

Draft Order in Council laid before Parliament, the Northern Ireland Assembly, the Scottish Parliament and Senedd Cymru under paragraph 11 of Schedule 3 to the Climate Change Act 2008 for approval by resolution of each House of Parliament, the Northern Ireland Assembly, the Scottish Parliament and Senedd Cymru.

DRAFT STATUTORY INSTRUMENTS

2026 No. XXXX

CLIMATE CHANGE

**The Greenhouse Gas Emissions Trading Scheme (Amendment)
(Extension to Maritime Activities) Order 2026**

Made - - - -

Coming into force

1st July 2026

At the Court at Buckingham Palace, the *** day of ***

Present,

The King's Most Excellent Majesty in Council

This Order is made in exercise of the powers conferred by sections 44, 54 and 90(3) of, and Schedule 2 and paragraph 9 of Schedule 3 to, the Climate Change Act 2008(a).

In accordance with paragraph 10 of Schedule 3 to that Act, before the recommendation to His Majesty in Council to make this Order was made—

- (a) the advice of the Committee on Climate Change, including on the amount of the limit referred to in section 48(2) of that Act, was obtained and taken into account; and
- (b) such persons likely to be affected by the Order as the Secretary of State, the Department of Agriculture, Environment and Rural Affairs, the Scottish Ministers and the Welsh Ministers considered appropriate were consulted.

In accordance with paragraph 11 of that Schedule, a draft of the instrument containing this Order was laid before Parliament, the Northern Ireland Assembly, the Scottish Parliament and Senedd Cymru and approved by resolution of each House of Parliament, the Northern Ireland Assembly, the Scottish Parliament and Senedd Cymru.

Accordingly, His Majesty, by and with the advice of His Privy Council, makes the following Order.

(a) 2008 c. 27. The amendment made to paragraph 30 of Schedule 2 of that Act by S.I. 2022/500 is not relevant to this Order.

Citation, commencement, extent and interpretation

1.—(1) This Order may be cited as the Greenhouse Gas Emissions Trading Scheme (Amendment) (Extension to Maritime Activities) Order 2026 and comes into force on 1st July 2026.

(2) This Order extends to the whole of the United Kingdom.

(3) In this Order references to the “2020 Order” are to the Greenhouse Gas Emissions Trading Scheme Order 2020(a).

Amendments to the 2020 Order

2. The 2020 Order is amended as follows.

Insertion of Part 4ZA

3. After Part 4 (Aviation) insert—

“PART 4ZA

Maritime

Application of the Order to maritime

34ZA. Schedule 2A has effect.”

Insertion of Schedule 2A into the 2020 Order

4. Schedule 1, which inserts Schedule 2A into the 2020 Order, has effect.

Amendments consequential on the insertion of Part 4ZA and Schedule 2A into the 2020 Order

5. Schedule 2, which makes further amendments to the 2020 Order consequential on those made by articles 3 and 4, has effect.

6. Schedule 3, which makes amendments to the Greenhouse Gas Emissions Trading Scheme Auctioning Regulations 2021(b) consequential on those made by articles 3 and 4, has effect.

Name
Clerk of the Privy Council

SCHEDULE 1

Article 4

APPLICATION OF THE 2020 ORDER TO MARITIME ACTIVITIES

After Schedule 2 of the 2020 Order insert—

(a) S.I. 2020/1265, amended by S.I. 2020/1557, S.I. 2021/1455, S.I. 2022/454, S.I. 2022/1173, S.I. 2023/850, S.I. 2023/1267, S.I. 2023/1387, S.I. 2024/192, S.I. 2024/1366, S.I. 2025/100 and S.I. 2025/124.
(b) S.I. 2021/484, amended by S.I. 2021/513, S.I. 2021/561, S.I. 2021/917, S.I. 2023/994 and S.I. 2024/1366.

“SCHEDULE 2A

Article 34ZA

MARITIME

PART 1

PRELIMINARY

Introductory

1. The UK ETS applies to maritime activities as set out in this Schedule.

Interpretation

- 2.—(1) In this Schedule—

“annual emissions report” is to be interpreted in accordance with paragraph 14(1);

“BDN” means bunker delivery note;

“control activities” means any acts carried out or measures implemented by the maritime operator to mitigate inherent risks;

“control risk” means the susceptibility of a parameter in the annual emissions report to misstatements that could be material, individually or when taken together with other misstatements, and will not be prevented or detected and corrected on a timely basis by the control system;

“control system” means the maritime operator’s risk assessment and entire set of control activities, including its continuous management, that a maritime operator has established, documented, implemented and maintained in line with Part 5 and its emissions monitoring plan;

“emission factor” means the average emission rate of a greenhouse gas relative to the activity data of a source stream, assuming complete oxidation for combustion and complete conversion for all other chemical reactions;

“greenhouse gas” means carbon dioxide (CO₂), nitrous oxide (N₂O) or methane (CH₄);

“in-port activity” is to be interpreted in accordance with paragraph 7(3);

“ISM Code” means the International Management Code for the Safe Operation of Ships and for Pollution Prevention adopted by the International Maritime Organization by Assembly Resolution A.741(18) (as amended);

“ISM company” means—

- (a) where a person who is not the registered owner of a ship has assumed responsibility for the operation of the ship and has agreed with the registered owner to take over all the duties and responsibilities imposed by the ISM Code, that person; or

- (b) in all other cases, the registered owner of the ship;

“offshore installation” means a structure, floating or fixed, used to support offshore industrial activities including those related to exploration and exploitation of resources by the renewable or hydrocarbon energy sector, aquaculture, ocean mining or similar activities;

“offshore ship” means the following ships certified to perform activities offshore or at offshore installations—

- (a) accommodation ship;
- (b) anchor handling tug supply ship;
- (c) cable layer;

- (d) cable repair ship;
- (e) commissioning service operation vessel;
- (f) crew or supply vessel;
- (g) diving support vessel;
- (h) dredger;
- (i) drilling ship;
- (j) floating production storage and offloading of oil;
- (k) floating storage and offloading of gas;
- (l) floating storage and offloading of oil;
- (m) gas processing vessel;
- (n) hopper dredger;
- (o) mining vessel;
- (p) offshore construction vessel;
- (q) offshore supply ship;
- (r) offshore support vessel;
- (s) pipe burying vessel;
- (t) pipe carrier;
- (u) pipe layer;
- (v) pipe layer crane vessel;
- (w) platform supply ship;
- (x) production testing vessel;
- (y) research survey vessel;
- (z) service operation vessel;
- (aa) standby safety vessel;
- (ab) trenching support vessel;
- (ac) well stimulation vessel;
- (ad) wind turbine installation vessel;
- (ae) work or repair vessel;

“port of call” is to be interpreted in accordance with paragraph 6;

“registered owner” means in relation to a ship the person named as the owner on the certificate of registry issued by the authority responsible for the registration of ships in the country of primary registration;

“ship” is to be interpreted in accordance with paragraph 5(2);

“uncertainty” means a parameter, associated with the result of the determination of a quantity, that characterises the dispersion of the values that could reasonably be attributed to the particular quantity, including the effects of systematic as well as of random factors, expressed as a percentage, and describes a confidence interval around the mean value comprising 95 % of inferred values taking into account any asymmetry of the distribution of values;

“verification” means the activities carried out by a verifier to issue a verification report pursuant to Part 8;

“verifier” means a legal person—

- (a) carrying out verification activities pursuant to Part 8; and
- (b) accredited by the national accreditation body pursuant to Part 8 at the time a verification report is issued.

“voyage” is to be interpreted in accordance with paragraph 7(2).

PART 2

KEY CONCEPTS AND OBLIGATIONS

Meaning of “maritime operator”

3.—(1) In this Order, a person is a maritime operator in relation to a scheme year, where in respect of that year that person—

- (a) performs a maritime activity in a ship; and
- (b) in respect of that ship is—
 - (i) unless sub-paragraph (2) applies, its registered owner; or
 - (ii) where sub-paragraph (2) applies, its ISM company.

(2) This sub-paragraph applies if—

- (a) the registered owner of that ship is not its ISM company;
- (b) that ship’s ISM company has agreed in writing with the registered owner of the ship that the ISM company is responsible for complying with the obligations that would otherwise be imposed by or under this Order on the registered owner of the ship as its maritime operator if this sub-paragraph did not apply to the ship;
- (c) evidence of that agreement has been provided to the satisfaction of the regulator; and
- (d) no notice has been given under paragraph 4(1) which relates to a change in the written agreement to the effect that that ISM company is no longer responsible for complying with the obligations imposed by or under this Order.

(3) Where the person that performed a maritime activity is not known, the registered owner will be deemed to have performed that maritime activity.

Notification of change of responsibility

4.—(1) An ISM company that has assumed responsibility for obligations imposed by or under this Order in accordance with paragraph 3(2)(b), must notify the regulator in writing where there is a change to its written agreement with the registered owner of a ship that affects its responsibility for compliance with those obligations.

(2) A notification under sub-paragraph (1) must be made within 14 days of the change to the written agreement taking effect.

Ships to which this Schedule applies

5.—(1) This Schedule applies to a ship of a gross tonnage of 5000 or more calculated in accordance with the tonnage determination regulations contained in Annex I to the International Convention on Tonnage Measurement of Ships, adopted by the International Maritime Organization (IMO) in London on 23rd June 1969, except—

- (a) a ship in the armed services of the United Kingdom or another country (including a naval auxiliary ship);
- (b) a ship, the principal use of which is for law enforcement (for example for border enforcement purposes or for customs purposes);
- (c) a ship, the principal use of which is for government surveillance and protection of the marine environment;
- (d) a ship, the principal use of which is for assisting marine navigation or safe passage;
- (e) a ship, the principal use of which is for fish-catching and fish processing;

- (f) a ship, the principal use of which is to carry out, or facilitate the carrying out of, publicly funded research;
- (g) a ship, the principal use of which is to undertake coastguard or search and rescue activities;
- (h) a ship, the principal use of which is responding to medical emergencies;
- (i) a ship exclusively propelled by non-mechanical means;
- (j) a wooden ship of a primitive build;
- (k) a ship that operates a Scottish ferry service;
- (l) up to and including 31st December 2026, an offshore ship.

(2) In this Order, “ship” means, except in sub-paragraph (1), a ship to which this Order applies by virtue of that sub-paragraph.

(3) In this paragraph, “Scottish ferry service” means a transport service by water that—

- (a) ordinarily carries passengers;
- (b) operates between two or more points in Scotland where the route for the transport service crosses through (in whole or in part) the Scottish marine region for—
 - (i) the Solway;
 - (ii) the Clyde;
 - (iii) Argyll;
 - (iv) the West Highlands;
 - (v) the Outer Hebrides
 - (vi) the North Coast;
 - (vii) the Orkney Islands;
 - (viii) the Shetland Isles;
 - (ix) the Moray Firth; and
- (c) operates either—
 - (i) according to a published timetable; or
 - (ii) with crossings so regular or frequent that they constitute a recognisable systematic series.

(4) Sub-paragraph (3)(b)(i) to (ix) is to be interpreted in accordance with the Scottish Marine Regions Order 2015(a).

Meaning of “port of call”

6.—(1) In this Schedule, except where sub-paragraph (2) applies, the expression “port of call” means any port that a ship arrives or is present at and at which—

- (a) passengers or crew embark, or disembark, that ship; or
- (b) cargo is loaded onto, or unloaded from, that ship.

(2) This sub-paragraph applies where a ship arrives or is present at a port and—

- (a) arrival or presence at the port is exclusively for the purpose of—
 - (i) refuelling the ship;
 - (ii) obtaining supplies in connection with the operation of the ship;
 - (iii) relieving the ship’s crew, other than relieving of crew of an offshore ship;
 - (iv) going into dry dock;
 - (v) obtaining repairs to the ship or its equipment;

(a) S.I. 2015/193.

- (vi) sheltering from adverse weather conditions;
- (vii) obtaining assistance where the ship is in distress; or
- (b) arrival or presence at the port is rendered necessary as a result of—
 - (i) a medical emergency;
 - (ii) search and rescue activities;
 - (iii) the provision of assistance to a ship in distress.

(3) In this paragraph, a port includes an offshore installation that has an assigned United Nations Code for Trade and Transport Locations (UN/LOCODE) at the date this Order is made^(a).

Meaning of “maritime activity”

7.—(1) In this Order, a “maritime activity” consists of the following—

- (a) a voyage, as defined in sub-paragraph (2);
- (b) an in-port activity, as defined in sub-paragraph (3).

(2) A “voyage” means any movement of a ship that—

- (a) commences at the last berth at a port of call within the United Kingdom’s jurisdiction;
- (b) ends at the first berth at that port of call or another port of call within the United Kingdom’s jurisdiction;
- (c) does not arrive at a port of call outside the United Kingdom’s jurisdiction; and
- (d) is not an excluded activity.

(3) An “in-port activity” consists of the following but does not include an excluded activity—

- (a) movements of a ship within a port of call within the United Kingdom’s jurisdiction that do not form part of a voyage; and
- (b) a ship being at berth at a port of call within the United Kingdom’s jurisdiction.

(4) In this paragraph—

“at berth” means, in relation to a ship, being securely moored or anchored in a port while that ship is loading, unloading or hotelling, including the time spent when not engaged in cargo operations;

“excluded activity” means a voyage or an in-port activity that is excluded pursuant to paragraph 8.

Excluded activities

8.—(1) For the purposes of this Order, an activity is excluded if performed for the exclusive purpose of—

- (a) the transport, on official mission, of—
 - (i) a reigning monarch and their immediate family, or head of state, of a country other than the United Kingdom;
 - (ii) a minister of a national government of a country other than the United Kingdom;
- (b) military activities;

(a) A list of UN/LOCODE Codes at the time the Order is made can be accessed at <https://www.gov.uk/government/publications/offshore-installations-with-a-un-code-for-trade-and-transport-locations-unlocode>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

- (c) search and rescue;
- (d) firefighting;
- (e) providing humanitarian aid or assistance;
- (f) carrying out a government function not otherwise falling within the activities listed above.

(2) In this paragraph—

“humanitarian aid or assistance” means activities performed for humanitarian purposes which transport relief personnel and relief supplies such as food, clothing, shelter, medical and other items during or after an emergency or disaster, or are used to evacuate persons from a place where their life or health is threatened by such emergency or disaster to a safe haven;

“immediate family” means, in relation to a person, their spouse or their partner where equivalent to a spouse, their children and parents;

“search and rescue” includes the performance of distress monitoring, communication, coordination and search and rescue functions, initial medical assistance or medical evacuation, through the use of public and private resources, including cooperating aircraft, ships and other craft and installations.

Applications for emissions monitoring plans

9.—(1) A maritime operator must, and any other person may, apply to the regulator for a plan setting out how the applicant’s maritime emissions are to be monitored for the purposes of this Order (“an emissions monitoring plan”).

(2) A maritime operator must comply with the requirement in sub-paragraph (1) before the end of the period of 42 days commencing with the day it performs its first maritime activity.

(3) An application under sub-paragraph (1) must include the information required for inclusion in the emissions monitoring plan in accordance with Parts 3 to 5.

Issue of emissions monitoring plans

10.—(1) If a maritime operator or other person applies for an emissions monitoring plan in accordance with paragraph 9, the regulator must issue the emissions monitoring plan unless—

- (a) the regulator is not satisfied that the application includes the information required for inclusion in the emissions monitoring plan in accordance with Parts 3 to 5; and
- (b) the applicant has not agreed to amendments of the application required to satisfy the regulator that the application does so comply.

(2) The regulator may include any condition that the regulator considers necessary to give proper effect to this Order.

Refusal of application for emissions monitoring plans

11.—(1) If the regulator refuses an application for an emissions monitoring plan the regulator must give notice to the applicant.

(2) A notice under sub-paragraph (1) must state—

- (a) the reasons for the decision; and
- (b) if amendments of the application are required in order for an emissions monitoring plan to be issued, the nature of those amendments.

(3) A maritime operator who is given a notice under sub-paragraph (1) must make a revised application to the regulator before the end of the period of 31 days beginning with the day that the notice was given.

(4) Paragraph 10 and this paragraph apply to a revised application to which sub-paragraph (5) applies as they apply to the original application, but for the purposes of such a revised application, the references to the period of 2 months in paragraph 2 of Schedule 3 are to be read as references to a period of 24 days.

(5) This paragraph applies to—

- (a) a revised application under sub-paragraph (3);
- (b) where the regulator refuses an application for an emissions monitoring plan by a person who is not a maritime operator, a revised application made by the person before the end of the period of 31 days beginning with the day on which the notice under sub-paragraph (1) is given.

Variation of emissions monitoring plans

12.—(1) A maritime operator—

- (a) may apply to the regulator to vary its emissions monitoring plan;
- (b) must apply to the regulator to vary its emissions monitoring plan where required to do so by a condition of the emissions monitoring plan.

(2) A variation applied for under sub-paragraph (1) is given effect by the regulator giving notice to the maritime operator.

(3) Sub-paragraphs (1) and (2) do not affect the operation of any condition of an emissions monitoring plan that allows a maritime operator to make a variation without applying to the regulator.

(4) The regulator may, by giving notice to a maritime operator, make any variation of the maritime operator's emissions monitoring plan that the regulator considers necessary in consequence of a report made by the maritime operator under paragraph 26.

(5) The regulator may, by giving notice to a maritime operator, vary the maritime operator's emissions monitoring plan where the maritime operator has failed to comply with a requirement in the emissions monitoring plan to make or apply for such a variation.

(6) The regulator may, by giving notice to a maritime operator, vary the maritime operator's emissions monitoring plan by modifying, adding or removing a condition if the regulator considers it necessary to do so to give proper effect to this Order.

(7) In this paragraph references to a maritime operator include any person who has been issued with an emissions monitoring plan.

