

**EXPLANATORY MEMORANDUM TO**  
**THE OZONE-DEPLETING SUBSTANCES (GRANT OF HALON DEROGATIONS)**  
**REGULATIONS 2021**

**2021 No. 1397**

**1. Introduction**

- 1.1 This explanatory memorandum has been prepared by the Department for Environment, Food and Rural Affairs (“Defra”) and is laid before Parliament by Command of Her Majesty.

**2. Purpose of the instrument**

- 2.1 This instrument grants derogations requested by the Ministry of Defence (MoD) with regards to the critical use of halon-1301 for the protection of engine nacelles and auxiliary power units in new Apache helicopters and Boeing E7 Wedgetail aircraft beyond the critical use cut-off date of 31 December 2014. The derogations are granted using the power in Article 13(4) of Regulation (EC) No 1005/2009 as retained in UK law as it applies in Great Britain (the Ozone Depleting Substances (ODS) Regulation).
- 2.2 The derogations allow MoD to operate the Apache helicopters and Wedgetail aircraft with fire suppression systems that contain halon-1301 for the protection of engine nacelles and auxiliary power units in new Apache helicopters and Boeing E7 Wedgetail aircraft, since there are currently no available technically and economically feasible alternatives to using halon in those systems for such military aircraft.

**3. Matters of special interest to Parliament**

*Matters of special interest to the [Joint Committee on Statutory Instruments]*

- 3.1 None.

**4. Extent and Territorial Application**

- 4.1 The territorial extent of this instrument is England, Wales and Scotland.
- 4.2 The territorial application of this instrument is England, Wales and Scotland.

**5. European Convention on Human Rights**

- 5.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

**6. Legislative Context**

- 6.1 The ODS Regulation prohibits the placing on the market of ozone-depleting substances (ODS) (Article 5(1)), products and equipment containing or relying on ODS (Article 6(1)). However, the Regulation permits a limited and controlled number of ODS uses. One is the critical use of halons (Article 13 and Annex VI of the ODS Regulation as amended by EUR 744/2010). The list of critical halon uses in Annex VI includes the use of halon-1301, halon-1211 and halon-2402 as fire suppressants for the protection of engine nacelles and auxiliary power units (APU) in aircraft. A “cut-off date” of 31 December 2014 is set for such use in relation to “new

equipment” and “new facilities”. An “end date” of 31 December 2040 is also set for such use.

6.2 Relevant definitions of terms in Annex VI are:

- “Cut-off date” means the date after which halons must not be used for fire extinguishers or fire protection systems in new equipment and new facilities for the application concerned.
- “End date” means the date after which halons shall not be used for the application concerned and by which date the fire extinguishers or fire protection systems containing halons shall be decommissioned.
- “New equipment” means equipment for which, by the cut-off date, neither of the following events has occurred:
  - signature of the relevant procurement or development contract.
  - submission of a request for type approval or type certification to the appropriate regulatory authority.

6.3 Article 13(4) of the ODS Regulation allows for the granting of derogations from cut-off dates and end dates in specific cases. This means use can continue beyond those dates, provided an applicant can demonstrate that there is no technically and economically feasible alternative to using halon available. A derogation may only be granted by regulations made by the appropriate authority.

6.4 The Regulation applies to Great Britain only. Northern Ireland remains subject to EU ODS legislation in accordance with the Northern Ireland Protocol.

6.5 The Article 13(4) power to grant a derogation is devolved. Therefore, the appropriate authority in England, Scotland and Wales is the Secretary of State, the Scottish Ministers and the Welsh Ministers respectively. Ministerial consent has been provided by the Scottish and Welsh Ministers for the Secretary of State to exercise the Article 13(4) power to grant derogations on their behalf. The grant of the derogations in this instrument is based on such consent and therefore applies to Scotland and Wales as well as to England.

## 7. Policy background

### *What is being done and why?*

7.1 Halons are a type of ozone-depleting substances (ODS). If emitted to the atmosphere, ODS damage the Earth’s stratospheric ozone layer. Under the UN Montreal Protocol on Substances that Deplete the Ozone Layer, ODS have largely been phased out in developed countries.

7.2 Remaining ODS use in the UK is very limited, tightly controlled and monitored under the ODS Regulation. It is permitted only in essential applications where no alternatives are available, such as fire extinguishers in ships and aircraft, laboratory and analytical uses, and as feedstock for other chemicals. Imports and exports must be licensed and annual reports on production and consumption must be submitted to the UN Ozone Secretariat.

