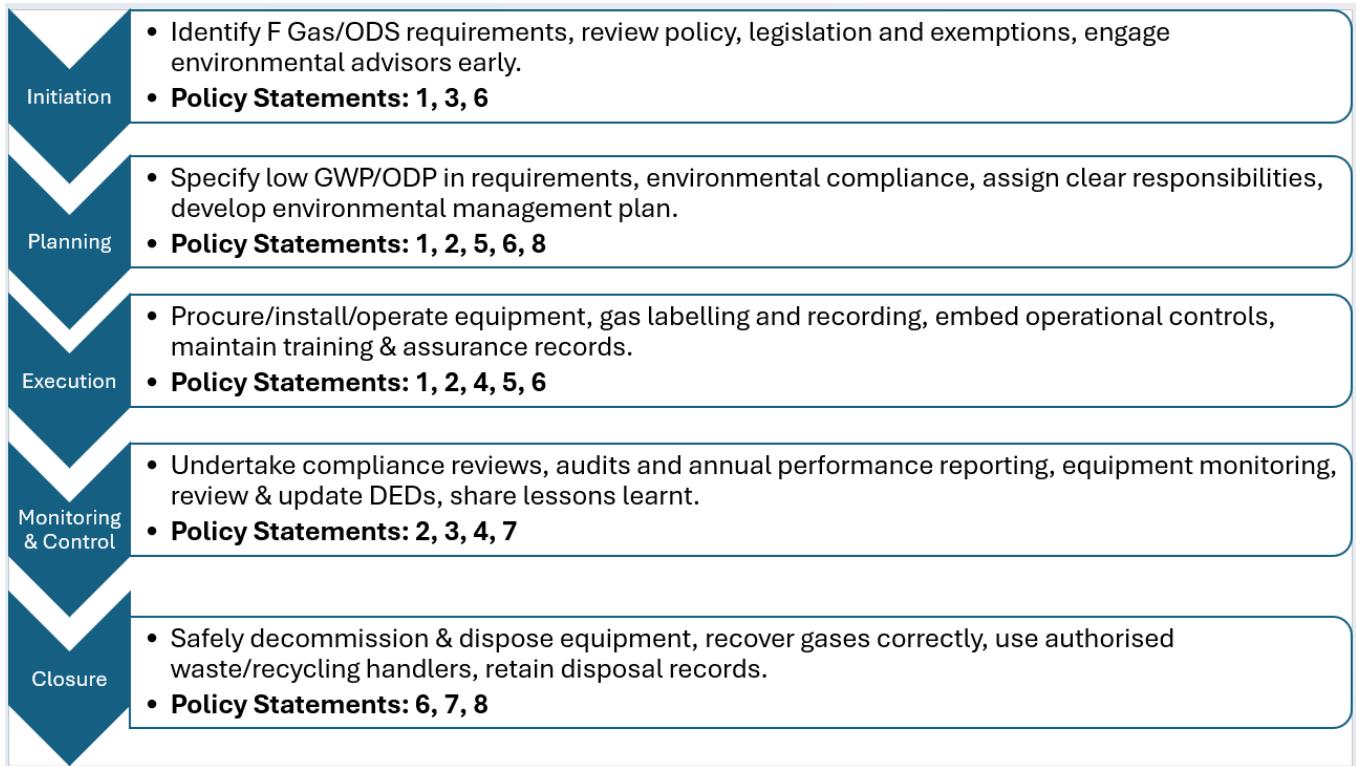
#### **Policy Statement 6**

15. Defence organisations **must** stay updated with changes in UK regulations and MOD policy by reviewing official guidance, participating in internal training or briefings, and utilising tools such as the Defence Legislation Support Tool (DLST) to assist with horizon scanning, particularly for the use of F Gases and ODS.

## Annex B: Project Lifecycles & Policy Statements

1. The below infographic provides an overview of each stage of the project lifecycle and typical activities that occur in each project stage for F-gases and ODS. The diagram also highlights when each policy statement for F-Gases and ODS are applicable in each stage of the project lifestyle.

Project lifecycle infographic



## Annex C: Statutory Reporting Requirements for F-Gases and ODS

### Overview

1. Ozone depleting substances (ODS), such as Halons, are regulated substances which deplete the ozone layer and are historically used fire suppression systems. The critical use of specific Halons is still permitted under strict conditions.
2. Fluorinated greenhouse gases (F Gases) are a family of man-made greenhouse gases containing fluorine, including HFCs, PFCs, SF<sub>6</sub>, and other fluorinated compounds that have very high global warming potential.
3. The MOD has a legal requirement to report the use ODS to the Environment Agency (EA) on an annual basis and retain records of the use of F Gases. The MOD is also mandated to report certain Greenhouse Gas (GHG) emissions in the MOD Annual Report and Account (ARAc) as directed by HM Treasury and in the Greening Government Commitments Annual Report. Fugitive emissions from the use of F-gas are Scope 1 direct GHG emissions.
4. The Quality, Safety, Environment and Engineering (QSEE) team in Defence Equipment and Support (DE&S) collate this annual reporting on behalf of the MOD.

### Reporting Requirements

5. There is an ongoing requirement to consider the approaching 'end dates' for Halons, and the 'phase down' of F Gases, therefore the following information must be considered when completing the reporting proforma:
  - a. Progress towards seeking alternatives with lower global warming potential.
  - b. What emission reduction measures have been taken.
  - c. An explanation if unable to provide any data.
  - d. Any ODS derogations in place and being used.
6. The DE&S QSEE team have created a template for this statutory reporting, which can be found on their controlled gases webpage on the [MOD SharePoint Intranet](#). Each Defence organisation **must** provide their annual reports the DE&S QSEE team in the proforma provided on their controlled gases webpage.
7. To comply with the EA reporting timeframes, in January each year the DE&S QSEE team will request all Defence organisations complete QSEE's proforma with the returns for the previous calendar year. The annual deadline to submit the data to the QSEE multi-user ([DES-EngSfty-QSEESSA-HazMat@mod.gov.uk](mailto:DES-EngSfty-QSEESSA-HazMat@mod.gov.uk)) is 31<sup>st</sup> March.
8. If you have any questions or concerns on the F Gas and ODS statutory reporting, please email the DE&S QSEE team ([DES-EngSfty-QSEESSA-HazMat@mod.gov.uk](mailto:DES-EngSfty-QSEESSA-HazMat@mod.gov.uk)) or the Directorate of Energy, Environment and Infrastructure Environmental Protection Policy team ([transformation-deei-ep@mod.gov.uk](mailto:transformation-deei-ep@mod.gov.uk))