Monitoring of emissions and emissions monitoring plan condition

13.—(1) Each maritime operator must monitor its maritime emissions in accordance with—

- (a) the requirements of Part 4;
- (b) the emissions monitoring plan issued to the person under paragraph 10.

(2) Each maritime operator must comply with any condition included in its emissions monitoring plan under paragraph 10(2) or 12(6).

Reporting of emissions

14.—(1) A person who is a maritime operator in relation to a scheme year must prepare a report of its maritime emissions for that scheme year (an “annual emissions report”) in accordance with—

- (a) the requirements of Part 7;
- (b) the emissions monitoring plan issued to the person under paragraph 10.

(2) The annual emissions report must be verified as satisfactory in accordance with the requirements of Part 8.

(3) The annual emissions report and the verification report must be submitted to the regulator by the maritime operator on or before 31st March in the year following the scheme year to which it relates.

(4) Where a voyage commences in one scheme year but ends in another scheme year, the respective emissions must be accounted for under the scheme year in which they occurred.

Surrender of allowances by maritime operators

15.—(1) A person who is a maritime operator in relation to a scheme year must surrender an amount of allowances equal to—

- (a) 50% of its maritime emissions arising in that scheme year (expressed in tonnes of carbon dioxide equivalent) from voyages—
 - (i) starting at a port of call in Northern Ireland and ending at a port of call in Great Britain;
 - (ii) starting at a port of call in Great Britain and ending at a port of call in Northern Ireland;
- (b) 100% of maritime emissions arising in that scheme year (expressed in tonnes of carbon dioxide equivalent) from any other maritime activity.

(2) The obligation to surrender referred to in sub-paragraph (1) must be satisfied—

- (a) on or before 30th April 2028 in relation to maritime emissions in the 2026 scheme year;
- (b) in relation to maritime emissions in any other scheme year, on or before 30th April in the following year.

Maritime monitoring and reporting principles

16. A maritime operator must carry out their obligations relating to monitoring and reporting of maritime emissions under this Order in accordance with the following principles—

- (a) a maritime operator must determine emissions using the appropriate monitoring methodology set out in Part 4;
- (b) monitoring and reporting must be complete and cover all maritime emissions;
- (c) a maritime operator must apply appropriate measures to prevent any data gaps within the scheme year;
- (d) monitoring and reporting must be consistent and comparable over time and, to that end, a maritime operator must use the same monitoring methodologies and data sets subject to variations approved by the regulator;
- (e) a maritime operator must obtain, record, compile, analyse and document monitoring data, including assumptions, references, emission factors and activity data, in a transparent manner that enables the reproduction of the determination of maritime emissions by the verifier and the regulator;
- (f) a maritime operator must ensure that the determination of maritime emissions is neither systematically nor knowingly inaccurate, and must identify and reduce any source of inaccuracies;
- (g) a maritime operator must enable reasonable assurance of the integrity of the maritime emission data to be monitored and reported;
- (h) a maritime operator must exercise due diligence to ensure that the calculation and measurement of maritime emissions are of the highest achievable accuracy;
- (i) a maritime operator must endeavour to take account of the recommendations included in the verification reports issued under paragraph 59 in their subsequent monitoring and reporting.

PART 3

CONTENTS OF THE EMISSIONS MONITORING PLAN

17.—(1) An emissions monitoring plan must contain the following information—

- (a) the name of the emissions monitoring plan holder;
- (b) details of a contact person;
- (c) the IMO unique company and registered owner identification number;
- (d) a description of the procedures used to monitor voyages and in-port activities;
- (e) a description of the procedures for monitoring fuel consumption, including—
 - (i) the procedures for the measurement of fuel uplifts and fuel in tanks;
 - (ii) the procedures for recording, retrieving, transmitting and storing information regarding measurements, as applicable;
 - (iii) a procedure to ensure that the total uncertainty of fuel measurements is consistent with the requirements of this Schedule;
 - (iv) details of the procedures, systems and responsibilities used to determine and update emission factors;
 - (v) a description of the method to be used to determine surrogate data for closing data gaps;
 - (vi) a procedure for the collection and recording of information required to support an emissions reduction claim including details of fuel type, purchase, delivery, sustainability criteria and avoidance of double counting;
- (f) in respect of each ship in which the emissions monitoring plan holder is performing or intends to perform maritime activities—
 - (i) the name of the ship;
 - (ii) the IMO ship identification number;
 - (iii) the type of ship;
 - (iv) the flag state;
 - (v) the gross tonnage;
 - (vi) where the emissions monitoring plan holder is the bareboat charterer of the ship, the state of registration of that bareboat charter;
 - (vii) a description of the emission sources on board the ship including any main engines, auxiliary engines, gas turbines, boilers and inert gas generators, and the fuel types used;
 - (viii) which of the monitoring methods A, B, C or D referred to in paragraph 21 is to be used (or which combination of those methods where more than one is used);
 - (ix) where applicable, the method chosen for the determination of density of fuel used;
 - (x) a description of the measuring equipment used;
 - (xi) single emission factors used for each fuel type;
 - (xii) details of any procedure for the ship that differ from the generic procedures the emissions monitoring plan holder set out in paragraphs (d) and (e);
- (g) a description of the procedures, systems and responsibilities used to manage and update the list of ships and emission sources on them.

(2) An emissions monitoring plan holder must check regularly, and at least annually, whether their emissions monitoring plan reflects the nature and functioning of their operations and whether the monitoring methodology can be improved.

PART 4

MONITORING ARRANGEMENTS

Monitoring on a per-voyage basis

18. Except where paragraph 19 applies, a maritime operator must monitor the following for each voyage—

- (a) port of departure;
- (b) date and hour of departure;
- (c) port of arrival;
- (d) date and hour of arrival;
- (e) total amount of each type of fuel consumed;
- (f) emission factor for each type of fuel consumed;
- (g) amount of each greenhouse gas emitted.

Simplified monitoring for voyages

19.—(1) Where this paragraph applies in respect of a ship, a maritime operator is not required to monitor on a per-voyage basis for that ship, and instead may monitor the following for the scheme year—

- (a) the number of voyages;
- (b) total amount of each type of fuel consumed;
- (c) emission factor for each type of fuel consumed;
- (d) amount of each greenhouse gas emitted.

(2) This paragraph applies where, in a scheme year, that ship—

- (a) is scheduled to perform more than 300 voyages while under the responsibility of the maritime operator; and
- (b) does not perform any journey that is not a voyage for the purpose of this Schedule.

Monitoring in-port activities

20. A maritime operator must monitor the following relating to its in-port activities—

- (a) total amount of each type of fuel consumed;
- (b) emission factor for each type of fuel consumed;
- (c) amount of each greenhouse gas emitted.

Monitoring methods for maritime emissions

21.—(1) The maritime operator must indicate in the emissions monitoring plan which monitoring method is to be used to determine the maritime emissions for each ship under its responsibility and ensure that once a method has been chosen, it is consistently applied.

(2) The methods A, B, C and D described in paragraphs 22 to 25, based on the calculation approach or the measurement approach, can be used.

(3) Under the calculation approach (methods A, B and C), maritime emissions must be calculated using the formulae set out in Part 6. For that purpose, the actual fuel consumption for each voyage must be determined using any of methods A, B or C described in paragraphs 22 to 24 and used for the purpose of the calculation.

(4) Sources of uncertainty and associated levels of uncertainty must be considered when selecting any of methods A, B or C. The maritime operator must regularly perform suitable control activities, including cross-checks between the bunkering quantity as provided by the

BDN and the bunkering quantity indicated by on-board measurement, and take corrective action if a notable deviation is observed.

(5) Under the measurement approach (method D), direct maritime emissions measurements are used.

(6) Any combination of methods A, B, C and D, once approved by the regulator, may be used if it enhances the overall accuracy of the measurement.

(7) Where the term ‘relevant’ is used in relation to fuels or emission sources in paragraphs 22 to 25, this means the fuel or emission source for which the method has been selected.

Method A: BDN and periodic stocktakes of fuel tanks

22.—(1) In this Schedule, a reference to method A is to be construed in accordance with this paragraph.

(2) This method is based on the quantity and type of fuel as indicated on the BDN combined with periodic stocktakes of fuel tanks based on tank readings. The fuel at the beginning of the period, plus deliveries, minus fuel available at the end of the period and de-bunkered fuel between the beginning of the period and the end of the period together constitute the fuel consumed over the period.

(3) The period means the time between two port calls or time within a port. For the fuel used during a period, the fuel type and the sulphur content need to be specified.

(4) This method must not be used when BDN are not available on board ships, especially when cargo is used as a fuel, for example, liquefied natural gas (LNG) boil-off.

(5) The periodic stocktake of fuel tanks on board is based on fuel tank readings. It uses tank tables relevant to each fuel tank to determine the volume at the time of the fuel tank reading. The uncertainty associated with the BDN must be specified in the emissions monitoring plan. Fuel tank readings must be carried out by appropriate methods such as automated systems, soundings and dip tapes. The method for tank sounding and uncertainty associated must be specified in the emissions monitoring plan.

(6) Where the amount of fuel uplift or the amount of fuel remaining in the tanks is determined in units of volume, expressed in cubic meters, the maritime operator must convert that amount from volume to mass by using actual density values.

(7) For the purpose of sub-paragraph (6), the maritime operator must determine the actual density by using one of the following—

- (a) on-board measurement systems;
- (b) the density measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or BDN;
- (c) the density measured in a test analysis conducted in a fuel test laboratory, accredited in accordance with EN ISO/IEC 17025(a) as updated from time to time, where available.

(8) The actual density must be expressed in kg/cubic meter and determined for the applicable temperature for a specific measurement. In cases for which actual density values are not available, a standard density factor for the relevant fuel type must be applied.

Method B: Bunker fuel tank monitoring on board

23.—(1) In this Schedule, a reference to method B is to be construed in accordance with this paragraph.

(a) ISO/IEC 17025 sets out the general requirements for the competence of testing and calibration laboratories. It can be accessed at <https://www.iso.org/standard/66912.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

(2) This method is based on fuel tank readings for all fuel tanks on board. The tank readings must occur daily when the ship is at sea and each time the ship is bunkering or de-bunkering.

(3) The cumulative variations of the fuel tank level between two readings constitute the fuel consumed over the period.

(4) The period means the time between two port calls or time within a port. For the fuel used during a period, the fuel type and the sulphur content need to be specified.

(5) Fuel tank readings must be carried out by appropriate methods such as automated systems, soundings and dip tapes. The method for tank sounding and uncertainty associated must be specified in the emissions monitoring plan.

(6) Where the amount of fuel uplift or the amount of fuel remaining in the tanks is determined in units of volume, expressed in cubic meters, the maritime operator must convert that amount from volume to mass by using actual density values.

(7) For the purpose of sub-paragraph (6), the maritime operator must determine the actual density by using one of the following—

- (a) on-board measurement systems;
- (b) the density measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or BDN;
- (c) the density measured in a test analysis conducted in a fuel test laboratory, accredited in accordance with EN ISO/IEC 17025 as updated from time to time, where available.

(8) The actual density must be expressed in kg/cubic meter and determined for the applicable temperature for a specific measurement. In cases for which actual density values are not available, a standard density factor for the relevant fuel type must be applied.

Method C: Flow meters for applicable combustion processes

24.—(1) In this Schedule, a reference to method C is to be construed in accordance with this paragraph.

(2) This method is based on measured fuel flows on board. The data from all flow meters linked to relevant maritime emission sources must be combined to determine all fuel consumption for a specific period.

(3) The period means the time between two port calls or time within a port. For the fuel used during a period, the fuel type and the sulphur content need to be monitored.

(4) The calibration methods applied and the uncertainty associated with flow meters used must be specified in the emissions monitoring plan.

(5) Where the amount of fuel consumed is determined in units of volume, expressed in cubic meters, the maritime operator must convert that amount from volume to mass by using actual density values.

(6) For the purpose of sub-paragraph (5), the maritime operator must determine the actual density by using one of the following—

- (a) on-board measurement systems;
- (b) the density measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or BDN;
- (c) the density measured in a test analysis conducted in a fuel test laboratory, accredited in accordance with EN ISO/IEC 17025 as updated from time to time, where available.

(7) The actual density must be expressed in kg/cubic meter and determined for the applicable temperature for a specific measurement. In cases for which actual density values are not available, a standard density factor for the relevant fuel type must be applied.

Method D: Direct maritime emissions measurement

25.—(1) In this Schedule, a reference to method D is to be construed in accordance with this paragraph.

(2) The direct maritime emissions measurements may be used for voyages and in-port activities. For ships for which CO₂ reporting is based on this method applied to all emission sources on board the ship, the fuel consumption must be calculated using the measured CO₂ emissions and the applicable emission factors of the relevant fuels and emission sources.

(3) This method is based on the determination of maritime emissions flows in exhaust gas stacks (funnels) by multiplying the greenhouse gas concentrations of the exhaust gas with the exhaust gas flow.

(4) The application of this method to determine emissions of one greenhouse gas does not prevent a maritime operator from applying any other monitoring method described in paragraphs 22 to 24 to monitor any other greenhouse gas.

(5) The calibration methods applied and the uncertainty associated with the devices used must be specified in the emissions monitoring plan.

Reporting on improvement to the monitoring methodology

26.—(1) Where the verification report states outstanding non-conformities or recommendations for improvements, in accordance with paragraph 59, the maritime operator must submit to the regulator for approval a report by 30th June of the year in which that verification report is issued by the verifier (the “improvement report”).

(2) Except where sub-paragraphs (4) or (5) apply, that improvement report must describe how and when the maritime operator has rectified or plans to rectify the non-conformities identified by the verifier and to implement recommended improvements.

(3) The regulator may set an alternative date for submission of the improvement report, but no later date than 30th September of the same year.

(4) Where recommended improvements would not lead to an improvement of the monitoring methodology, the maritime operator must provide a justification of why that is the case.

(5) Where the recommended improvements would incur unreasonable costs, the maritime operator must provide evidence of the unreasonable nature of the costs.

(6) Sub-paragraphs (1) to (5) do not apply where the maritime operator has already resolved all non-conformities and recommendations for improvement and has submitted an application to vary its emissions monitoring plan to the regulator in accordance with paragraph 12 before the date set pursuant to sub-paragraph (1).

PART 5

DATA MANAGEMENT AND CONTROL

Control system

27.—(1) The maritime operator must—

- (a) carry out a risk assessment to identify sources of risks of errors in the data flow from primary data to final data in the annual emissions report;
- (b) establish, document, implement and maintain an effective control system to ensure that any reports resulting from data flow activities—
 - (i) do not contain misstatements;
 - (ii) are in conformity with the emissions monitoring plan;
 - (iii) comply with this Schedule;

- (c) make the risk assessment referred to in paragraph (a) available—
 - (i) to the regulator upon request;
 - (ii) for the purposes of verification.
- (2) For the purposes of sub-paragraph (1), the maritime operator must—
 - (a) establish, document, implement and maintain written procedures, separately from the emissions monitoring plan, for data flow activities as well as for control activities;
 - (b) include references to and a description of those procedures in the emissions monitoring plan;
 - (c) make any written documentation of the procedures available—
 - (i) to the regulator upon request;
 - (ii) for the purposes of verification.
- (3) Control activities referred to in sub-paragraph (2) include, where applicable—
 - (a) quality assurance of the relevant measurement equipment;
 - (b) quality assurance of information technology systems ensuring that the relevant systems are designed, documented, tested, implemented, controlled and maintained in a way that ensures processing reliable, accurate and timely data in accordance with the risks identified in accordance with sub-paragraph (1);
 - (c) segregation of duties in the data flow activities and control activities, as well as management of necessary competencies;
 - (d) internal reviews and validation of data;
 - (e) corrections and corrective action;
 - (f) control of out-sourced processes;
 - (g) keeping records and documentation including the management of document versions.

Quality assurance of relevant measurement equipment

28.—(1) For the purposes of paragraph 27(3)(a) the maritime operator must ensure that all relevant measuring equipment is—

- (a) calibrated, adjusted and checked at regular intervals including prior to use;
- (b) checked against measurement standards traceable to international measurement standards, where available, and proportionate to the risks identified.

(2) Where components of the measuring systems cannot be calibrated, the maritime operator must—

- (a) identify those components in the emissions monitoring plan;
- (b) propose alternative control activities.

(3) When the equipment is found not to comply with the performance requirements, the maritime operator must promptly take necessary corrective action.

Internal reviews and validation of data

29. For the purposes of paragraph 27(3)(d), the maritime operator must review and validate data resulting from the data flow activities referred to in paragraph 27(2) and must include the following—

- (a) a check as to whether the data are complete;
- (b) a comparison of the data that the maritime operator has obtained, monitored and reported over several years;

- (c) a comparison of data and values resulting from different monitoring methods when more than one monitoring method is applied.

Corrections and corrective action

30. For the purposes of paragraph 27(3)(e), the maritime operator must ensure that corrective action is taken and affected data is corrected without undue delay where data flow activities or control activities are found not to function effectively, or not to respect the rules set in the documentation of procedures for those activities.

Control of out-sourced processes

31. For the purposes of paragraph 27(3)(f), where the maritime operator outsources one or more data flow activities or control activities referred to in paragraph 27(1), it must—

- (a) check the quality of the outsourced data flow activities and control activities in accordance with this Schedule;
- (b) indicate appropriate requirements for the outputs of the outsourced processes as well as the methods used in those processes;
- (c) check the quality of the outputs and methods referred to in sub-paragraph (b);
- (d) ensure that the outsourced activities are carried out in such a manner that those are responsive to the inherent risks and control risks identified in the risk assessment referred to in paragraph 27(1).

Effectiveness of control system

32.—(1) The maritime operator must monitor the effectiveness of the control system including by—

- (a) carrying out internal reviews;
- (b) taking into account any relevant findings of the verifier during the verification of annual emissions report.