7.3 Previously, the European Commission undertook most of these control functions on behalf of the UK, including granting derogations in the case of critical uses of halons. The geographical extent of the ODS Regulation is Great Britain only. Northern

Ireland remains subject to EU ODS legislation in accordance with the terms of the Northern Ireland Protocol. Powers under the ODS Regulation are devolved.

- 7.4 While the ODS Regulation prohibits the placing on the market of ODS, certain specific uses are permitted. This includes the critical use of halon-1301 as a fire suppressant for the protection of engine and APU in aircraft. As described in the Legislative Context section, such use is time-limited, but derogations can be granted to permit the continuing use of halon-1301 beyond those set time limits where an applicant in a particular case can demonstrate that there is no technically and economically feasible alternative to halon available.
- 7.5 MoD applied for derogations from the 31 December 2014 cut-off date for the use of halon-1301 in fire suppression systems in the engine nacelles of new Apache AH-64E helicopters and engine nacelles and APUs of new Wedgetail E7 aircraft.
- 7.6 For both applications, MoD submitted that:
- There is currently no implementable “drop in” replacement for Halon 1301 in an engine nacelle and APU fire suppression system. Although there are potential alternatives that either have a greater mass or require a greater volume of suppressant, these alternatives would require modifications to the design of the Apache AH-64E helicopters and Boeing E-7 Wedgetail aircraft which is technically and programmatically unachievable prior to the In-Service Date.
- 7.7 In assessing the applications by MoD, the latest Assessment Report of the Montreal Protocol’s Halons Technical Options Committee (HTOC), published in December 2018, (the [HTOC Report](#)) has been reviewed. According to the HTOC Report, despite over 20 years of research, the civil aviation industry has not yet been able to find any replacements for halon-1301 that they deem to be acceptable from an efficiency perspective (i.e., space and weight), a toxicity perspective or both. Further investigation has identified that, while evaluation of alternatives to halon-1301 has continued since publication of the HTOC Report, there are still no alternatives available that address all of the space, weight and safety considerations.
- 7.8 Having carefully reviewed the evidence provided by MoD in both the Apache helicopters and Wedgetail aircraft applications and having assessed the HTOC Report and identified the ongoing lack of acceptable alternatives to halon-1301 that address the necessary considerations, we are content that there are no technically and economically feasible alternatives available for use in these Apache helicopters and Wedgetail aircraft. On that basis, we are content to grant the derogations for the helicopters and aircraft through this instrument. The derogations are granted by Secretary of State, as the appropriate authority for England and, with the consent of Scottish and Welsh Ministers, as the appropriate authority for Scotland and for Wales respectively.

*What will it now do?*

- 7.9 This instrument will grant MoD derogations from the 31 December 2014 cut-off date for the use of halon-1301 in fire suppression systems in the engine nacelles of new Apache AH-64E helicopters and engine nacelles and APUs of new Wedgetail E7 aircraft.

**8. European Union Withdrawal and Future Relationship**

- 8.1 This instrument does not relate to withdrawal from the European Union.

## **9. Consolidation**

9.1 No consolidation is required.

## **10. Consultation outcome**

10.1 The Devolved Administrations were consulted throughout the development of this instrument and agreement between officials on its provisions was reached. Furthermore, Ministerial consent has been provided by the Welsh Government and Scottish Government for the Secretary of State to exercise the power to grant derogations under Article 13(4) of the ODS Regulation.

## **11. Guidance**

11.1 No guidance is required.

## **12. Impact**

12.1 There is no, or no significant, impact on business, charities or voluntary bodies.

12.2 There is no, or no significant, impact on the public sector.

12.3 A full Impact Assessment has not been prepared for this instrument because it relates to maintenance of existing regulatory standards.

## **13. Regulating small business**

13.1 The legislation does not apply to activities that are undertaken by small businesses.

## **14. Monitoring & review**

14.1 There is no requirement to review the granting of derogations covered by this statutory instrument.

## **15. Contact**

15.1 Ademola Adeseun at the Department for Environment, Food and Rural Affairs, Telephone: +44 (0)2087203545 or email: [ademola.adeseun@defra.gov.uk](mailto:ademola.adeseun@defra.gov.uk) can be contacted with any queries regarding the instrument.

15.2 Robert Mason, Deputy Director for Climate, at the Department for Environment, Food and Rural Affairs can confirm that this Explanatory Memorandum meets the required standard.

15.3 Jo Churchill MP, Parliamentary Under Secretary of State, at the Department for Environment, Food and Rural Affairs can confirm that this Explanatory Memorandum meets the required standard.