



# **Discussion paper on elements relevant for independent auditors verifying reports on bulk imports and production of hydrofluorocarbons (HFCs) in accordance with Regulation (EU) No 517/2014 on fluorinated greenhouse gases**

**Version 2.1 (April 2020)**

## **Scope of this guidance document**

Article 19 of Regulation (EU) No 517/2014 on fluorinated greenhouse gases ('the Regulation') requires companies to report on their production, import and export of fluorinated greenhouse gases and gases listed in Annex II of the Regulation. In some cases explained in this document, the reported data must be verified by an independent auditor.

There is no detailed legal framework for how this verification should be conducted. Still, a number of industry stakeholders and Member States have asked for guidance on the aspects that verification would be expected to cover. The purpose of this document is to provide suggestions regarding the elements appearing to be most relevant for the verification as well as more general information on reporting thresholds and deadlines. For verification of such data, it gives information on:

- What an auditor should check during the verification of relevant data;
- What principles the auditor should apply to verification;
- The steps in the verification process and the specific rules applicable when verifying relevant data;
- Accreditation of auditors carrying out verification, as well as specific competence and impartiality requirements that may apply

**This document shall not be understood to have any legal validity.**

## **What's new?**

Key updates in version 2.1 of this guidance document compared to the previous version of March 2016 relate to:

- the scope of the verification in section 4 of this document
- the description of verification activities in section 5.1 of this document
- the need of verification for quota-exempted HFCs in section 5.4 of this document
- the upload of verification reports to the BDR reporting system in section 5.5 of this document
- the list of particular elements of the F-gas report to be addressed by the auditor (section 6 of this document)
- guidance what a company should do in case the auditor detects inaccuracies (section 8 of this document)
- the verification report template in Annex III to this document, listing elements to be taken up in the independent auditor's verification report

## **Acknowledgement**

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## 1. Introduction

This document provides an outline of the issues that an auditor should consider when verifying the mandatory F-gas reports **on hydrofluorocarbons (HFCs) in bulk (i.e. this does not include HFCs contained in equipment)** required by Art 19(1) of [Regulation \(EU\) No 517/2014](#) on fluorinated greenhouse gases ('the Regulation').

The steps that a company must follow to comply with the Regulation include registration, reporting and (depending on thresholds) independent verification.

Companies must submit their reports using the electronic reporting tool provided by the European Environmental Agency (EEA), accessible from the F-gas portal on the website of the European Commission. The reporting format is established by the [Commission Implementing Regulation \(EU\) No 1191/2014](#) ('the Implementing Regulation').

As a first step, companies register in the [F-gas Portal](#)<sup>1</sup>. A [guidance document](#)<sup>2</sup> is available to help with the registration process.

Companies then submit their annual F-gas report using the electronic reporting tool, which is an online questionnaire provided by the EEA, accessible via a link from the [F-gas portal & HFC Licensing System](#), on the website of the European Commission. The electronic reporting tool is part of the EEA's Business Data Repository (BDR)<sup>3</sup>, which has been developed to handle this type of confidential information. A description of the structure of a typical F-gas report is included in Annex I of this document.

Throughout this document, the term 'F-gas report' refers to the printed (or electronic) result of the completed online questionnaire that has been submitted via the BDR. The term 'Reporting Section' refers to the numbered sections of the Reporting Sections of the Annex of the Implementing Regulation, the online questionnaire and its printout.

Auditors are strongly advised to consult the Regulation and the Implementing Regulation directly. Further guidance on reporting requirements is provided in the [Frequently Asked Questions document for companies reporting on F-gas activities](#)<sup>4</sup> (FAQ) available from the [EEA F-gases reporting BDR help webpage](#).

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<sup>1</sup> <https://webgate.ec.europa.eu/fgas/>

<sup>2</sup> [https://ec.europa.eu/clima/system/files/2020-01/guidance\\_document\\_en.pdf](https://ec.europa.eu/clima/system/files/2020-01/guidance_document_en.pdf)

<sup>3</sup> <https://bdr.eionet.europa.eu>

<sup>4</sup> [https://bdr.eionet.europa.eu/help/faq/F-gases\\_FAQ\\_EN.pdf](https://bdr.eionet.europa.eu/help/faq/F-gases_FAQ_EN.pdf)

## 2. The legal basis for the verification requirements

This document focuses on the verification of the yearly reporting of data on HFCs in bulk, based on the following articles in the Regulation:

### Article 19(6)

*By 30 June 2015 and every year thereafter, each undertaking which under paragraph 1 reports on the placing on the market 10 000 tonnes of CO<sub>2</sub> equivalent or more of hydrofluorocarbons during the preceding calendar year shall, in addition, ensure that the accuracy of the data is verified by an independent auditor. The auditor shall be either:*

*(a) accredited pursuant to Directive 2003/87/EC; or*

*(b) accredited to verify financial statements in accordance with the legislation of the Member State concerned.*

Companies affected are producers, importers or exporters of HFCs as well as any undertakings receiving quotas pursuant to Article 18(1):

### Article 19(1)

*By 31 March 2015 and every year thereafter, each producer, importer and exporter [...] shall report to the Commission the data specified in Annex VII on each of those substances for that calendar year. This paragraph shall also apply to undertakings receiving quotas pursuant to Article 18(1).*

Annex VII of the Regulation indicates data to be reported by such companies. Commission Implementing Regulation (EU) 1191/2014<sup>5</sup> further describes in detail what is to be reported in 13 different sections of the reporting sheets.

### Annex V

*[..]*

*Transactions referred to in point (c) of Article 15(2) shall be verified in accordance with Article 19(6) regardless of the quantities involved.*

Annex V makes particular references to the need to verify correct reporting on gases supplied to others for direct export, exempted from the phase-down.

### Article 15(2)

*This Article shall also not apply to the following categories of hydrofluorocarbons: [..]*

*(c) hydrofluorocarbons supplied directly by a producer or an importer to undertakings, for export out of the Union, where those hydrofluorocarbons are not subsequently made available to any other party within the Union, prior to export;*

*[..]*

**Note that for import of HFCs contained in equipment, verification is also needed.**

### Article 14(2)

*From 1 January 2018, where hydrofluorocarbons contained in the equipment have not been placed on the market prior to the charging of the equipment, importers of that equipment shall ensure that by 31 March every year the accuracy of the documentation and declaration of conformity is verified, for the preceding calendar year, by an independent auditor.*

<sup>5</sup> Commission Implementing Regulation (EU) 1191/2014 has been amended by means of Commission Implementing Regulation (EU) 2017/1375, Commission Implementing Regulation (EU) 2018/1992 and Commission Implementing Regulation (EU) 2019/522. A consolidated version, which is meant as a documentation tool only and has no legal effect (only the authentic versions of the relevant acts as quoted above do), is available at [https://eur-lex.europa.eu/eli/reg\\_impl/2014/1191/2019-04-17](https://eur-lex.europa.eu/eli/reg_impl/2014/1191/2019-04-17).

## Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation

Detailed arrangements relating to the declaration of conformity and the verification by the independent auditor on HFCs pre-charged in equipment are specified in [Commission Implementing Regulation \(EU\) 2016/879](#). Please consult the [specific guidance document](#)<sup>6</sup> available on the [DG CLIMA website](#)<sup>7</sup> for further information on imports of pre-charged equipment and related verification.

### 3. Who is authorised to verify?

The Regulation specifies that:

*Article 19(6)*

*The auditor shall be either:*

- (a) accredited pursuant to Directive 2003/87/EC; or*
- (b) accredited to verify financial statements in accordance with the legislation of the Member State concerned.*

Note that the need for accreditation under Directive 2003/87/EC does not imply that the verification rules and procedures established under that Directive apply automatically to the verification rules and procedure to be carried out under Regulation (EU) No 517/2014. While Article 19(6) allows a broad range of capacity to be able to verify, it remains the case that **auditors must have a recognised verification competency, which is proven by holding either of the two accreditations as given in the Article 19(6) above.**

As of 2020, the HFC registry in the European Commission's F-Gas portal & HFC Licensing System (<https://webgate.ec.europa.eu/fgas/>) offers a **'find an auditor' module**. Auditors accredited as given above may register in the system. This allows all registered producers and importers of bulk HFCs to search the list of registered auditors in order to identify and contact them.

The auditor and its personnel involved in verification activities have to be independent from the company and competent to perform the verification. Competence is not only knowledge but also the skill to apply that knowledge and to carry out prescribed activities. Auditors carrying out F-gas verification need to have:

- Knowledge and experience on data and information auditing.
- The ability to perform verification activities.
- Knowledge and experience in the sector specific reporting aspects that are relevant to the specific scope of accreditation.
- Specific knowledge of [Regulation \(EU\) No 517/2014](#) on fluorinated greenhouse gases ('the Regulation') and preferably be familiar with relevant guidance documents.