(2) When the maritime operator finds the control system ineffective or not commensurate with the risks identified, it must—

- (a) seek to improve the control system;
- (b) update the emissions monitoring plan or the underlying written procedures for data flow activities, risk assessments and control activities, as appropriate.

Data gaps

33.—(1) Where data relevant for the determination of a ship's maritime emissions for one or more voyages are missing, the maritime operator must use surrogate data calculated in accordance with the alternative method or methods indicated in the emissions monitoring plan.

(2) Where data relevant for the determination of a ship's maritime emissions for one or more voyages are missing, for which the emissions monitoring plan does not list alternative monitoring methods or alternative data sources for corroborating data or for closing the data gap, the maritime operator must use an appropriate estimation method for determining conservative surrogate data for the respective time period and missing parameter.

(3) Where, for technical reasons, it is temporarily not feasible to apply the approach to monitoring set out in the emissions monitoring plan, the maritime operator must—

- (a) apply a method based on alternative data sources listed in the emissions monitoring plan for the purpose of performing corroborative checks; or

- (b) if such an alternative is not contained in the emissions monitoring plan, an alternative method which provides surrogate data or a conservative estimation until the conditions for application of the emissions monitoring plan have been restored.
- (4) The maritime operator must take all necessary measures to achieve a prompt application of the emissions monitoring plan.
- (5) Where an estimation method is used in accordance with sub-paragraph (2), or where a temporary deviation from the emissions monitoring plan occurs in accordance with sub-paragraph (3), the maritime operator must without undue delay—
 - (a) develop a written procedure for avoiding this type of data gap in the future;
 - (b) vary the emissions monitoring plan.

Records and documentation

- 34.**—(1) The maritime operator must keep records of data and information in line with its emissions monitoring plan.
- (2) The documented and archived monitoring data must allow for the verification of the annual emissions reports.
- (3) Data reported by the maritime operator contained in an electronic reporting and data management system set up by the regulator may be considered to be retained by the maritime operator, if the maritime operator can access those data.
- (4) The maritime operator must ensure that relevant documents are available when and where they are needed to perform the data flow activities and control activities.
- (5) The maritime operator must, upon request, make those documents available to the regulator and to the verifier verifying the annual emissions report.

PART 6

CALCULATION OF MARITIME EMISSIONS

Formulae to be used when calculating maritime emissions

- 35.**—(1) For the purposes of calculating maritime emissions, a maritime operator must use the following formula—

$$ME_{ETS} = CO_2ETS + CH_4ETS \times GWP_{CH_4} + N_2O_{ETS} \times GWP_{N_2O}$$

- (2) In the application of the formula referred to in sub-paragraph (1)—
 - (a) a maritime operator must calculate CO₂ emissions by adding the CO₂ emissions of all fuels *i* used, applying the following formula—

$$CO_2ETS = \sum_i (M_i - M_{i,NC}) \times EF_{CO_2,i}$$

- (b) a maritime operator must calculate CH₄ emissions by adding the CH₄ emissions resulting from the combustion of all fuels *i* used together with the emissions caused by CH₄ slippage, applying the following formula—

$$CH_4ETS = \left[\sum_i (M_i - M_{i,NC}) \times EF_{CH_4,i} \right] + CH_4S$$

- (c) a maritime operator must calculate N₂O emissions by adding the N₂O emissions of all fuels *i* used applying the following formula—

$$N_2O_{ETS} = \sum_i (M_i - M_{i,NC}) \times EF_{N_2O,i}$$

(3) The terms used in the equations are to be interpreted in accordance with Table C1.

Table C1

Explanation of terms used in relation to the equations

<i>Term</i>	<i>Explanation</i>
ME _{ETS}	Maritime emissions to be reported under this Schedule, expressed in tonnes CO ₂ equivalent, where “CO ₂ equivalent” means the metric measure used to compute the emissions from CO ₂ , CH ₄ and N ₂ O on the basis of their global warming potential, by converting amounts of CH ₄ and N ₂ O to the equivalent amount of carbon dioxide with the same global warming potential.
CO ₂ ETS	Total aggregated CO ₂ emitted.
CH ₄ ETS	Total aggregated CH ₄ emitted.
N ₂ O _{ETS}	Total aggregated N ₂ O emitted.
GWP _{CH₄}	Global warming potential of CH ₄ over 100 years which is 28tCO _{2(e)} /tCH ₄ .
GWP _{N₂O}	Global warming potential of N ₂ O over 100 years which is 265tCO _{2(e)} /tN ₂ O.
i	Index corresponding to the fuels used on board the ship in the scheme year.
j	Index corresponding to emission sources on board the ship. For the purpose of this Schedule, the sources include the main engines, auxiliary engines, gas turbines, boilers and inert gas generators.
M _i	Fuel consumption, as total mass of the specific fuel i used (total for all emission sources).
M _{i,j}	Fuel consumption, as mass of the specific fuel i used in emission source j.
C _j	Tank to Wake emission factor of slipped fuel (slippage coefficient) as a percentage of the mass of the fuel i used by the emission source j [%]. C _j includes fugitive and slipped emissions. Fugitive and slipped emissions are emissions caused by the amount of fuel that does not reach the combustion chamber of the emission source or that is not consumed by the emission source because they are un-combusted, vented or leaked from the system.
M _{i,NC}	Total mass of fuel i not combusted but released into the atmosphere. For the purpose of determining such amount, a maritime operator must apply the following formula— $M_{i,NC} = \sum_i \sum_j M_{i,j} \times C_j / 100$
CH ₄ S	Amount of CH ₄ non combusted released into the atmosphere. For the purpose of determining such amount, a maritime operator must apply the following formula— $CH_4S = M_{i,NC}$
EF _{CO₂,i}	Tank to Wake CO ₂ emission factor by fuel i, as defined in Table C2.
EF _{CH₄,i}	Tank to Wake CH ₄ emission factor by fuel i, as defined in Table C2.
EF _{N₂O,i}	Tank to Wake N ₂ O emission factor by fuel i, as defined in Table

	C2.
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(4) For the purposes of calculating maritime emissions, fuel consumption must be calculated separately for—

- (a) voyages;
- (b) in-port activities.

Default values for emission factors

36.—(1) The default values, as contained in Table C2 below sub-paragraph (5), for emission factors for fuels and emission sources used on board the ship must be applied for the purpose of this Schedule.

(2) In Table C2—

“TBM” stands for “to be measured”;

“N/A” stands for “not available”;

“—” means “not applicable”.

(3) Where an entry in Table C2 indicates either TBM or N/A, the highest default value of the fuel class in the same column must be used. Where, for a particular fuel class, all entries in the same column indicate either TBM or N/A, the default value of the least favourable fossil fuel type must be used. This rule does not apply to column 6 where TBM or N/A refers to non-available values for the emission source.

(4) For non-fossil fuels not listed in Table C2, the maritime operator must determine the emission factors in accordance with Part 9.

(5) Where there is fuel blending, each fuel must be considered separately.

Table C2

Default emission factors

1	2	3	4	5	6
<i>Fuel class</i>	<i>Type of fuel</i>	EF_{CO_2} $\left[\frac{gCO_2}{gFuel} \right]$	EF_{CH_4} $\left[\frac{gCH_4}{gFuel} \right]$	EF_{N_2O} $\left[\frac{gN_2O}{gFuel} \right]$	<i>C_j as % of the mass of the fuel used by the emission source</i>
Fossil	HFO ISO 8217(a) Grades RME to RMK	3.114	0.00005	0.00018	—
	LFO ISO 8217 Grades RMA to RMD	3.151	0.00005	0.00018	—
	MDO MGO ISO 8217 Grades DMX to DMB	3.206	0.00005	0.00018	—
	LNG	2.750	0	0.00011	3.1 for LNG Otto (dual fuel)

(a) ISO 8217 (as updated from time to time) specifies marine fuels. It can be accessed <https://www.iso.org/standard/80579.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

					medium speed) 1.7 for LNG Otto (dual fuel slow speed) 0.2 for LNG Diesel (dual fuel slow speed) 2.6 for Lean- Burn Spark- Ignited (LBSI)
	LPG (Butane)	3.03	TBM	TBM	N/A
	LPG (Propane)	3.00	TBM	TBM	N/A
	H ₂ (fossil)	0	0	— for fuel cells TBM for Internal Combustion Engine (ICE)	—
	NH ₃ (fossil)	0	N/A	TBM	N/A
	Methanol (fossil)	1.375	TBM	TBM	—
Biofuels	Ethanol	1.913	TBM	TBM	—
	Bio-diesel	2.834	TBM	TBM	—
	Hydrotreated Vegetable Oil (HVO)	3.115	0.00005	0.00018	—
	Liquified Bio- methane as transport fuel (Bio-LNG)	2.750	0	0.00011	3.1 for LNG Otto (dual fuel medium speed) 1.7 for LNG Otto (dual fuel slow speed) 0.2 for LNG Diesel (dual fuel slow speed) 2.6 for Lean- Burn Spark- Ignited (LBSI)
	Bio-methanol	1.375	TBM	TBM	—
	Other	3.115	0.00005	0.00018	—
	Bio-H ₂	0	0	0 for fuel cells TBM for ICE	—
Renewable Fuels of Non- Biological Origin (RFNBO) – e-fuels	e-diesel	3.206	0.00005	0.00018	—
	e-methanol	1.375	TBM	TBM	—
	e-LNG	2.750	0	0.00011	3.1 for LNG Otto (dual fuel medium speed) 1.7 for LNG Otto (dual fuel slow speed)

					0.2 for LNG diesel (dual fuel slow speed) 2.6 for Lean-Burn Spark-Ignited (LBSI)
	e-H ₂	0	0	0 for fuel cells TBM for ICE	—
	e-NH ₃	0	N/A	TBM	N/A
	e-LPG	N/A	N/A	N/A	N/A
	e-DME	N/A	N/A	N/A	—
<p>Notes</p> <p>Column 1 identifies the class of the fuels.</p> <p>Column 2 identifies the name of the relevant types of fuel for each class.</p> <p>Column 3 contains the emission factor EF for carbon dioxide in gCO₂/gfuel.</p> <p>Column 4 contains the emission factor EF for methane in gCH₄/gfuel.</p> <p>Column 5 contains the emission factor EF for nitrous oxide in gN₂O/gfuel.</p> <p>Column 6 identifies the part of the fuel lost as fugitive and slipped emissions (C_j) measured as % of mass of fuel used by the specific emission source. For fuels such as LNG for which fugitive and slipped emissions exist, the amount of fugitive and slipped emissions as presented in the table is expressed in % of the mass of fuel used. The values of C_j in the table are calculated at 50% of the full engine load.</p>					

Emissions reduction claims

37.—(1) A person who is a maritime operator in relation to a scheme year may submit to the regulator an emissions reduction claim with respect to the carbon dioxide emissions from a fuel that—

- (a) is an eligible fuel in accordance with a direction given by the relevant national authority to the regulator under section 52 of the CCA 2008;
- (b) was purchased either—
 - (i) in the scheme year to which the emissions reduction claim relates, or
 - (ii) no more than three months before the start of the scheme year to which the emissions reduction claim relates;
- (c) has been delivered to a point of no return before 31st March in the year following the scheme year to which the emissions reduction claim relates;
- (d) has not been used by the person making the emissions reduction claim—
 - (i) to obtain an emissions reduction in the UK ETS in relation to another scheme year;
 - (ii) to obtain an emissions reduction or financial benefit in any scheme other than the UK ETS;
- (e) has not been sold to a third party.

(2) Where the conditions in sub-paragraphs (1)(a) to (e) are met, the emission factor of the eligible fuel is zero.

(3) An emissions reduction claim must be verified in accordance with Part 8.

(4) The amount of fuel in respect of which the person in sub-paragraph (1) may make an emissions reduction claim must not exceed the total amount of fuel used by that person in respect of its maritime activities in that scheme year.

PART 7

REPORTING REQUIREMENTS

Contents of the annual emissions report

38.—(1) The annual emissions report that a maritime operator is required to submit in accordance with paragraph 14 must contain the following information—

- (a) information relating to each ship whose emissions are being reported, including—
 - (i) the name of the ship;
 - (ii) the IMO ship identification number;
 - (iii) the flag state and the state of registration of the bareboat charter (if applicable);
 - (iv) information on each monitoring method used and the related level of uncertainty;
 - (v) total amount of each type of fuel consumed;
 - (vi) aggregated maritime emissions from all in-port activities;
 - (vii) aggregated maritime emissions from all voyages other than those in sub-paragraph (viii);
 - (viii) aggregated maritime emissions from all voyages between Great Britain and Northern Ireland;
 - (ix) total aggregated maritime emissions from all maritime activities;
- (b) total aggregated maritime emissions from all maritime activities performed by all ships whose emissions are being reported;
- (c) details of any emissions reduction claim arising from eligible fuels;
- (d) details of any applicable surrender deduction under paragraph 15(1)(a);
- (e) total maritime emissions less any surrender deduction.

(2) In this paragraph, “aggregated maritime emissions” means that data is separately provided for carbon dioxide, methane and nitrous oxide.

PART 8

VERIFICATION AND ACCREDITATION

CHAPTER 1

GENERAL PROVISIONS

Introductory

39. Verification of the maritime operator’s annual emissions report must be carried out in accordance with this Part.

Interpretation

40. In this Part—

“accreditation” means attestation by the national accreditation body that a verifier meets the requirements set by paragraph 67(2), and the requirements of this Part and is thus qualified to carry out the verification activities pursuant to this Part;

“analytical procedures” means the analysis of fluctuations and trends in the data including an analysis of the relationships that are inconsistent with other relevant information or that deviate from predicted amount;

“assessment team” means one or more assessors appointed by the national accreditation body to assess a verifier pursuant to this Part;

“assessor” means a person assigned by the national accreditation body to assess a verifier pursuant to this Part, individually or as part of an assessment team;

“competence” means the ability to apply knowledge and skills to carry out an activity;

“detection risk” means the risk of a verifier not detecting a material misstatement;

“independent reviewer” means a person assigned by the verifier specifically to carry out internal review activities, who belongs to the same entity but has not carried out any of the verification activities subject to review;

“inherent risk” means the susceptibility of a parameter in the annual emissions report to misstatements that could be material, individually or taken together, before taking into consideration the effect of any related control activities;

“internal verification documentation” means all internal documentation that a verifier has compiled to record documentary evidence and justification of activities carried out to verify an annual emissions report pursuant to this Part;

“lead assessor” means an assessor who is given overall responsibility for the assessment of a verifier pursuant to this Part;

“level of assurance” means the degree of assurance that the verifier provides on the verification report based on the objective of reducing the verification risk according to the circumstances of the verification engagement;

“material misstatement” means a misstatement that, in the opinion of the verifier, individually or when taken together with other misstatements, exceeds the materiality level or could affect the treatment of the maritime operator’s annual emissions report by the regulator;

“materiality level” means the quantitative threshold or cut-off point above which the verifier considers misstatements, individually or taken together, to be material;

“misstatement” means an omission, misrepresentation or error in the reported data, apart from the uncertainty permissible under this Part;

“national accreditation body” means the United Kingdom Accreditation Service^(a);

“non-conformity” means—

- (a) for the purpose of verifying an annual emissions report, one of the following—
 - (i) the maritime emissions and other relevant information are not reported in line with the monitoring methodology described in the emissions monitoring plan issued by the regulator;
 - (ii) the reported data do not fulfil the requirements under this Part;
- (b) for the purpose of accreditation, any act or omission by the verifier that is contrary to requirements under this Part;

“reasonable assurance” means a high but not absolute level of assurance, expressed positively in the verification opinion, as to whether the annual emissions report subject to verification is free of material misstatements;

(a) The United Kingdom Accreditation Service (UKAS) was appointed as the national accreditation body of the United Kingdom by regulation 3 of S.I. 2009/3155.

“site”, for the purposes of verifying the annual emissions report means a location where the monitoring process is defined and managed, including locations where relevant data and information are controlled and stored;

“technical expert” means a person who provides detailed knowledge and expertise on a specific matter as required for the performance of verification activities for the purposes of paragraphs 45 to 61 and accreditation activities for the purposes of paragraphs 71 to 88;

“UK ETS auditor” means an individual member of a verification team responsible for verifying an annual emissions report, other than the UK ETS lead auditor;

“UK ETS lead auditor” means a UK ETS auditor in charge of directing and supervising the verification team, who is responsible for performing and reporting on the verification of an annual emissions report;

“verification risk” means the risk (a function of inherent, control and detection risk) of the verifier expressing an inappropriate verification opinion when the annual emissions report is not free of material misstatements.

General obligations for the verifiers

41.—(1) The verifier must carry out the verification and the activities required by this Part with the aim of providing a verification report that concludes with reasonable assurance that the maritime operator’s annual emissions report is free from material misstatements.

(2) The verifier must plan and perform the verification with an attitude of professional scepticism, recognising that circumstances may exist that cause the information in the maritime operator’s annual emissions report to contain material misstatements.

(3) The verifier must carry out verification in the public interest and be independent of the maritime operator and the regulator.

(4) During the verification, the verifier must assess whether—

- (a) the maritime operator’s annual emissions report is complete and meets the requirements laid down in Part 7;
- (b) the maritime operator has acted in compliance with the requirements of the emissions monitoring plan issued by the regulator;
- (c) the data in the maritime operator’s annual emissions report are free from material misstatements;
- (d) information can be provided in support of the maritime operator’s data flow activities, control system and associated procedures to improve the performance of their monitoring and reporting.

(5) For the purpose of sub-paragraph (4)(c), the verifier must obtain clear and objective evidence from the maritime operator to support the reported aggregated maritime emissions, any surrender deduction under paragraph 15(1)(a), and any emissions reduction claim made pursuant to paragraph 37, taking into account all other information provided in the maritime operator’s annual emissions report.

(6) If the verifier discovers that a maritime operator is not complying with paragraphs 13 or 14 that irregularity must be included in the verification report.

(7) If the emissions monitoring plan has not been issued by the regulator, is incomplete or if significant variations have been made during the scheme year which have not been accordingly approved by the regulator, the verifier must advise the maritime operator to apply to the regulator for an emissions monitoring plan, or a variation to its emissions monitoring plan.

(8) Following the issue or variation of the emissions monitoring plan by the regulator, the verifier must continue, repeat or adapt the verification activities accordingly.

(9) If the emissions monitoring plan has not been issued or varied before the issue of the verification report, the verifier must report this in the verification report.

Presumption of conformity

42. A verifier that demonstrates conformity with the criteria laid down in ISO 14065:2020(a), in conjunction with ISO/IEC 17029:2019(b), will be presumed to comply with the requirements of paragraphs 43 to 70 of this Part in so far as the applicable standards cover those requirements.

CHAPTER 2

VERIFICATION OF ANNUAL EMISSIONS REPORTS

Pre-contractual obligations

43.—(1) Before accepting a verification engagement, a verifier must obtain a proper understanding of the maritime operator and assess whether it can undertake the verification.

(2) For this purpose the verifier must at least—

- (a) evaluate the risks involved to undertake the verification of the maritime operator's annual emissions report in accordance with this Part;
- (b) undertake a review of the information supplied by the maritime operator to determine the scope of the verification;
- (c) assess whether the engagement falls within the scope of its accreditation;
- (d) assess whether it has the competence, personnel and resources required to select a verification team capable of dealing with the complexity of the maritime operator's activities and fleet as well as whether it is capable of successfully completing the verification activities within the timeframe required;
- (e) assess whether it is capable of ensuring that the potential verification team at its disposal holds all the competence, and persons required to carry out verification activities for that specific maritime operator;
- (f) determine, for each verification engagement requested, the time allocation needed to properly carry out the verification.

(3) The maritime operator must provide the verifier with all relevant information that enables the verifier to carry out the activities referred to in sub-paragraph (2).

Time allocation

44.—(1) When determining the time allocation for a verification engagement referred to in paragraph 43(2)(f), the verifier must at least take into account—

- (a) the complexity of the maritime operator's activities and fleet;
- (b) the level of information and the complexity of the issued emissions monitoring plan;
- (c) the required materiality level;
- (d) the complexity and completeness of the data flow activities and the control system of the maritime operator;

-
- (a) ISO 14065:2020 specifies general principles and requirements for bodies validating and verifying environmental information. The document includes sector-specific requirements in addition to the requirements of ISO/IEC 17029:2019. It can be accessed at <https://www.iso.org/standard/74257.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.
 - (b) ISO/IEC 17029:2019 contains general principles and requirements for the competence, consistent operation and impartiality of bodies performing validation/verification as conformity assessment activities. It can be accessed at <https://www.iso.org/standard/29352.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

- (e) the location of information and data related to maritime emissions.
- (2) The verifier must ensure that the verification contract provides for the possibility for time to be charged in addition to the time agreed in the contract, where such additional time is found to be needed for the strategic analysis, risk analysis or other verification activities.
- (3) Situations where the additional time may be needed include the following—
 - (a) during the verification where the data flow activities, control activities or logistics of the maritime operator seem to be more complex than initially anticipated;
 - (b) where misstatements, non-conformities, insufficient data or errors in the data sets are identified by the verifier during the verification.
- (4) The verifier must record the time allocated in the internal verification documentation.

Information to be provided by maritime operators

45.—(1) A maritime operator must provide the verifier with the following supporting information prior to the strategic analysis and verification of the annual emissions report—

- (a) the latest version of the emissions monitoring plan as well as any other relevant versions of the emissions monitoring plan previously issued by the regulator;
 - (b) the annual emissions report for the scheme year to be verified;
 - (c) where applicable, a copy of the verified annual emissions report and verification report from the previous year, if the verification was not carried out by the same verifier;
 - (d) a description of the maritime operator's data flow activities;
 - (e) the maritime operator's risk assessment referred to in paragraph 27 and an outline of the overall control system;
 - (f) the procedures mentioned in the emissions monitoring plan issued by the regulator, including procedures for data flow activities and control activities;
 - (g) if the emissions monitoring plan was varied during the scheme year, a record of all those variations;
 - (h) all relevant correspondence with the regulator, in particular information related to the notification of variations of the emissions monitoring plan;
 - (i) where applicable, information on databases and data sources used for monitoring and reporting purposes;
 - (j) where applicable, the approval from the regulator for carrying out a virtual site visit pursuant to paragraph 55;
 - (k) a list of all ships in which the maritime operator carried out maritime activities;
 - (l) any other relevant information necessary for planning and carrying out the verification.
- (2) A maritime operator must provide the verifier with the following supporting information in relation to each ship listed in accordance with sub-paragraph (1)(k) prior to verification of the annual emissions report—
- (a) a list of all voyages carried out by the ship in question during the scheme year;
 - (b) where data gaps occurred during the scheme year—
 - (i) the number of voyages for which data gaps occurred, and the circumstances and reasons for such data gaps;
 - (ii) the estimation method for surrogate data applied as referred to in paragraph 33 and, where applicable, in the emissions monitoring plan;
 - (iii) the amount of emissions calculated based on surrogate data;
 - (c) copies of the ship's official logbook and of the oil record book (if separate);
 - (d) copies of bunkering documents;

- (e) copies of any relevant certificates concerning fuels for the purposes of determining emission factors in accordance with paragraph 36;
 - (f) copies of any relevant documentation supporting an emissions reduction claim made under paragraph 37.
- (3) If relevant to the monitoring method applied, the verifier may ask the maritime operator to provide—
- (a) an overview of the IT landscape showing the data-flow for the relevant ship, including information on databases and where data is held and processed;
 - (b) evidence of the maintenance of measurement equipment and flow meters;
 - (c) evidence of the accuracy of measurement equipment and flow meters;
 - (d) an extract of fuel consumption activity data from flow meters;
 - (e) copies of evidence of fuel tank meter readings;
 - (f) an extract of activity data from direct emissions measurement systems;
 - (g) any other information relevant to the verification of the annual emissions report.
- (4) If the verifier asks for any of the information in sub-paragraph (3), the maritime operator must provide that information.
- (5) Before the verifier issues the verification report, the maritime operator must provide it with the final authorised and internally validated annual emissions report.

Strategic analysis

- 46.**—(1) At the beginning of the verification, the verifier must assess the likely nature, scale and complexity of the verification tasks by carrying out a strategic analysis of all activities relevant to the maritime operator.
- (2) The verifier must collect and review the information needed to assess that the verification team is sufficiently competent to carry out the verification, to determine that the time allocation indicated in the contract has been set correctly and to ensure that it is able to conduct the necessary risk analysis.
- (3) The information referred to in sub-paragraph (2) must include—
- (a) the information referred to in paragraph 45;
 - (b) the information obtained from the verification in previous years, if the verifier is carrying out the verification for the same maritime operator;
 - (c) the required materiality level.
- (4) When reviewing the information referred to in sub-paragraph (3), the verifier must assess the following—
- (a) the size and nature of the maritime operator, the distribution of information in different locations as well as the number and type of maritime activities;
 - (b) the emissions monitoring plan issued by the regulator as well as the specifics of the monitoring methodology laid down in that emissions monitoring plan;
 - (c) the nature, scale and complexity of emission sources and source streams as well as the equipment and processes that have resulted in maritime emissions data, including the measurement equipment described in the emissions monitoring plan and the origin and application of calculation factors and other primary data sources;
 - (d) the data flow activities, the control system and the control environment;
 - (e) the ships' engines and fuel types used, as well as the number of voyages carried out by ships during the scheme year.
- (5) When carrying out the strategic analysis, the verifier must check—

- (a) whether the emissions monitoring plan presented to it is the most recent version issued by the regulator;
- (b) whether there have been any variations to the emissions monitoring plan during the scheme year and whether these variations have been notified to and, if required, issued by the regulator pursuant to paragraph 12.

Risk analysis to be carried out by verifiers

47.—(1) The verifier must identify potential risks relating to the monitoring and reporting process by comparing reported maritime emissions with estimated data based on ship tracking data and characteristics such as the installed engine power, and must carry out further analysis where significant deviations are found.

(2) The verifier must identify potential risks relating to the different calculation steps by reviewing all data sources and methodologies used.

(3) The verifier must consider any effective risk control methods applied by the maritime operator to reduce levels of uncertainty associated with the accuracy specific to the monitoring methods used.

(4) The verifier must identify and analyse—

- (a) the inherent risks;
- (b) the control risks;
- (c) the detection risks.

(5) When identifying and analysing the elements referred to in sub-paragraph (4), the verifier must at least consider—

- (a) the findings from the strategic analysis referred to in paragraph 46(1);
- (b) the information referred to in paragraph 45(1) and (2) and paragraph 46(3)(b);
- (c) the materiality level referred to in paragraph 46(3)(c).

(6) If the verifier determines that the maritime operator has failed to identify the relevant inherent risks and control risks in its risk assessment, the verifier must inform the maritime operator of that determination.

(7) When performing the risk analysis, the verifier must consider any areas of higher verification risk including—

- (a) the number of ships under the maritime operator's responsibility during the scheme year;
- (b) the number of maritime operator changes for ships under the maritime operator's responsibility during the scheme year;
- (c) the diversity of ships' engines;
- (d) the number of different flag States;
- (e) the voyage data;
- (f) fuel consumption;
- (g) the fuel types used, including the diversity of fuel types used;
- (h) the application of any surrender deduction pursuant to paragraph 15(1)(a);
- (i) the application of any derogation pursuant to paragraph 19;
- (j) the maritime emissions;
- (k) the aggregation of the data in the annual emissions report.

(8) When identifying and analysing the areas listed in sub-paragraph (7), the verifier must consider the existence, completeness, accuracy, consistency, transparency and relevance of the information reported.

(9) Where appropriate, in light of the information obtained in the course of verification, the verifier must revise the risk analysis and modify or repeat the verification activities.

Verification plan

48.—(1) The verifier must draft a verification plan commensurate with the information obtained and the risks identified during the risk analysis.

(2) The verification plan must include—

- (a) a verification programme describing the nature and scope of the verification activities and the time and manner in which they are to be carried out;
- (b) a test plan setting out the scope and methods of testing the control activities as well as the procedures for control activities;
- (c) a data sampling plan setting out the scope and methods of data sampling relating to data points underlying the aggregated maritime emissions, fuel consumption or other relevant information in the annual emissions report.

(3) The verifier must set up the test plan referred to sub-paragraph (2)(b) in a manner that allows it to determine the extent to which the relevant control activities may be relied on for the purposes of assessing compliance with the requirements mentioned in paragraph 41(4)(b) or (c).

(4) When determining the sampling size and sampling activities for testing the control activities under sub-paragraph (2)(b), the verifier must consider the following elements—

- (a) the inherent risks;
- (b) the control environment;
- (c) the relevant control activities;
- (d) the requirement to deliver a verification opinion with reasonable assurance.

(5) When determining the sampling size and sampling activities for sampling the data referred to in sub-paragraph (2)(c), the verifier must consider the following elements—

- (a) the inherent risks and control risks;
- (b) the results of the analytical procedures;
- (c) the requirement to deliver a verification opinion with reasonable assurance;
- (d) the materiality level;
- (e) the materiality of the contribution of an individual data element for the overall data set.

(6) The verifier must set up and implement the verification plan such that the verification risk is reduced to an acceptable level to obtain reasonable assurance that the maritime operator's report is free from material misstatements.

(7) The verifier must update the risk analysis and the verification plan, and adapt the verification activities during the verification when it finds additional risks that need to be reduced or when there is less actual risk than initially expected.

Verification process

49.—(1) The verifier must implement the verification plan and, on the basis of the risk analysis, verify whether the monitoring and reporting systems, as described in the emissions monitoring plan, exist in practice and are properly implemented.

(2) For the purpose of sub-paragraph (1), the verifier must consider carrying out the following types of processes—

- (a) enquiry with relevant staff;
- (b) document inspection;
- (c) observation and walkthrough procedures.

(3) The verifier must verify the following—

- (a) the data flow activities and the systems used in the data flow, including information technology systems;

- (b) whether the control activities are appropriately documented, implemented, maintained and effective to mitigate the inherent risks;
- (c) whether the procedures listed in the emissions monitoring plan are effective to mitigate the inherent risks and control risks;
- (d) whether the procedures listed in the emissions monitoring plan are implemented, sufficiently documented and properly maintained.

(4) For the purposes of sub-paragraph (3)(a), the verifier must track the data flow following the sequence and interaction of the data flow activities from primary source data to the compilation of the annual emissions report.

(5) For the purposes of sub-paragraphs (3)(b) to (d), the verifier may use sampling methods specific to a ship provided that, based on the risk analysis, sampling is justified.

Analytical procedures

50.—(1) The verifier must use analytical procedures to assess the plausibility and completeness of data where the inherent risk, the control risk and the aptness of the maritime operator's control activities show the need for such analytical procedures.

(2) In carrying out the analytical procedures referred to in sub-paragraph (1), the verifier must assess reported data to identify potential risk areas and to subsequently validate and tailor the planned verification activities. The verifier must at least—

- (a) assess the plausibility of fluctuations and trends over time or between comparable items;
- (b) identify immediate outliers, unexpected data and data gaps.

(3) In applying the analytical procedures referred to in sub-paragraph (1), the verifier must perform the following procedures—

- (a) preliminary analytical procedures on aggregated data before carrying out the activities referred to in paragraph 49 in order to understand the nature, complexity and relevance of the reported data;
- (b) substantive analytical procedures on the aggregated data and the data points underlying these data for the purposes of identifying potential structural errors and immediate outliers;
- (c) final analytical procedures on the aggregated data to ensure that all errors identified during the verification process have been resolved correctly.

(4) Where the verifier identifies outliers, fluctuations, trends, data gaps or data that are inconsistent with other relevant information or that differ significantly from expected amounts or ratios, the verifier must obtain explanations from the maritime operator supported by additional relevant evidence.

(5) Based on the explanations and additional evidence provided, the verifier must assess the impact on the verification plan and the verification process to be performed.

Verification of reported data

51.—(1) The verifier must verify the data reported in the annual emissions report through the following—

- (a) detailed testing, including by tracing the data back to the primary data source;
- (b) cross-checking the data with external data sources, including ship-tracking data;
- (c) performing reconciliations;
- (d) checking thresholds as regards appropriate data;
- (e) carrying out recalculations.

(2) As part of the data verification referred to in sub-paragraph (1), the verifier must verify—

- (a) the completeness of the annual emissions report, including that all ships under the maritime operator's responsibility during the scheme year and their corresponding emissions falling within this Schedule;
- (b) the completeness of emission sources as described in the emissions monitoring plan;
- (c) the completeness of data;
- (d) the consistency between reported aggregated data and data from relevant documentation or primary sources;
- (e) the consistency between aggregated fuel consumption and data on fuel purchased or otherwise supplied to the ship in question, if applicable;
- (f) the reliability and accuracy of the data;
- (g) the correctness of the calculations leading to the aggregated emissions data.

Verification of methods applied for missing data

52.—(1) Where methods laid down in the emissions monitoring plan issued by the regulator have been used to complete missing data pursuant to paragraph 33, the verifier must verify whether the methods used were appropriate for the specific situation and whether they have been applied correctly.

(2) Where the methods referred to in sub-paragraph (1) were not issued beforehand, the verifier must verify whether the approach used by the maritime operator to complete the missing data ensures that the emissions are not underestimated and that that approach does not lead to material misstatements.

Materiality level

53.—(1) For the purpose of verifying fuel consumption and maritime emissions data in the annual emissions report, the materiality level is 5% of the respective total reported for each item in the scheme year.

(2) For the purpose of verifying an annual emissions report, when the sum of all ships' total aggregated emissions to be reported under this Schedule—

- (a) exceeds 500 000 tonnes of CO₂ equivalent, the materiality level is 2% of the emissions data in the scheme year;
- (b) does not exceed 500 000 tonnes of CO₂ equivalent, the materiality level is 5% of the emissions data in the scheme year.

Site visits

54.—(1) At one or more appropriate times during the verification process, the verifier must carry out a site visit in order to verify an annual emissions report, in particular based on the outcome of the risk analysis pursuant to paragraph 47.

(2) The verifier must also determine the activities to be performed and the time needed for the site visit.

(3) The maritime operator must provide the verifier with access to its sites, including to its relevant onshore locations and its ships.

Virtual site visits

55.—(1) For the purpose of verifying the annual emissions report, the verifier may, with the agreement of the maritime operator and subject to the approval of the regulator in accordance with sub-paragraph (4), carry out a virtual site visit instead of carrying out a physical site visit in accordance with paragraph 54.

(2) Before any virtual site visit, the verifier must undertake a risk analysis that includes considering measures to reduce the verification risk to an acceptable level to obtain reasonable assurance that the maritime operator's annual emissions report is free from material misstatements.

(3) An application for the regulator's approval for a virtual site visit must be submitted by a maritime operator on or before 28th February in the year after the scheme year to which the maritime operator's report relates or such later date as the regulator may specify.

(4) On an application being submitted, the regulator must take the following into consideration in deciding whether or not to approve the virtual site visit—

- (a) the information provided by the verifier on the outcome of the risk analysis;
- (b) information on how the virtual site visit will be carried out;
- (c) evidence that measures are taken to reduce the verification risk to an acceptable level;
- (d) any proposal to carry out a physical site visit after the virtual site visit;
- (e) any other information requested by the regulator to enable the regulator to decide whether or not to approve the virtual site visit.

(5) When approving a virtual site visit, the regulator may impose conditions on the approval (including a condition that a physical site visit be carried out within a period specified by the regulator) and the maritime operator must ensure that any conditions are complied with.