### 4. Scope of the verification

**The verification obligations relate only to HFCs as listed in Section 1 of Annex I of the Regulation, and to mixtures containing any of these HFCs, not to other fluorinated greenhouse gases.**

The scope of verification is defined by the tasks the auditor must perform to achieve the objective of verification: i.e. that the audit and data verification process aims to give assurance that the F-gas data submitted are accurate and reliable. The process also supports the principle of fairness by ensuring that all submissions have been made on an equal basis in accordance with the criteria.

The scope of verification includes an assessment of the accuracy of HFC-data:

- relating to HFCs in the full annual F-gas report as submitted to the BDR, when the amount of HFCs placed on the market exceeds 10 000 tonnes of CO<sub>2</sub> equivalents, as calculated in Reporting

<sup>6</sup> [https://ec.europa.eu/clima/sites/clima/system/files/2020-06/guidance\\_equipment\\_importers\\_en.pdf](https://ec.europa.eu/clima/sites/clima/system/files/2020-06/guidance_equipment_importers_en.pdf)

<sup>7</sup> [https://ec.europa.eu/clima/eu-action/fluorinated-greenhouse-gases/f-gas-portal-hfc-licensing-system-quota-allocation-authorisation-and-reporting\\_en](https://ec.europa.eu/clima/eu-action/fluorinated-greenhouse-gases/f-gas-portal-hfc-licensing-system-quota-allocation-authorisation-and-reporting_en)

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation Section 9, sub-heading 9C ("Total amount of hydrofluorocarbons regarded as placed on the EU market for the first time").<sup>8</sup>

- on HFCs supplied directly to undertakings for export out of the Union, reported in Reporting Section '5C\_exempted'.

In verifying the accuracy of the data, auditors have to assess:

- the risks of misstatements and their material effect on the reported data.
- the completeness of the annual F-gas report – that it captures all relevant operations relating to HFCs and HFCs exempted from the phase-down in accordance with Article 15(2).
- that the data relating to HFCs are free from material misstatements
- information in support of data flow and control activities, the control system in place and data quality assurance procedures
- whether the annual F-gas report is limited to the activities of the reporting legal entity (= undertaking). The activities (e.g. imports) under the name and VAT number of a sister company must not be included.

In order for the auditor to conclude this, they must obtain clear and objective evidence from the reporting undertaking to support the total data to be reported. To obtain the evidence required for a reasonable level of assurance and making this assessment on the material correctness of the data and associated information, the verifier will use analytical and statistical procedures, carry out substantive data verification and assess the implementation of the reporting requirements. The approach to verifying submissions and the level of scrutiny will be proportionate to the scale of the exercise and the need to assure the accuracy of submitted data.

The auditor is responsible to consider and assess whether there are areas for improvement in the reporting undertaking's reporting process with the intent of improving the rigor, robustness and quality of reported data. This relates primarily to the data flow activities, the reporting undertaking's risk assessment, the control activities, evaluation of the control system and the data quality reporting procedures. If there are areas for improvement, the auditor should add a related recommendation in the verification report.

## **5. Verification requirements**

Depending on their reporting obligations, companies may require different types of verification or documentation. This could include verification of the full annual F-gas report, verification of supplies of quota-exempted HFCs or both.

### **5.1. Verification activities**

#### **Introduction**

Accredited auditors will usually be accustomed to the accredited assurance approach to verification. In such an approach, the auditor (an individual or company) doing the verification holds an accreditation for a specific standard(s). Thus, when an accredited auditor verifies a report they have the authority to state whether the report conforms to that standard.

This is not the approach taken by Regulation (EU) 517/2014. Article 19(6) states that auditors should be accredited<sup>9</sup> (hence they would be qualified and familiar with verification matters) and that the accuracy of the data shall be verified by an independent auditor. Article 19(6) does not directly specify an assurance standard or level of accuracy.

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<sup>8</sup> See explanation under 6.1 below.

<sup>9</sup> See point 3 above



Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation  
While verification of F-gas data conducted by such accredited persons *will not be assured to comply with either the ISO 14065 or any financial assurance standard*, such accredited persons would be in a position to make a statement about the accuracy of the F-gas report.

The Regulation does not specify procedural criteria for verification. Auditors may, of course, choose to verify the accuracy of the data using procedures and criteria that are familiar to them.

In addition, there are international standards that may be relevant for auditors to rely on. Examples of appropriate standards include:

- International Standard on Related Services (ISRS) 4400, Engagements to Perform Agreed-Upon Procedures Regarding Financial Information<sup>10</sup>
- International Framework for Assurance Engagements<sup>11</sup>
- Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000)<sup>12</sup>.