Addressing misstatements, non-conformities and non-compliance

56.—(1) Where the verifier identifies misstatements, non-conformities, or non-compliance with the monitoring and reporting requirements in this Schedule in the course of the verification of the annual emissions report, it must inform the maritime operator of this without undue delay and request relevant corrections within a reasonable deadline.

(2) The maritime operator must correct any misstatements or non-conformities communicated under sub-paragraph (1).

(3) The verifier must document in the internal verification documentation, marking them as resolved, all misstatements, non-conformities or non-compliance with the monitoring and reporting requirements that have been corrected in the course of the verification.

(4) Where the maritime operator does not correct the misstatements or non-conformities referred to in sub-paragraph (1), the verifier must, before issuing the verification report, ask the maritime operator to explain the main causes of the misstatements or non-conformities.

(5) The verifier must assess whether—

- (a) the uncorrected misstatements, individually or together with other misstatements, have an impact on the total reported maritime emissions or other relevant information and whether that impact leads to material misstatements;
- (b) the uncorrected non-conformity, individually or when combined with other non-conformities, has an impact on the reported data and whether that leads to material misstatement.

(6) The verifier must consider misstatements or non-conformities which, individually or together with other misstatements, are below the materiality level set in paragraph 53 as material misstatements where that is justified by their scale and nature or by the particular circumstances of their occurrence.

Conclusions of the verification

57. To complete the verification of the annual emissions report, the verifier must—

- (a) confirm that all verification activities required under this Part have been carried out;

- (b) perform final analytical procedures on the aggregated data to ensure that they are free of material misstatements;
- (c) verify whether the information in the report satisfies the requirements of the monitoring and reporting requirements in this Schedule;
- (d) assess whether the verification risk is at an acceptably low level to obtain reasonable assurance;
- (e) ensure that sufficient evidence has been gathered to be able to give a verification opinion with reasonable assurance that the annual emissions report is free from material misstatements;
- (f) ensure that the verification process is fully documented in the internal verification documentation and that a final judgment in the verification report can be given;
- (g) before issuing the verification report, prepare the internal verification documentation and the draft report and submit them to the independent reviewer in accordance with paragraph 61;
- (h) authorise a person to authenticate the report on the basis of the conclusions reached by the independent reviewer and the evidence of the internal verification documentation, and notify the maritime operator of this authorisation.

Recommendations for improvement

58.—(1) The verifier must communicate to the maritime operator recommendations for improvement in relation to uncorrected misstatements and non-conformities not leading to material misstatements.

(2) The verifier must communicate any other recommendations for improvement that it identifies relating to the following areas of the maritime operator's performance—

- (a) the maritime operator's risk assessment;
- (b) the development, documentation, implementation and maintenance of data flow activities and control activities as well as the evaluation of the control system;
- (c) the development, documentation, implementation and maintenance of procedures for data flow activities and control activities as well as other procedures that a maritime operator has to establish pursuant to Part 5;
- (d) the monitoring and reporting of emissions, including in relation to reducing risks and enhancing efficiency in the monitoring and reporting.

(3) When communicating recommendations to the maritime operator, the verifier must remain impartial in relation to the maritime operator, the ships and the monitoring and reporting system and must not jeopardise its impartiality by giving advice or developing parts of the monitoring and reporting process.

(4) During verification following a year in which recommendations for improvement were made in a verification report—

- (a) the verifier must verify whether the maritime operator has implemented those recommendations for improvement and the manner in which that has been done;
- (b) if the maritime operator has not implemented those recommendations, the verifier must assess whether that increases or may increase the risk of misstatements.

Verification report

59.—(1) On the basis of the information collected, the verifier must issue a verification report on each annual emissions report subject to verification.

(2) The verification report must include a verification opinion verifying the annual emissions report as satisfactory or unsatisfactory.

(3) For the purposes of sub-paragraph (2), the annual emissions report will be considered to have been verified as satisfactory only if it is free of material misstatements and must not be verified as satisfactory if—

- (a) it contains material misstatements that were not corrected before the verification report was issued;
- (b) the scope of verification is too limited pursuant to paragraph 60 and the verifier could not obtain sufficient evidence to issue a verification opinion with reasonable assurance that the annual emissions report is free from material misstatements;
- (c) non-conformities, individually or combined with other non-conformities, provide insufficient clarity and prevent the verifier from stating with reasonable assurance that the maritime operator's annual emissions report is free from material misstatement.

(4) The verification report must contain the following elements—

- (a) the name of the maritime operator and the IMO unique company and registered owner identification number;
- (b) a title making it clear that it is a verification report;
- (c) the identity of the verifier, including the name and business email address of a contact person;
- (d) the objectives and scope of the verification;
- (e) a reference to the annual emissions report and the scheme year subject to verification;
- (f) details, including version number and date of issue, of any emissions monitoring plan issued by the regulator that is relevant to the verification as well as period of validity for each plan;
- (g) the aggregated maritime emissions data submitted in accordance with paragraph 38;
- (h) a reference to the verification standards used;
- (i) a summary of the verifier's procedures, including information on and dates of site visits, information on the reasons for conducting virtual site visits;
- (j) the responsibilities of the maritime operator, regulator and verifier;
- (k) a verification opinion;
- (l) a description of uncorrected misstatements and non-conformities as referred to in paragraph 56, including their nature and scale, whether or not they have a material impact and the elements of the annual emissions report to which they relate, if any;
- (m) any issues of non-compliance with the monitoring and reporting requirements in this Schedule which have become apparent during the verification;
- (n) a description of any non-conformity issue as defined in sub-paragraph (a)(ii) of the definition of non-conformity in paragraph 40, which have become apparent during the verification;
- (o) any data gaps and the corresponding amount of emissions;
- (p) where applicable, recommendations for improvement;
- (q) the names of the UK ETS lead auditor, the independent reviewer and, where applicable, the UK ETS auditor and the technical expert that were involved in the verification of the annual emissions report;
- (r) the date of the verification report and signature of an authorised person on behalf of the verifier, including the name of that person.

(5) The verifier must describe the misstatements, non-conformities and non-compliances in sufficient detail in the verification report to allow the maritime operator as well as the regulator to understand, including the following aspects—

- (a) the size and nature of the misstatement, non-conformity or non-compliance;
- (b) why the misstatement has material effect, or not;
- (c) to which element of the annual emissions report the misstatement refers, or to what element of the emissions monitoring plan the non-conformity refers;
- (d) to which paragraph in this Schedule the non-compliance relates.

Limitation of scope

60. The verifier may conclude that the scope of the verification referred to in paragraph 59(3)(b) is too limited in any of the following situations—

- (a) data are missing that prevent a verifier from obtaining the evidence required to reduce the verification risk to the level needed to obtain reasonable assurance;
- (b) the emissions monitoring plan is not issued by the regulator;
- (c) the emissions monitoring plan does not provide sufficient scope or clarity to conclude on the verification;
- (d) the maritime operator has failed to make sufficient information available to enable the verifier to carry out the verification.

Independent review

61.—(1) The independent reviewer must review the internal verification documentation and the draft verification report to verify that the verification process has been conducted in accordance with this Part and that due professional care and judgment have been exercised.

(2) The independent reviewer must not have carried out any verification activities that are subject to their review.

(3) The scope of the independent review must encompass the complete verification process laid down in paragraphs 45 to 60 and must include an assessment of whether the evidence gathered is sufficient to enable the verifier to issue a verification report with reasonable assurance.

(4) Where circumstances occur which may cause changes in the verification report after the review, the independent reviewer must also review those changes and the supporting evidence.

(5) After the report has been authenticated in accordance with paragraph 57(h), the verifier must include the results of the independent review in the internal verification documentation.

CHAPTER 3

REQUIREMENTS FOR VERIFIERS

Continued competence process

62.—(1) The verifier must establish, document, implement and maintain a continued competence process to ensure that all personnel entrusted with verification activities are competent for the tasks that are allocated to them.

(2) For the purposes of the competence process referred to in sub-paragraph (1), the verifier must establish, document, implement and maintain the following aspects—

- (a) general competence criteria for all personnel undertaking verification activities;
- (b) specific competence criteria for each function within the verifier undertaking verification activities, in particular for the UK ETS lead auditor, the UK ETS auditor, the independent reviewer and the technical expert;
- (c) a method for ensuring the continued competence and regular evaluation of the performance of all personnel undertaking verification activities;

- (d) a process for ensuring ongoing training of the personnel undertaking verification activities;
- (e) process for assessing whether the verification engagement falls within the scope of the verifier's accreditation, and whether the verifier has the competence, personnel and resources required to select the verification team and successfully complete the verification activities within the timeframe required.

(3) In evaluating the competence of the personnel pursuant to sub-paragraph (2)(c), the verifier must assess that competence against the competence criteria referred to in sub-paragraph (2)(a) and (b).

(4) The process referred to in sub-paragraph (2)(e), must also include a process for assessing whether the verification team holds all the competence and personnel required to carry out verification activities for a specific maritime operator.

(5) The verifier must develop general and specific competence criteria which are in conformity with the criteria laid down in paragraphs 63(4), 64, 65 and 66.

(6) The verifier must monitor regularly, and at least annually, the performance of all personnel undertaking verification activities in order to confirm their continued competence.

(7) The verifier must regularly review the continued competence process referred to in sub-paragraph (1) to ensure that—

- (a) the competence criteria referred to in paragraph (2)(a) and (b), are developed in accordance with the competence requirements under this Part;
- (b) all issues that may be identified related to the setting of the general and specific competence criteria pursuant to paragraph (2)(a) and (b), are addressed;
- (c) all the requirements in the competence process are updated and maintained as appropriate.

(8) The verifier must have a system for recording the results of the activities carried out in the competence process referred to in sub-paragraph (1).

(9) A sufficiently competent evaluator must assess the competence and performance of the UK ETS auditor and UK ETS lead auditor.

(10) The competent evaluator must monitor those auditors during the verification of an annual emissions report on the site of the maritime operator as appropriate, to determine whether they meet the competence criteria.

(11) If a member of personnel fails to demonstrate that the competence criteria for a specific task allocated to that member have been fully met, the verifier must identify and organise additional training or supervised work experience. The verifier must monitor that member until the member demonstrates to the verifier that the member meets the competence criteria.

Verification teams

63.—(1) For each particular verification engagement, the verifier must assemble a verification team capable of performing the verification activities referred to in paragraphs 43 to 61.

(2) The verification team must at least consist of a UK ETS lead auditor and, where the verifier's conclusions during the assessment referred to in paragraph 43(2)(e) and the strategic analysis so require, a suitable number of UK ETS auditors and technical experts.

(3) For the independent review of the verification activities related to a particular verification engagement, the verifier must appoint an independent reviewer who is not part of the verification team.

(4) Team members must have a clear understanding of their specific role in the verification process and must be able to communicate effectively in the language required

to perform their verification tasks and to examine the information submitted by the maritime operator.

(5) The verification team must include at least one person with the technical competence and understanding required to assess the specific technical monitoring and reporting aspects related to the maritime activities carried out by the maritime operator.

(6) Where the verification team consists of one person, that person must meet all the competence requirements for the UK ETS auditor and the UK ETS lead auditor and meet the requirements laid down in sub-paragraphs (4) and (5).

Competence requirements for UK ETS auditors and UK ETS lead auditors

64.—(1) UK ETS auditors must have the competence to perform the verification.

(2) For the purpose of sub-paragraph (1), UK ETS auditors must have, at least—

- (a) knowledge of this Schedule, relevant standards and applicable guidelines;
- (b) knowledge and experience of data and information auditing, including—
 - (i) data and information auditing methodologies, application of the materiality level and assessing the materiality of misstatements;
 - (ii) analysing inherent and control risks;
 - (iii) sampling techniques in relation to data sampling and checking control activities;
 - (iv) assessing data and information systems, IT systems, data-flow activities, control activities, control systems and procedures for control activities;
- (c) the ability to perform the activities related to the verification of an annual emissions report as required by paragraphs 45 to 61.

(3) In addition, sector-specific knowledge and experience of relevant aspects as specified in sub-paragraph (5) must be taken into consideration by verifiers for the purposes of verifying annual emissions reports.

(4) A UK ETS lead auditor must meet the competence requirements for a UK ETS auditor and must have demonstrated competence to lead a verification team and to be responsible for carrying out the verification activities in accordance with this Part.

(5) For the purposes of paragraph (3), knowledge and experience of the following must be taken into consideration—

- (a) possible synergies between monitoring and reporting in accordance with this Schedule and existing maritime-specific management systems (including the ISM Code) and other relevant sector-specific guidance (such as guidance on the development of the ship energy efficiency management plan (SEEMP));
- (b) emission sources on board each ship;
- (c) registration of voyages and procedures ensuring the completeness and accuracy of the list of voyages and of the list of ships (as submitted by the maritime operator);
- (d) reliable external sources (including ship-tracking data) that could serve to cross-check information with data from ships;
- (e) fuel consumption calculation methods, as applied by ships in practice;
- (f) the application of uncertainty levels in accordance with Part 4 and relevant guidance;
- (g) the application of emission factors for all fuels and emission sources used on board the ship, and for all maritime emissions covered by this Schedule;
- (h) understanding of which fuels are eligible for an emissions reduction claim pursuant to paragraph 37 and which documents are required to support such a claim;
- (i) fuel handling, fuel cleaning, tank systems;
- (j) ship maintenance and quality control of metering equipment;

- (k) bunkering documents, including BDN;
- (l) operational logs, voyage abstracts and port abstracts, ship deck logs;
- (m) commercial documentation, such as charter party agreements, bills of lading;
- (n) existing statutory requirements;
- (o) operation of the ship's bunkering systems;
- (p) determination of fuel density by ships in practice;
- (q) machinery and technical systems used on board the ship to determine fuel consumption and other relevant information.

Competence requirements for independent reviewers

65.—(1) The independent reviewer must have the appropriate authority to review the draft conclusions on the draft verification report and internal verification documentation pursuant to paragraph 61.

(2) The independent reviewer must meet the competence requirements applying to UK ETS lead auditors, as referred to in paragraph 64(4).

(3) In order to assess whether the internal verification documentation is complete and whether enough evidence has been gathered in the course of the verification activities, the independent reviewer must have the necessary competence to—

- (a) analyse the information provided and confirm its completeness and integrity;
- (b) challenge missing or contradictory information;
- (c) check data trails to assess whether the internal verification documentation is complete and provides sufficient information to support the draft conclusions on the draft verification report and conclusions examined in the internal review.

Use of technical experts

66.—(1) When carrying out verification activities, a verifier may use technical experts to provide detailed knowledge and expertise on a specific subject matter needed to support the UK ETS auditor and UK ETS lead auditor in carrying out their verification activities.

(2) Where the independent reviewer does not have the competence to assess a particular issue in the review process, the verifier must request the support of a technical expert.

(3) The technical expert must have the competence and expertise required to support the UK ETS auditor and the UK ETS lead auditor, or the independent reviewer, where necessary, effectively on the subject matter for which knowledge and expertise of such expert is requested and must also have a sufficient understanding of the issues referred to in paragraph 64.

(4) The technical expert must undertake specified tasks under the direction and full responsibility of the independent reviewer or of the UK ETS lead auditor of the verification team in which the technical expert is operating.

Procedures for verification activities

67.—(1) The verifier must establish, document, implement and maintain one or more procedures and processes for the verification activities described in paragraphs 45 to 61.

(2) When establishing and implementing such procedures and processes, the verifier must carry out the activities in accordance with ISO 14065:2020, in conjunction with ISO/IEC 17029:2019.

(3) The verifier must establish, document, implement and maintain a quality management system to ensure consistent development, implementation, improvement and review of the procedures and processes in accordance with the standard referred to in sub-paragraph (2).

(4) The quality management system referred to in sub-paragraph (3) must include the following—

- (a) policies and responsibilities;
- (b) management review;
- (c) internal audits;
- (d) corrective action;
- (e) actions to address risk and opportunities and to take preventive action;
- (f) control of documented information.

(5) In addition, the verifier must establish the following procedures, processes and arrangements in accordance with the standard referred to in sub-paragraph (2)—

- (a) a process and policy for communication with the maritime operator;
- (b) adequate arrangements to safeguard the confidentiality of information obtained;
- (c) a process for dealing with appeals;
- (d) a process for dealing with complaints (including indicative timescale);
- (e) a process for issuing a revised verification report where an error in the verification report or annual emissions report is identified after the verifier has submitted the verification report to the maritime operator;
- (f) a procedure or process for outsourcing verification activities to other organisations;
- (g) a procedure or process to ensure the verifier takes full responsibility for verification activities performed by contracted individuals;
- (h) processes ensuring the proper functioning of the quality management system as referred to in sub-paragraph (3), including—
 - (i) processes for the review of the management system at least once a year, not exceeding 15 months between management reviews;
 - (ii) processes for conducting internal audits at least once a year, not exceeding 15 months between internal audits;
 - (iii) processes for identifying and managing non-conformities in the verifier's activities and taking corrective action to address those non-conformities;
 - (iv) processes for identifying risks and opportunities in verifier's activities and taking preventive actions to mitigate those risks;
 - (v) processes for the control of documented information.

Internal verification documentation

68.—(1) The verifier must prepare and compile internal verification documentation containing at least—

- (a) the results of the verification activities performed;
- (b) the verification plan, the strategic analysis and the risk analysis;
- (c) sufficient information to support the draft verification report, including justifications for judgments as to whether or not misstatements were material.

(2) The internal verification documentation must be drafted in such a way that the independent reviewer referred to in paragraph 61 and the national accreditation body are able to assess whether the verification has been performed in accordance with this Part.

(3) The verifier must, upon request, provide the regulator with access to the internal verification documentation and other relevant information to facilitate an evaluation of the verification by the regulator and the regulator may set a timeframe within which the verifier must provide access to that documentation.

Records and communication

69.—(1) The verifier must maintain and manage records to demonstrate compliance with this Part, including as regards the competence and impartiality of their personnel.

(2) The verifier must, on a regular basis, make information available to the maritime operator in accordance with the standard referred to in paragraph 67(2).

(3) The verifier must safeguard the confidentiality of information obtained in the course of the verification, in accordance with the standard referred to in paragraph 67(2).

Impartiality and independence

70.—(1) The verifier must be independent from the maritime operator and impartial in carrying out its verification activities.

(2) To ensure independence and impartiality, the verifier and any part of the same legal entity must not be a maritime operator, the owner of such a maritime operator or owned by such a maritime operator, and must not have relations with the maritime operator that could affect its independence and impartiality.

(3) The verifier must also be independent from bodies that trade emission allowances under the UK ETS.

(4) The verifier must be organised in such a way as to safeguard their objectivity, independence and impartiality. For the purposes of this Part, the relevant requirements laid down in the standard referred to in paragraph 67(2) apply.

(5) The verifier must—

- (a) not carry out verification activities for a maritime operator that poses an unacceptable risk to their impartiality or in respect of which they have a conflict of interests;
- (b) not use personnel or contracted persons in the verification of an annual emissions report that involves an actual or potential conflict of interest;
- (c) ensure that the activities of personnel or organisations do not affect the confidentiality, objectivity, independence and impartiality of the verification and must, for this purpose, monitor the risks to impartiality and take appropriate action to address those risks.

(6) For the purpose of sub-paragraph (5), the verifier must monitor the risks to impartiality and take appropriate actions to address those risks.

(7) An unacceptable risk to impartiality or a conflict of interests will be considered to have arisen, in particular, where a verifier, or any part of the same legal entity, provides—

- (a) consulting services to develop part of the monitoring and reporting process described in the emissions monitoring plan, including development of the monitoring methodology, drafting of the annual emissions report and drafting of the emissions monitoring plan;
- (b) technical assistance to develop or maintain the system for monitoring and reporting emissions or other relevant information under this Schedule.

(8) A conflict of interest for a verifier in the relations between it and the maritime operator will be considered to have arisen in particular in either of the following cases—

- (a) where the relationship between the verifier and the maritime operator is based on common ownership, common governance, common management or personnel, shared resources, common finances and common contracts or marketing;
- (b) where the maritime operator has received consulting services referred to in sub-paragraph (7)(a), or technical assistance referred to in sub-paragraph (7)(b), from a consultancy body, technical assistance body or another organisation having relations with the verifier and threatening the impartiality of the verifier.

(9) For the purposes of sub-paragraph (8)(b), the verifier's impartiality will be considered compromised where the relations between the verifier and the consultancy body, technical assistance body or the other organisation are based on common ownership, common governance, common management or personnel, shared resources, common finances, common contracts or marketing and common payment of sales commission or other inducement for the referral of new clients.

(10) The verifier must not outsource the independent review or the issuance of the verification reports.

(11) Where the verifier outsources other verification activities, they must meet the relevant requirements laid down in the standard referred to in paragraph 67(2).

(12) For the purposes of sub-paragraph (11), contracting individuals to carry out verification activities will not constitute outsourcing if the verifier, when contracting those persons, takes full responsibility for the verification activities performed by contracted personnel. When contracting individuals for carrying out verification activities, the verifier must require those individuals to sign a written agreement that they comply with the procedures of the verifier and that there is no conflict of interest in carrying out those verification activities.

(13) The verifier must establish, document, implement and maintain a process to ensure their continuous impartiality and independence, and those of the parts of the same legal entity, of other organisations referred to in sub-paragraphs (8) and (9), and of all personnel and contracted persons involved in the verification. That process must include a mechanism to safeguard the impartiality and independence of the verifier and meet the relevant requirements laid down in the standard referred to in paragraph 67(2).

(14) When verifying the same maritime operator as in the previous year, the verifier must assess the risk to impartiality and take measures to reduce the risk to impartiality.

(15) If the UK ETS lead auditor undertakes annual verifications of annual emissions reports for a period of six consecutive years for a given maritime operator, the UK ETS lead auditor must take a three consecutive years' break from providing verification of annual emissions reports for that same maritime operator.

CHAPTER 4

ACCREDITATION OF VERIFIERS

Accreditation of verifiers

71.—(1) Where no specific provisions concerning the accreditation of verifiers are laid down in this Part the relevant provisions of Regulation (EC) No 765/2008 apply.

(2) With respect to the minimum requirements for accreditation and the requirements for accreditation bodies, the standard pursuant to ISO/IEC 17011:2017 concerning general requirements for accreditation bodies accrediting conformity assessment bodies^(a) apply.

Scope of accreditation

72. The scope of accreditation of verifiers must cover the verification of annual emissions reports in accordance with this Part.

(a) ISO/IEC 17011:2017 on conformity assessment and requirements for accreditation bodies accrediting conformity assessment bodies. It can be accessed at <https://www.iso.org/standard/67198.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

Objectives of the accreditation process

73. In the course of the accreditation process and of the annual surveillance of accredited verifiers, in accordance with paragraphs 75 to 80, the national accreditation body must assess whether the verifier and its personnel undertaking verification activities—

- (a) have the competence to verify annual emissions reports in accordance with this Part;
- (b) are in fact verifying annual emissions reports in accordance with this Part;
- (c) meet the requirements for verifiers referred to in paragraphs 62 to 70, including those regarding impartiality and independence.

Requests for accreditation

74.—(1) Requests for accreditation must contain the information required on the basis of the standard referred to in paragraph 71(2).

(2) In addition, prior to the start of the assessment referred to in paragraph 75, the verifier applying for accreditation ('the applicant') must make available to the national accreditation body information on the following aspects—

- (a) the procedures and processes referred to in paragraph 67(1) and the quality management system referred to in paragraph 67(3);
- (b) the competence criteria referred to in paragraph 62(2)(a) and (b), the results of the continuous competence process referred to in that paragraph and other relevant documentation on the competence of all personnel involved in verification activities as referred to in paragraphs 64 and 65;
- (c) the process for ensuring continuous impartiality and independence, as referred to in paragraph 70(13), including relevant records on the impartiality and independence of the applicant and its personnel;
- (d) the technical experts and key personnel involved in the verification of annual emissions reports;
- (e) the procedures and processes for ensuring appropriate verification, including those concerning the internal verification documentation referred to in paragraph 68;
- (f) records, as referred to in paragraph 69;
- (g) all other information requested by the national accreditation body.

Assessment

75.—(1) For the purposes of the assessment referred to in paragraph 73, the assessment team appointed in accordance with paragraph 83 must, at least—

- (a) review all relevant documents and records supplied by the applicant pursuant to paragraph 74;
- (b) carry out an on-site visit to review a representative sample of the internal verification documentation and assess the implementation of the applicant's quality management system and the procedures or processes for verification activities referred to in paragraph 67;
- (c) witness the performance and competence of a representative number of the applicant's staff involved verifying annual emissions reports to ensure that they operate in accordance with this Part.

(2) The assessment team must carry out the activities outlined in sub-paragraph (1) in compliance with the requirements of the standard referred to in paragraph 71(2).

(3) The assessment team must report its findings and any non-conformities to the applicant and request a response, in accordance with the requirements of the standard referred to in paragraph 71(2).

(4) The applicant must take corrective action to address any non-conformities reported pursuant to sub-paragraph (3) and submit a response with an indication of what action it has taken, or plans to take within a time set by the national accreditation body, to resolve them.

(5) The national accreditation body must review the response that the applicant submits pursuant to sub-paragraph (4).

(6) Where the national accreditation body finds the applicant's response or the action taken to be insufficient or ineffective, it must ask the applicant to submit further information or take further action.

(7) The national accreditation body may also request evidence of, or carry out a follow-up assessment to assess, the actual implementation of the corrective action.

Decision on accreditation and accreditation certificate

76.—(1) When preparing and taking the decision on whether to grant, extend or renew the accreditation of an applicant, the national accreditation body must take into account the requirements of the standard referred to in paragraph 71(2).

(2) Where the national accreditation body has decided to grant or renew an applicant's accreditation, it must issue an accreditation certificate to that effect.

(3) The accreditation certificate must contain at least the information required on the basis of the standard referred to in paragraph 71(2).

(4) The accreditation certificate will be valid for a period not exceeding five years after the date on which the national accreditation body has issued that certificate.

Annual surveillance

77.—(1) The national accreditation body must carry out annual surveillance of each verifier to which it has issued an accreditation certificate.

(2) The surveillance referred to in sub-paragraph (1) must comprise, at least—

- (a) an on-site visit as referred to in paragraph 75(1)(b);
- (b) witnessing the performance and assessing the competence of a representative number of the verifier's staff in accordance with paragraph 75(1)(c);

(2) The national accreditation body must carry out the first surveillance of a verifier in accordance with sub-paragraph (1) within 12 months of the date on which its accreditation certificate was issued.

(3) The surveillance planning must allow the national accreditation body to assess representative samples of the verifier's activities within the scope of the accreditation certificate and of the staff involved in the verification activities, in accordance with the requirements of the standard referred to in paragraph 71(2).

(4) Where a verifier carries out verification in another country, the national accreditation body that has accredited the verifier may ask the national accreditation body of that other country to carry out surveillance activities on its behalf and under its responsibility.

Reassessment

78.—(1) Before the expiry of an accreditation certificate which it has issued, the national accreditation body must reassess the verifier in question to determine whether the validity of the certificate can be extended.

(2) The reassessment planning must ensure that the national accreditation body assesses a representative sample of the verifier's activities covered by the certificate.

(3) In planning and carrying out the reassessment, the national accreditation body must satisfy the requirements of the standard referred to in paragraph 71(2).

Extraordinary assessment

79.—(1) The national accreditation body may conduct an extraordinary assessment of the verifier at any time to ensure that it continues to meet the requirements of this Part.

(2) In order to enable the national accreditation body to assess the need for an extraordinary assessment, the verifier must inform that body without delay of any significant changes relevant to its accreditation concerning any aspect of its status or operation, including changes mentioned in the standard referred to in paragraph 71(2).

Administrative measures

80.—(1) The national accreditation body may suspend, withdraw or reduce the scope of an accreditation of a verifier where the verifier does not meet the requirements of this Part.

(2) The national accreditation body must suspend, withdraw or reduce the scope of an accreditation of a verifier where the verifier so requests.

(3) The national accreditation body must establish, document, implement and maintain a procedure for the suspension, withdrawal and reduction of scope of the accreditation in line with the standard referred to in paragraph 71(2).

(4) The national accreditation body must suspend a verifier's accreditation, or reduce the scope of an accreditation where the verifier has—

- (a) committed a serious breach of the requirements of this Part;
- (b) persistently and repeatedly failed to meet the requirements of this Part;
- (c) breached any other specific terms and conditions laid down by the national accreditation body.

(5) The national accreditation body must withdraw a verifier's accreditation where—

- (a) the verifier has failed to remedy the grounds for a decision to suspend the accreditation certificate;
- (b) a member of the top management of the verifier or a verifier's staff involved in verification activities under this Part has been found guilty of fraud;
- (c) the verifier has intentionally provided false information or has intentionally concealed information.

(6) Decisions of a national accreditation body to suspend, withdraw or reduce the scope of an accreditation in accordance with sub-paragraphs (1), (4) and (5) are subject to appeal in accordance with the procedures established by the national accreditation body for the resolution of appeals.

(7) Decisions of a national accreditation body to suspend, withdraw or reduce the scope of the accreditation take effect upon being notified to the verifier. The national accreditation body must consider the impact on activities carried out prior to those decisions in the light of the nature of the non-compliance.

(8) The national accreditation body must terminate the suspension of an accreditation certificate where it has received satisfactory information and concludes that the verifier meets the requirements of this Part.

CHAPTER 5

REQUIREMENTS FOR THE NATIONAL ACCREDITATION BODY

Requirements for national accreditation bodies

81.—(1) The tasks related to accreditation pursuant to this Part must be carried out by the national accreditation body.

(2) For the purposes of this Part, the national accreditation body must carry out their functions in accordance with the requirements of the standard referred to in paragraph 71(2).

Independence and impartiality

82.—(1) The national accreditation body must be organised in a manner that guarantees its full independence from verifiers it assesses and its impartiality in carrying out its accreditation activities.

(2) For the purpose of sub-paragraph (1), the national accreditation body must not—

- (a) offer or provide any activities or services provided by a verifier;
- (b) provide consultancy services, own shares in or otherwise have a financial or managerial interest in a verifier.

(3) Without prejudice to paragraph 81(2), the structure, responsibilities and tasks of the national accreditation body must be clearly distinguished from those of the regulator and those of other national authorities.

(4) The national accreditation body must take all final decisions pertaining to the accreditation of verifiers but may sub-contract certain activities, subject to the requirements set out in the standard referred to in paragraph 71(2).

Assessment team

83.—(1) The national accreditation body must appoint an assessment team for each assessment carried out under the requirements of the standard referred to in paragraph 71(2).

(2) An assessment team must consist of a lead assessor responsible for carrying out an assessment in accordance with this Part and, where necessary, a suitable number of assessors or technical experts with relevant knowledge and experience for the specific scope of accreditation.

(3) An assessment team must include, at least, one person with the following skills—

- (a) sufficient knowledge of this Schedule;
- (b) competence and understanding required to assess the verification activities referred to in paragraph 45 to 61 and sufficient knowledge of the characteristics of the various types of vessels and of monitoring and reporting of maritime emissions, fuel consumption and other relevant information pursuant to this Schedule.

Competence requirements for assessors

84.—(1) Assessors must have the competence to carry out the activities under paragraphs 75 to 80. To that end, the assessor must—

- (a) meet the requirements of the standard referred to in paragraph 71(2);
- (b) have sufficient knowledge of data and information auditing, as referred to in paragraph 64(2)(b), obtained through training or access to a person who has knowledge and experience of such data and information;
- (c) have sufficient knowledge of this Schedule as well as applicable guidelines as referred to in paragraph 64(2)(a).

(2) In addition to the competence requirements set out in sub-paragraph (1), lead assessors must demonstrate competence to lead an assessment team and be responsible for carrying out an assessment in accordance with this Part.

(3) In addition to the competence requirements set out in sub-paragraph (1), internal reviewers and persons taking decisions on the granting, extending or renewing of an accreditation must have sufficient knowledge and experience to evaluate the accreditation.

Technical experts

85.—(1) The national accreditation body may include technical experts in the assessment team to provide detailed knowledge and expertise on a specific subject matter needed to support the lead assessor or assessor.

(2) A technical expert must have—

- (a) the competence required to support the lead assessor and assessor effectively on the subject matter for which knowledge and expertise of such expert is requested;
- (b) sufficient knowledge of this Schedule as well as applicable guidelines as referred to in paragraph 64(2)(a).
- (c) a sufficient understanding of verification activities.

(3) Technical experts must undertake specified tasks under the direction and full responsibility of the lead assessor of the assessment team in question.

Complaints

86. Where the national accreditation body has received a complaint concerning the verifier from the regulator, the maritime operator, or other interested parties, the national accreditation body must, within a reasonable time but no later than three months from the date of its receipt—

- (a) decide on the validity of the complaint;
- (b) ensure that the verifier concerned is given the opportunity to submit its observations;
- (c) take appropriate actions to address the complaint;
- (d) record the complaint and action taken;
- (e) respond to the complainant.

Records and documentation

87.—(1) The national accreditation body must keep records on each person involved in the accreditation process. Those records must include records related to relevant qualifications, training, experience, impartiality and competence necessary to demonstrate compliance with this Part.

(2) The national accreditation body must keep records of the verifier in line with the standard referred to in paragraph 71(2).

Access to information and confidentiality

88.—(1) The national accreditation body must, on a regular basis, make publicly available and update information about the national accreditation body and its accreditation activities.

(2) The national accreditation body must make, in accordance with point 4 of Article 8 of Regulation (EC) No 765/2008, adequate arrangements to safeguard, as appropriate, the confidentiality of information obtained.

CHAPTER 6

INFORMATION EXCHANGE

Information exchange and focal points

89.—(1) The UK ETS authority must establish an effective exchange of appropriate information and effective cooperation between the national accreditation body and the regulator.

(2) The Environment Agency or such other regulator as may be designated by the UK ETS authority from time to time is to be the focal point for the exchange of information, for the purpose of this Chapter for coordinating the cooperation referred to in sub-paragraph (1), and for the activities referred to in this Chapter.

Accreditation work programme and management report

90.—(1) By 31st December of each year, the national accreditation body must make available an accreditation work programme to the regulator containing the list of verifiers accredited by the national accreditation body. The accreditation work programme must contain the following information in relation to each verifier—

- (a) information on activities that the national accreditation body has planned for that verifier, including surveillance and reassessment activities;
- (b) dates of anticipated witnessing audits to be performed by the national accreditation body to assess the verifier;
- (c) information on whether the national accreditation body has requested the national accreditation body from another country to carry out surveillance activities pursuant to paragraph 77(4).

(2) Where changes occur in the information referred to in sub-paragraph (1), the national accreditation body must submit to the regulator an updated work programme by 31st January of each year.

(3) Following the submission of the accreditation work programme in accordance with sub-paragraph (1), the regulator must provide the national accreditation body with any relevant information, including any applicable national legislation and guidelines.

(4) By 1st June of each year, the national accreditation body must make available a management report to the regulator which must contain the following information in relation to each verifier that has been accredited by the national accreditation body—

- (a) accreditation details of verifiers that were newly accredited by the national accreditation body;
- (b) summarised results of surveillance and reassessment activities carried out by the national accreditation body;
- (c) summarised results of extraordinary assessments that have taken place, including reasons for initiating such extraordinary assessments;
- (d) any complaints filed against the verifier since the last management report and the actions taken by the national accreditation body;
- (e) details of action taken by the national accreditation body in response to the information that is shared by the regulator.