Verification activities normally follow a risk-based approach with the aim of reaching a verification opinion with reasonable assurance (see 5.2) that the F-gas data reported and submitted by the undertaking are fairly and accurately stated (i.e. that the report is free from material misstatement).

The risk based approach, and the need to demonstrate reasonable assurance, requires auditors to undertake a risk assessment on a specific basis, in order to set an appropriate verification plan, for the specific HFC producer and importer. Depending on the findings as the verification proceeds, the verification activities may need to be continuously adjusted to meet the requirements for achieving reasonable assurance. Traceable evidence clearly linked to tests and results etc., and clear planning, output and decision trails to support the verification conclusion. The evidence as well as the related tests and findings shall be fully documented in the auditor's internal verification documentation (i.e. their own auditable record of the verification carried out).

A risk-based verification process consists of several verification steps, which are interconnected to each other and cyclical. Findings during the verification process can mean that an auditor may have to adjust or repeat one or more steps in the verification process. The verification steps are the following:

- 1) Strategic analysis
- 2) Risk analysis (leading to a verification plan)
- 3) Verification (the actual detailed verification testing)
- 4) Internal verification documentation
- 5) Completing the verification and findings and issuing a verification report

### Strategic analysis

During the pre-contract stage (i.e. before a contract is signed with the HFC producer and importer) the auditor checks if he has the ability to undertake the verification activities for a HFC producer and importer based on an evaluation of the risks that are involved for the auditor to undertake the verification activities for the particular HFC producer and importer. When determining the necessary time allocation for a specific verification engagement the auditor takes certain factors into account such as the extent of an HFC producer and importer's activities, the complexity of data flow activities, its internal control system (QA/QC procedures) and the location of information and data related to the BDR-report data. In particular, the risks associated with multiple locations for records and the large data sets have an impact on the time to be allocated. The method used to allocate time is normally documented in a transparent way.

The objective of the **strategic analysis** is to get an understanding of the organisation, data flow and the control system with respect to reporting. This will enable the auditor to plan the verification for the specific circumstances of an individual HFC producer and importer. The auditor assesses the likely nature, scale and complexity of the verification activity. Usually, this is done by document review and interviews. The

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<sup>10</sup> International Standard on Related Services 4400 Engagements to perform agreed-upon procedures regarding financial information [www.ifac.org/system/files/downloads/b015-2010-iaasb-handbook-isrs-4400.pdf](http://www.ifac.org/system/files/downloads/b015-2010-iaasb-handbook-isrs-4400.pdf)

<sup>11</sup> International Framework for Assurance Engagements [www.ifac.org/system/files/downloads/b003-2010-iaasb-handbook-framework.pdf](http://www.ifac.org/system/files/downloads/b003-2010-iaasb-handbook-framework.pdf)

<sup>12</sup> International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information [www.ifac.org/system/files/downloads/b012-2010-iaasb-handbook-isa-3000.pdf](http://www.ifac.org/system/files/downloads/b012-2010-iaasb-handbook-isa-3000.pdf)

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation strategic analysis provides input for the risk analysis, the verification plan and ultimately to the findings and conclusions of the verification which are incorporated into the verification report.

### Risk analysis

To ensure that the auditor can assess the risk of misstatements and their likely material effect, the auditor performs a **risk analysis**. The auditor assesses the likely level of risks of a material misstatement and/or a material non-conformity based on an analysis of the inherent and control risks.

During the verification the auditor also assesses the verification risk (the risk that the auditor expresses an inappropriate verification opinion and/or fails to undertake for example sufficient testing that enables detection of all relevant issues). In assessing the verification risk the auditor takes into account the inherent risks, control risks and detection risks. In order to assess them it is important that the auditor fully understands the data flow, the existing and new systems used to manage the data flow as well as the internal control activities implemented by the HFC producer and importer.

Based on the risk analysis the auditor drafts a verification plan, which comprises at least:

- a **verification programme**, including
  - o the nature of the verification activities, when and how these activities will be carried out and their scope;
  - o the site visit(s) including a description of what activities will be performed on site and what activities off site, as well as information on the systems and processes to be checked and interviews to be performed.
  - o the way the auditor plans to check the completeness of the data set.
- a **data sampling plan**, setting out the scope and extent of the data to be tested in order to reach a verification opinion with reasonable assurance that there are no material misstatements. This should include the sampling method, the method used to test the control activities and the action to be taken if the data fails testing (i.e. which additional testing will be done);

If the actual verification shows that the verification plan is not sufficient and additional risks are identified, the verification plan and the verification activities need to be adapted or expanded; it is therefore a living document to be updated as necessary.