Information exchange on administrative measures

91. If the national accreditation body has imposed administrative measures on the verifier pursuant to paragraph 80 or if a suspension of the accreditation has been terminated or a decision on appeal has reversed the decision of the national accreditation body to impose administrative measures referred to in paragraph 80, the national accreditation body must inform the regulator.

Information exchange by the regulator in respect of a maritime operator

92.—(1) The regulator must annually communicate to the national accreditation body at least the following—

- (a) relevant results from checking the annual emissions reports and the verification reports, in particular of any issue of reported data that did not fulfil the requirements under this Part;

- (b) results from the inspection of the maritime operator where those results are relevant for the national accreditation body concerning the verifier's accreditation and surveillance or where those results include any identified issue of data that did not fulfil the requirements under this Part;
- (c) results from the evaluation of the internal verification documentation of that verifier where the regulator has evaluated the internal verification documentation pursuant to paragraph 68(3);
- (d) complaints received by the regulator concerning that verifier.

(2) Where the information referred to in sub-paragraph (1) provides evidence that the regulator has identified issues in the reported data that did not fulfil the requirements under this Part, the national accreditation body must treat the communication of that information as a complaint by the regulator concerning that verifier within the meaning of paragraph 86.

(3) The national accreditation body must take appropriate action to address such information and respond to the regulator within a reasonable time, but no later than three months from the date of its receipt.

(4) In responding to the regulator pursuant to sub-paragraph (3), the national accreditation body must inform the regulator of the action taken by it and, where relevant, the administrative measures imposed on the verifier.

Databases of accredited verifiers

93. The national accreditation body must set up and manage a database which must be publicly available and contain the following information—

- (a) the name, accreditation number and business address of each verifier accredited by that national accreditation body;
- (b) each verifier's scope of accreditation;
- (c) the date on which the accreditation was granted and its expiry date;
- (d) information on administrative measures imposed on the verifier.

Notification by verifiers

94.—(1) For the purposes of enabling the national accreditation body to draft the accreditation work programme and the management report referred to in paragraph 90, a verifier must, by 15th November of each year, send the following information to the national accreditation body—

- (a) the planned time and place of the verifications that the verifier is scheduled to perform;
- (b) the business address and contact details of the maritime operators whose annual emissions reports are subject to its verification;
- (c) the names of the members of the verification team and the scope of the verification under which the maritime activity falls.

(2) Where changes occur in the information referred to in sub-paragraph (1), the verifier must notify those changes to the national accreditation body within a timeframe agreed with the national accreditation body.

PART 9

DETERMINATION OF VALUES FOR EMISSION FACTORS UNDER PARAGRAPH 36(4)

Emission factors based on analyses

95.—(1) The maritime operator must ensure that any analyses, sampling, calibrations and validations for the determination of emission factors are carried out by applying methods based on corresponding EN standards.

(2) Where EN standards are not available, the methods must be based on suitable ISO standards or national standards.

(3) Where no applicable published standards exist, suitable draft standards, industry best-practice guidelines or other scientifically proven methodologies must be used, limiting sampling and measurement bias.

(4) The result of any analysis must be used only for the delivery period or batch of fuel for which the samples have been taken, and for which the samples were intended to be representative.

(5) When determining a specific parameter, the maritime operator must use the results of all analyses made with regard to that parameter.

Sampling plan

96.—(1) Where emission factors are determined by analyses, the maritime operator must submit to the regulator for approval, for each fuel a sampling plan in the form of a written procedure, which contains information on methodologies for the preparation of samples, including information on responsibilities, locations, frequencies and quantities, and methodologies for the storage and transport of samples.

(2) The maritime operator must ensure that the derived samples are representative for the relevant batch or delivery period and free of bias.

(3) Relevant elements of the sampling plan must be agreed with the laboratory carrying out the analysis for the respective fuel, and evidence of that agreement must be included in the plan.

(4) The maritime operator must make the plan available for the purposes of verification pursuant to Part 8.

(5) The maritime operator must, in agreement with the laboratory carrying out the analysis for the respective fuel and subject to the approval of the regulator, adapt the elements of the sampling plan where analytical results indicate that the heterogeneity of the fuel significantly differs from the information on heterogeneity on which the original sampling plan for that specific fuel was based.

Use of laboratories

97.—(1) The maritime operator must ensure that laboratories used to carry out analyses for the determination of emission factors are accredited in accordance with EN ISO/IEC 17025(a), as updated from time to time, for the relevant analytical methods.

(2) Laboratories not accredited in accordance with EN ISO/IEC 17025 may be used for the determination of emission factors only where the maritime operator can demonstrate to the satisfaction of the regulator that access to laboratories referred to in sub-paragraph (1) is

(a) ISO/IEC 17025 sets out the general requirements for the competence of testing and calibration laboratories. It can be accessed at <https://www.iso.org/standard/66912.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

technically not feasible or would incur unreasonable costs, and that the non-accredited laboratory meets requirements equivalent to EN ISO/IEC 17025.

(3) The regulator must deem a laboratory to meet requirements equivalent to EN ISO/IEC 17025 within the meaning of sub-paragraph (2) where the maritime operator provides, to the extent feasible, evidence in accordance with sub-paragraphs (4) and (5).

(4) With respect to quality management, the maritime operator must produce an accredited certification of the laboratory in conformity with EN ISO/IEC 9001(a), as updated from time to time, or other certified quality management systems that cover the laboratory. In the absence of such certified quality management systems, the maritime operator must provide other appropriate evidence that the laboratory is capable of managing its personnel, procedures, documents and tasks in a reliable manner.

(5) With respect to technical competence, the maritime operator must provide evidence that the laboratory is competent and able to generate technically valid results using the relevant analytical procedures. Such evidence must cover at least the following elements—

- (a) management of the personnel's competence for the specific tasks assigned;
- (b) suitability of accommodation and environmental conditions;
- (c) selection of analytical methods and relevant standards;
- (d) where applicable, management of sampling and sample preparation, including control of sample integrity;
- (e) where applicable, development and validation of new analytical methods or application of methods not covered by international or national standards;
- (f) uncertainty estimation;
- (g) management of equipment, including procedures for calibration, adjustment, maintenance and repair of equipment, and record keeping thereof;
- (h) management and control of data, documents and software;
- (i) management of calibration items and reference materials;
- (j) quality assurance for calibration and test results, including regular participation in proficiency testing schemes, applying analytical methods to certified reference materials, or inter-comparison with an accredited laboratory;
- (k) management of outsourced processes;
- (l) management of assignments, customer complaints, and ensuring timely corrective action.

Frequencies for analyses

98.—(1) The maritime operator must apply the minimum frequencies for analyses for relevant fuels, as set out in Table C3.

Table C3

<i>Fuel</i>	<i>Minimum frequency of analysis</i>
Other gases	At least daily — using appropriate procedures at different parts of the day
Other fuels	Every 10 000 tonnes of fuel and at least four times a year

(2) The regulator may allow the maritime operator to use a frequency that differs from those referred to in sub-paragraph (1), where minimum frequencies are not available or

(a) ISO/IEC 9001 sets out the requirements for quality management systems. It can be accessed at <https://www.iso.org/standard/62085.html>. A copy may be inspected at the Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP.

where the maritime operator demonstrates that using the required frequency would incur unreasonable costs.”

SCHEDULE 2

Article 5

FURTHER AMENDMENTS TO THE 2020 ORDER

Introductory

1. The 2020 Order is amended as follows.

Amendments to article 4 (Interpretation)

2.—(1) Article 4 is amended as follows.

(2) In paragraph (1)—

(a) for the definition of “emissions monitoring plan”, substitute—

““emissions monitoring plan” has the meaning given in article 28(1) in relation an aircraft operator and the meaning given in paragraph 9(1) of Schedule 2A in relation to a maritime operator;”;

(b) after the definition of “installation”, insert—

““maritime activity” has the meaning given in paragraph 7 of Schedule 2A;

“maritime emissions” means emissions of carbon dioxide, methane and nitrous oxide from maritime activities;

“maritime operator” has the meaning given in paragraph 3 of Schedule 2A;

“maritime operator holding account” means a maritime operator holding account opened under paragraph 13A(3) of Schedule 5A;”;

(c) for the definition of “regulator”, substitute—

““regulator” must be construed in accordance with articles 9 to 13A;”;

(d) after the definition of “surrender condition”, insert—

“surrender deduction” means any deduction arising in accordance with paragraph 15(1)(a) of Schedule 2A;”;

(e) for the definition of “verification report”, substitute—

““verification report” has, in relation to an operator or aircraft operator, the same meaning as in the Verification Regulation 2018 and, in relation to a maritime operator, means a verification report issued pursuant to paragraph 59 of Schedule 2A.”.

Amendments to article 9 (Meaning of regulator)

3.—(1) Article 9 is amended as follows.

(2) In paragraph (2), after sub-paragraph (b), insert—

“(c) in relation to a maritime operator, the regulator determined in accordance with article 13A.”

Insertion of article 13A (Meaning of regulator: maritime operators)

4. After article 13, insert—

“Meaning of regulator: maritime operators

13A.—(1) This article applies for the purposes of article 9.

- (2) The regulator of a maritime operator is—
- (a) the Environment Agency, where the maritime operator—
 - (i) has its registered office or place of residence in England; or
 - (ii) does not have a registered office or a place of residence in the United Kingdom;
 - (b) NRW, where the maritime operator has its registered office or place of residence in Wales;
 - (c) SEPA, where the maritime operator has its registered office or place of residence in Scotland;
 - (d) the chief inspector, where the maritime operator has its registered office or place of residence in Northern Ireland.”.

Amendments to article 16 (UK Emissions Trading Scheme)

5.—(1) Article 16 is amended as follows.

(2) In paragraph (2)—

- (a) at the end of sub-paragraph (a) delete “and”;
- (b) after sub-paragraph (b) insert—
 - “(c) maritime activities by maritime operators.”.

Amendments to article 19 (Cap for trading period)

6.—(1) Article 19 is amended as follows.

(2) In paragraph (b), for “302,924,924” substitute “312,248,470”.

Amendments to article 22 (Cap: base for scheme years)

7.—(1) Article 22 is amended as follows.

(2) In table B in column 2 (base)—

- (a) for “79,059,690” substitute “80,063,992”;
- (b) for “70,127,996” substitute “72,317,337”;
- (c) for “53,498,502” substitute “55,618,096”;
- (d) for “50,918,572” substitute “52,964,678”;
- (e) for “49,320,164” substitute “51,284,366”.

Amendments to article 24 (Monitoring and reporting of emissions)

8.—(1) Article 24 is amended as follows.

(2) Renumber the text of article 24 as paragraph (1) and after that paragraph insert—

“(2) Paragraph (1) does not apply to the monitoring and reporting of maritime emissions.”

Amendments to article 25 (Verification of data and accreditation of verifiers)

9.—(1) Article 25 is amended as follows.

(2) Renumber the text of article 25 as paragraph (1) and after that paragraph insert—

“(2) Paragraph (1) does not apply to the verification of maritime emissions.”.

Amendments to article 35 (Charges)

10.—(1) Article 35 is amended as follows.

(2) In paragraph (1), after “aircraft operator”, insert “, maritime operator”.

(3) In paragraph (2)(h), after “article 45” insert “, a determination of maritime emissions under article 45A or a determination of the emissions figure for surrender under article 45B”.

(4) In paragraph (3), for “or aircraft operator” substitute “, aircraft operator or maritime operator”.

Amendments to article 44A (Deficit notices)

11.—(1) Article 44A is amended as follows.

(2) In paragraph (1), after sub-paragraph (b), insert—

“(c) a person who is a maritime operator in relation to a scheme year (the “relevant scheme year”) fails to surrender allowances in accordance with paragraph 15 of Schedule 2A.”.

(3) For paragraph (3)(a) to (c), substitute—

“(a) the relevant scheme year and—

- (i) the installation’s reportable emissions;
- (ii) the person’s aviation emissions; or
- (iii) the person’s maritime emissions less any surrender deduction, in that year;

(b) the number of allowances (if any) surrendered in compliance with article 27, the requirements of a surrender or revocation notice, article 34 or paragraph 15 of Schedule 2A (including any surrendered after the date by which allowances were required to be surrendered);

(c) the number of allowances representing the difference (the “deficit”) between allowances equal to—

- (i) the installation’s reportable emissions;
- (ii) the person’s aviation emissions; or
- (iii) the person’s maritime emissions less any surrender deduction, in the relevant scheme year and the number referred to in sub-paragraph (b);”.

(4) In paragraph (8), after sub-paragraph (b), insert—

“(ba) to a person who is a maritime operator in relation to a scheme year, if the person’s maritime operator holding account has been closed under paragraph 28A of that Schedule;”.

Insertion of articles 45A and 45B

12. After article 45 insert—

“Determination of maritime emissions by regulator

45A.—(1) The regulator must make a determination of emissions of a maritime operator that fails to submit a report of its maritime emissions (the “annual emissions report”) in accordance with paragraph 14 of Schedule 2A.

(2) Where a verifier states in a verification report under paragraph 59 of Schedule 2A that there are non-material misstatements in the annual emissions report of the maritime operator that have not been corrected by the maritime operator before the verification report is issued—

- (a) the regulator must—

- (i) assess the misstatements;
- (ii) if the regulator considers it appropriate, make a determination of emissions of the maritime operator;
- (iii) give notice to the maritime operator as to whether or not corrections are required to the annual emissions report and, if corrections are required, set out the corrections in the notice; and

- (b) the maritime operator must make the information referred to in sub-paragraph (a)(iii) available to the verifier.

(3) The regulator may make a determination of emissions of the maritime operator if the regulator considers that the determination of maritime emissions is necessary for the purpose of imposing, or considering whether to impose, a civil penalty until article 47.

(4) A regulator who makes a determination under this article must give notice of the determination to the maritime operator or the person on whom the civil penalty referred to in paragraph (3) may be imposed.

(5) A notice of a determination of maritime emissions determines for the purposes of this Order (including for calculating a civil penalty under article 47) the maritime operator's maritime emissions for the period to which the determination relates.

(6) Where, after making a determination under this article (including a rectified determination of emissions, or a further rectified determination of emissions, made under this paragraph), the regulator considers that there is an error in the determination, the regulator must—

- (a) withdraw any notice of the determination given under paragraph (4);
- (b) make a rectified determination; and
- (c) give notice of the rectified determination in accordance with paragraph (4),

and paragraph (5) applies to a notice of the rectified determination as it does to the notice of the previous determination.

(7) The obligation to give notice of a rectified determination under paragraph (6)(c) does not apply where that person was not a maritime operator in the scheme year to which the determination relates.

(8) For the purposes of this article, emissions must be determined on the basis of a set of assumptions designed to ensure that no under-estimation occurs.

Determination of emissions figure for surrender by regulator

45B.—(1) For the purposes of this article, the emissions figure for surrender is the maritime operator's maritime emissions less its surrender deduction in the scheme year to which the determination relates.

(2) The regulator must make a determination of a maritime operator's emissions figure for surrender in a scheme year where—

- (a) a maritime operator entitled to a surrender deduction failed to calculate the surrender deduction in its annual emissions report correctly or at all; or
- (b) the maritime operator's surrender deduction has been altered as a result of a determination of maritime emissions under article 45A.

(3) A regulator who makes a determination under this article must give a notice of determination of the emissions figure for surrender to the maritime operator.

(4) A notice of a determination of emissions figure for surrender determines for the purposes of this Order (including for calculating a civil penalty under article 47) the maritime operator's maritime emissions less the surrender deduction for the period to which the determination relates.

(5) Where, after making a determination under this article (including a rectified determination, or a further rectified determination, made under this paragraph), the regulator considers that there is an error in the determination, the regulator must—

- (a) withdraw any notice of the determination given under paragraph (3);
- (b) make a rectified determination; and
- (c) give notice of the rectified determination in accordance with paragraph (3),

and paragraph (4) applies to a notice of the rectified determination as it does to the notice of the previous determination.

(6) The obligation to give notice of a rectified determination under paragraph (5)(c) does not apply where that person was not a maritime operator in the scheme year to which the determination relates.”.

Amendments concerning enforcement

13.—(1) Article 47 is amended as follows.

(2) In paragraph (12) in the definition of “daily penalty”, after “64A(2)(b)”, insert “64B(2)(b), 64C(2)(b), 64D(2)(b), 64E(2)(b)”.

14.—(1) Article 52 is amended as follows.

(2) In paragraph (1)—

- (a) for “or an aircraft operator”, substitute “, an aircraft operator, or a maritime operator”;
- (b) after sub-paragraph (b) insert—

“(c) in the case of a maritime operator, the maritime operator fails to surrender sufficient allowances, contrary to paragraph 15 of Schedule 2A.”.

(3) In paragraph (2), for “or the aircraft operator” substitute “, the aircraft operator, or the maritime operator”.

(4) After paragraph (9), insert—

“(9A) This paragraph applies where the regulator becomes aware that—

- (a) a maritime operator’s maritime emissions less any surrender deduction (as determined by the regulator under article 45A or 45B) in a scheme year exceed the maritime operator’s verified maritime emissions less any surrender deduction for that year; and
- (b) the maritime operator failed to surrender allowances equal to the difference on or before 30th April in the year following the scheme year referred to in sub-paragraph (a).

(9B) In paragraph (9A), “verified maritime emissions less any surrender deduction” means maritime emissions and, where applicable, the surrender deduction—

- (a) verified under paragraph 14(2) of Schedule 2A; or
- (b) previously determined by the regulator under article 45A or 45B.

(9C) Where paragraph (9A) applies, the maritime operator is liable to the civil penalty referred to in paragraph (10) (and not the excess emissions penalty) in respect of the failure to surrender allowances referred to in paragraph (9A)(b).”.

(5) In paragraph 10, for “or the aircraft operator”, substitute “, the aircraft operator, or the maritime operator”.

15. After article 64A, insert—

“Maritime: failure to apply or make revised application for emissions monitoring plan

64B.—(1) A maritime operator is liable to a civil penalty where the maritime operator fails—

- (a) to apply (or to apply on time) to the regulator for an emissions monitoring plan, contrary to paragraph 9 of Schedule 2A; or
 - (b) to make a revised application (or to make a revised application on time) for an emissions plan, where required to do so under paragraph 11 of Schedule 2A.
- (2) The civil penalty is—
- (a) £20,000; and
 - (b) a daily penalty at a daily rate of £500 for each day that the application is not submitted or, as the case may be, the revised application is not submitted, beginning with the day on which the initial notice is given, up to a maximum of £45,000.

Maritime: failure to comply with condition of emissions monitoring plan

64C.—(1) A maritime operator is liable to a civil penalty where the maritime operator fails to comply (or to comply on time) with a condition of an emissions monitoring plan, contrary to paragraph 13(2) of Schedule 2A.

- (2) The civil penalty is—
- (a) £20,000; and
 - (b) a daily penalty at a daily rate of £500 for each day that the person fails to comply with the condition, beginning with the day on which the initial notice is given, up to a maximum of £45,000.

Maritime: failure to monitor maritime emissions

64D.—(1) A maritime operator is liable to a civil penalty where the maritime operator fails to monitor maritime emissions in accordance with paragraph 13 of Schedule 2A.

- (2) The civil penalty is—
- (a) £20,000; and
 - (b) a daily penalty at a daily rate of £500 for each day that the person fails to monitor maritime emissions in accordance with paragraph 13 of Schedule 2A, beginning with the day on which the initial notice is given, up to a maximum of £45,000.

Maritime operator: failure to report maritime emissions

64E.—(1) A maritime operator is liable to a civil penalty where the maritime operator fails to submit (or to submit on time) a verified report of maritime emissions to the regulator, contrary to paragraph 14 of Schedule 2A.

- (2) The civil penalty is—
- (a) £20,000; and
 - (a) a daily penalty at a daily rate of £500 for each day that the report is not submitted, beginning with the day on which the initial notice is given, up to a maximum of £45,000.”.

16.—(1) Article 67 is amended as follows.

(2) After paragraph (e), insert—

“(f) in a report of maritime emissions under paragraph 14 of Schedule 2A.”.

Amendments to article 70 (Right of appeal)

17.—(1) Article 70 is amended as follows.

(2) After paragraph (2)(d), insert—

“(da) article 45A(4) (determination of maritime emissions by regulator);

(db) article 45B(3) (determination of emissions figure for surrender by regulator);”.

(3) After paragraph (2)(f), insert—

“(fa) paragraph 11 of Schedule 2A (refusal of application by a maritime operator for an emissions monitoring plan);

(fb) paragraph 12 of Schedule 2A (variation of an emissions monitoring plan issued to a maritime operator);”.

(4) After paragraph (2)(gc), insert—

“(gca) paragraph 13A(4) of Schedule 5A (notice suspending maritime operator holding account);”.

Amendments to article 72 (Effect of appeals)

18.—(1) Article 72 is amended as follows.

(2) After paragraph (2)(c)(ii), insert—

“(iiza) paragraph 12(4), (5) and (6) of Schedule 2A (variation of an emissions monitoring plan issued to a maritime operator);”.

(3) After paragraph (2)(c)(iic), insert—

“(iica) paragraph 13A(4) of Schedule 5A (notice suspending maritime operator holding account);”.

(4) In paragraph (4), after “article 28(1)”, insert “or paragraph 9(1) of Schedule 2A”.

(5) In paragraph (5), after “article 45(5)”, insert “, or the determination of maritime emissions or emissions figure for surrender under articles 45A(4) or 45B(3),”.

Amendments to article 75C (National security)

19.—(1) Article 75C is amended as follows.

(2) After paragraph (6)(c), insert—

“(ca) paragraph 13A(5) (maritime operator holding account);”.

Amendments to Schedule 5A (Registry)

20. Schedule 5A is amended as set out in paragraphs 21 to 30.

21.—(1) Paragraph 5 is amended as follows.

(2) In sub-paragraph (1)(a), for “and aircraft operators”, substitute “, aircraft operators and maritime operators”.

(3) For sub-paragraph (1)(c), substitute—

“(c) reportable emissions of installations, aviation emissions of aircraft operators and maritime emissions of maritime operators;”.

(4) For sub-paragraph (1)(d), substitute—

“(d) the surrender of allowances by operators, aircraft operators and maritime operators in accordance with articles 27 and 34 and paragraph 15 of Schedule 2A.”.

(5) In sub-paragraph (2)(a), after sub-paragraph (iv), insert—

“(iva) maritime operator holding accounts (see paragraph 13A);”.

22.—(1) Paragraph 6A is amended as follows.

(2) In the heading, for “Reportable emissions and aviation emissions to be recorded in registry” substitute “Reportable emissions, aviation emissions and maritime emissions to be recorded in the registry”.

(3) For sub-paragraph (4), substitute—

“(4) Where a maritime operator submits an annual emissions report to the regulator in accordance with paragraph 14 of Schedule 2A, the maritime emissions less any surrender deduction stated in the report must be recorded in the maritime operator’s maritime operator holding account on or before 30th April in the year in which the report is submitted.

(5) Where the regulator makes a determination under articles 45 to 45B, the emissions so determined must, within one month of the notice of their determination being given under article 45(5), 45A(4) or 45B(3), be recorded by the registry administrator—

- (a) in the case of reportable emissions of the operator of an installation, in its operator holding account;
- (b) in the case of aviation emissions of an aircraft operator, in its aircraft operator holding account; and
- (c) in the case of a maritime operator, in its maritime operator holding account.”.

23. After paragraph 13, insert—

“Maritime operator holding accounts

13A.—(1) Where the regulator issues an emissions monitoring plan to a person under paragraph 10 of Schedule 2A, the regulator must, as soon as reasonably practicable, instruct the registry administrator to open a maritime operator holding account in the name of the person.

(2) The registry administrator may by notice to the person or the regulator, require the person or the regulator to provide in the form specified in the notice, such information as the registry administrator considers necessary to—

- (a) open the account; and
- (b) assess whether the person is a fit and proper person to hold a maritime operator holding account.

(3) As soon as is reasonably practicable after receiving an instruction under sub-paragraph (1) and any information required under sub-paragraph (2), the registry administrator must assess whether the person is a fit and proper person to hold a maritime operator holding account and—

- (a) if the registry administrator considers that the person is a fit and proper person to hold a maritime operator holding account, open the account; or
- (b) if the registry administrator does not consider that the person is a fit and proper person to hold a maritime operator holding account, open, and immediately suspend, the account imposing the restriction set out in paragraph 25(2)(b) or (c) (or both).

(4) The registry administrator must give notice to the person and the regulator of a decision to open and suspend an account under sub-paragraph (3)(b).

(5) A notice under sub-paragraph (4) must include the reason for the suspension unless the registry administrator considers that its inclusion might prejudice the investigation or prosecution of an offence under the law of any part of the United Kingdom or a country or territory outside the United Kingdom or would be contrary to the interests of national security.

(6) Where, after a suspension under sub-paragraph (3)(b), the registry administrator subsequently considers that the person is a fit and proper person to hold a maritime operator holding account, the registry administrator must, as soon as reasonably practicable—

- (a) lift the suspension;
- (b) give notice to the person and the regulator that the suspension has been lifted.”.

24.—(1) Paragraph 16 is amended as follows.

(2) In sub-paragraph (4)(e), for “or an aircraft operator holding account”, substitute “, an aircraft operator holding account or a maritime operator holding account”.

25.—(1) Paragraph 20 is amended as follows.

(2) In paragraph 20(2), after paragraph (c), insert—

“(ca) paragraph 13A(3)(b) (maritime operator holding accounts);”.

26.—(1) Paragraph 24 is amended as follows.

(2) For sub-paragraph (1), substitute—

“(1) The operator of an installation, a person who is an aircraft operator in relation to a scheme year or a person who is a maritime operator in relation to a scheme year may surrender an allowance by transferring the allowance from—

- (a) the operator’s operator holding account for the installation;
 - (b) the aircraft operator’s aircraft operator holding account; or
 - (c) the maritime operator’s maritime operator holding account,
- to the surrender account.”.

(3) In sub-paragraph (3)(a)—

(a) in sub-paragraph (ii), delete the “and”;

(b) after sub-paragraph (ii), insert—

“(iii) where the person requesting the reversal is a maritime operator in relation to a scheme year, the person’s obligation to surrender allowances under paragraph 15 of Schedule 2A; and”.

27. After paragraph 28, insert—

“Closure of maritime operator holding accounts

28A.—(1) This paragraph applies where—

- (a) the regulator is satisfied that a person has ceased to perform maritime activity and there is no realistic prospect that the person will resume maritime activity;
- (b) the person has complied with the requirements of paragraph 15 of Schedule 2A or the regulator considers that there is no reasonable prospect of the requirements being complied with; and
- (c) where relevant, any deficit notice given under article 44A to the person has been complied with or the regulator considers that there is no reasonable prospect of the deficit notice being complied with.

(2) The regulator must instruct the registry administrator to close the maritime operator holding account.

(3) The registry administrator must give notice to the person as soon as reasonably practicable after the account is closed.”.

28.—(1) Paragraph 30 is amended as follows.

(2) In sub-paragraph (1), for “27, 28 or 29(2) or (3), substitute “27, 28, 28A or 29(2) or (3)”.

29.—(1) Paragraph 31 is amended as follows.

(2) After sub-paragraph (1)(b), insert—

“(ba) maritime operator holding accounts;”.

(3) After sub-paragraph (2)(e), insert—

“(ea) if the account is a maritime operator holding account, the information referred to in paragraph 33A;”.

30. After paragraph 33, insert—

“Information about accounts: maritime operator holding accounts

33A.—(1) In the case of a maritime operator holding account, the information is—

- (a) the regulator of the account holder;
- (b) the number of the account holder’s emissions monitoring plan;
- (c) the first scheme year for which the account holder’s maritime emissions (less any surrender deduction) are recorded in the account;
- (d) if the account is closed, the last scheme year for which the account holder’s maritime emissions (less any surrender deduction) are recorded in the account;
- (e) the account holder’s maritime emissions less any surrender deduction in each scheme year, and the account holder’s total maritime emissions less any surrender deduction in the trading period, recorded in the account as at the relevant date;
- (f) the total number of allowances transferred from the account to the surrender account (excluding transfers that have subsequently been reversed) as at the relevant date; and
- (g) the code (known as the “static compliance code”) generated in the registry from the information recorded in the account as at the relevant date, and the key to that code, indicating which one of the statuses referred to in sub-paragraph (2) applies.

(2) The statuses are that—

- (a) the account holder is not a maritime operator in relation to the scheme year preceding the relevant date;
- (b) paragraph (a) does not apply and the account holder’s maritime emissions less any surrender deduction in the scheme year preceding the relevant date are not recorded in the account as at the relevant date;
- (c) neither paragraph (a) nor (b) applies and the total number of allowances referred to in sub-paragraph (1)(f) is greater than or equal to the account holder’s maritime emissions less any surrender deduction in the trading period recorded in the account as at the relevant date;
- (d) neither paragraph (a) nor (b) applies and the total number of allowances referred to in sub-paragraph (1)(f) is less than the account holder’s maritime emissions less any surrender deduction in the trading period recorded in the account as at the relevant date.

(3) In this paragraph, “relevant date” means 1st May preceding the date of publication of the information or the updated information.”.

SCHEDULE 3

Article 6

AMENDMENTS TO THE GREENHOUSE GAS EMISSIONS TRADING SCHEME AUCTIONING REGULATIONS 2021

Introductory

1. The Greenhouse Gas Emissions Trading Scheme Auctioning Regulations 2021(a) are amended in accordance with this Schedule.

Amendments to regulation 9 (Annual volumes of allowances)

2.—(1) Regulation 9 is amended as follows.

(a) S.I. 2021/484, amended by S.I. 2021/513, S.I. 2021/561, S.I. 2021/917, S.I. 2023/994 and S.I. 2024/1366.

- (2) In the table in paragraph (10), in column 2 (Base)—
- (a) for “79,059,690” substitute “80,063,992”;
 - (b) for “70,127,996” substitute “72,317,337”;
 - (c) for “53,498,502” substitute “55,618,096”;
 - (d) for “50,918,572” substitute “52,964,678”;
 - (e) for “49,320,164” substitute “51,284,366”.

Amendments to regulation 10 (Adjustments of the auction calendar)

- 3.—(1) Regulation 10 is amended as follows.
- (2) In paragraph (1), after sub-paragraph (g), insert—
- “(h) the addition of an activity to article 16(2) of the Trading Scheme Order.”.

Amendments to regulation 16 (Persons eligible to apply for admission to bid)

- 4.—(1) Regulation 16 is amended as follows.
- (2) For paragraph (1)(a), substitute—
- “(a) an operator having an operator holding account, bidding on its own account, including any parent undertaking, subsidiary undertaking or affiliated undertaking forming part of the same group as the operator;
 - (aa) an aircraft operator having an aircraft operator holding account, bidding on its own account, including any parent undertaking, subsidiary undertaking or affiliated undertaking forming part of the same group as the aircraft operator;
 - (ab) a maritime operator having a maritime operator holding account, bidding on its own account, including any parent undertaking, subsidiary undertaking or affiliated undertaking forming part of the same group as the maritime operator;”.

Amendments to regulation 25 (Appointment requirements applicable to any auction platform)

- 5.—(1) Regulation 25 is amended as follows.
- (2) In paragraph (8) after “Trading Scheme Order)” insert “or maritime operators (within the meaning of paragraph 3 of Schedule 2A to the Trading Scheme Order)”.

Amendments to the Schedule (List of elements referred to in regulation 18(5))

- 6.—(1) The Schedule is amended as follows.
- (2) After paragraph 10, insert—
- “**10A.** For maritime operators, the emissions monitoring plan issued under paragraph 10 of Schedule 2A to the Trading Scheme Order.”.

EXPLANATORY NOTE

(This note is not part of the Order)

The United Kingdom Emissions Trading Scheme (the “UK ETS”) was established by the Greenhouse Gas Emissions Trading Scheme Order 2020 (the “UK ETS Order”). The purpose of the UK ETS is to limit, or to encourage the limitation of, the emission of greenhouse gases from certain activities during the ten “scheme years” beginning in 2021. Operators of certain industrial installations and certain aircraft operators are required to monitor, report on, and surrender “allowances” equivalent to, their greenhouse gas emissions in each scheme year. This Order expands the coverage of the UK ETS to include greenhouse gas emissions from certain maritime activities.

The effect is to require operators of certain ships arriving at ports of call in the United Kingdom to obtain an “emissions monitoring plan” (to document the processes through which it will ascertain the greenhouse gas emissions associated with the maritime activities of its ships) and, for each scheme year, to monitor, independently verify, and report to the regulator its maritime emissions, and to surrender a level of allowances equivalent to those maritime emissions.

This Order inserts Schedule 2A into the UK ETS Order and amends the Order to provide as follows—

Part 1 of Schedule 2A to the UK ETS Order contains at paragraph 2 definitions that are used in the Schedule.

Paragraph 3 defines the “maritime operator”, the entity responsible for compliance in respect of a ship.

Paragraph 4 outlines the requirement to provide notification of a change of responsibility.

Paragraph 5 lists ships to which Schedule 2A applies.

Paragraph 6 provides the meaning of “port of call”.

Paragraph 7 provides the meaning of “maritime activity”.

Paragraph 8 lists activities excluded from scope.

Paragraph 9 provides for the making of applications for emissions monitoring plans.

Paragraph 10 outlines how these applications are to be considered by the regulator.

Paragraph 11 provides for refusal of an application for an emissions monitoring plan.

Paragraph 12 provides for variations to emissions monitoring plans.

Paragraph 13 applies an obligation to undertake monitoring of maritime emissions in accordance with Part 4 of Schedule 2A.

Paragraph 14 outlines the requirements around reporting such emissions, through an annual emissions report and sets out the requirement on verification of the annual emissions report.

Paragraph 15 sets out the requirement of maritime operators to surrender allowances.

Paragraph 16 outlines maritime monitoring and reporting principles.

Part 3 of Schedule 2A outlines the content to be included in an emissions monitoring plan.

Part 4 of Schedule 2A provides for the methods through which to determine maritime emissions.

Part 5 of Schedule 2A provides for data management and control.

Part 6 of Schedule 2A provides the formulae with which to calculate maritime emissions.

Part 7 of Schedule 2A outlines the content to be included in the annual emissions report.

Part 8 of Schedule 2A contains details on verification and accreditation.

Part 9 of Schedule 2A contains details on the determination of values for emission factors.

Schedule 2 of this Order contains consequential amendments to the UK ETS Order, as required for the functioning of the maritime regime within the existing UK ETS structure. This includes adding maritime activities to the scope of the scheme (see paragraph 5 amending article 16), clarifying the meaning of regulator in relation to maritime operators (see paragraphs 3 and 4 amending article 9 and inserting article 13A), and disapplying for the purposes of the maritime regime the Monitoring and Reporting Regulation 2018 and Verification Regulation 2018 (see paragraphs 8 and 9). Paragraph 10 amends article 35 to enable regulatory charging in respect of the maritime regime,

and paragraphs 11 to 16 amend Part 7 (Enforcement) of the UK ETS Order to extend this to maritime.

An impact assessment of the effect that this expansion of the UK ETS will have on the costs of business, and on the public sector, is available from the Industrial Decarbonisation and Emissions Trading Directorate, Department for Energy Security and Net Zero, 3-8 Whitehall, London, SW1A 2JP, and is available alongside the instrument on www.legislation.gov.uk.