### Verification testing

In order for the auditor to conclude and give a verification opinion statement with reasonable assurance that the BDR-report is free from material misstatements, it must obtain clear and objective evidence from the reporting undertaking to support the total data to be reported. The auditor carries out data sampling as well as testing to confirm that the data management and reporting system is implemented correctly and the control activities are appropriate. To obtain the evidence required for a reasonable level of assurance and making this assessment on the material correctness of the data and associated information, the auditor should use analytical and statistical procedures, carry out substantive data verification and assess the implementation of the reporting requirements. A key element of sampling is that the selection is representative for the overall data set in terms of the factors/types of data sampled and the time periods when samples are selected from across the reporting year.

The objective of the **process analysis** is to collect and document evidence upon which the auditor's verification opinion will be based. The auditor implements the verification plan using the standard auditing techniques of document review, interview, observation and corroboration as well as using data and information from external sources where relevant information is available. This includes walkthrough tests, sampling and analytical review as well as data review procedures. The process analysis stage consists of the verification of processes (data flow), the testing of internal control activities and the verification of the data. During the process analysis the auditor assesses the likely materiality of the misstatements (in relation to the overall declared quantities in the BDR- report subject to verification) and he will then require the HFC producer and importer to correct them where possible (or justify where deemed not possible). The process analysis is completed when all activities described in the verification plan have been carried out. Following the sequence and interaction of the data flow activities as well as testing the control activities can also be carried out by the auditor at the office where the relevant (electronic) databases and procedures

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation for quality assurance and control activities are located. In certain cases the auditor's risk analysis may allow the databases and procedures to be accessed remotely from the desktop of an auditor.

After evaluation of the evidence and before completion of the verification, it is good practice for the auditor to obtain a signed 'Management Declaration' from the reporting undertaking's senior management, in which the management confirms that they have provided all information and evidence that the auditor needs to complete their work. Such 'Management Declaration' supports the auditor in managing their verification risks and potential liabilities. Note, that such a declaration does not exempt the auditor from doing detailed checks on the data.

### **Internal Verification**

At the end of the verification process, the auditor prepares the **internal verification** documentation, which at least proves that the strategic analysis, the risk analysis, the verification plan, including the data sampling plan, have been performed in full. It also has to provide sufficient information to support the conclusions on the verification. The internal verification documentation must be transparent and enable the independent reviewer to obtain an insight as to whether the verification process has been carried out according to the internal requirements. Furthermore, the internal verification documentation reduces the liability risks of the auditor.

### **Verification Report**

The auditor shall present the verification methodology, his findings and verification opinion in a **verification report**. If the data in the BDR-report are free from material misstatement the auditor finally states this in his verification opinion.

A verification statement in line with such standards would include details of or reference to:

- the auditor, the engagement company and intended users
- planning for the verification
- materiality and level of assurance
- the reporting obligation and subject matter being verified
- a description of the verification process(es)
- information on the company's data flow and data quality assurance procedures
- strategic analysis and risk assessments to establish sampling requirements consistent with the level of assurance and the risk to material misstatements identified when reviewing the data flow and control/assurance procedures
- a written assurance report in the form appropriate to an assurance engagement
- the auditor's accreditation.

**A Verification report template is included in Annex III of this document.**

The draft verification report is usually subject to an independent technical review (within the verification body) prior to a decision being made to issue the external verification report. The technical review is carried out at the very end of the verification and its scope shall encompass the complete verification process. There should be no subsequent changes to the opinion statement and associated information unless the changes are reviewed again by the technical reviewer.

Once the verification has been finalised the auditor submits the verification report to the HFC producer and importer.

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation  
**The legal deadline for the verification document to be available is 30 June while the deadline for reporting is 31 March each year, for activities of the preceding calendar year.**

## 5.2. Materiality and level of assurance

As mentioned, the Regulation does not specify a level of assurance or materiality. Still, **the purpose of the verification is to assure that companies do not exceed their quotas** given to them for the purpose of the HFC phase-down. For this reason, **even small exceedances of the quota would be illegal and punishable** under the Regulation. Hence the verification must ascertain, with a high degree of certainty, that the data reported to the BDR does mirror, with very little margin of error, the information available from the company's books. Given that a limited assurance could imply limited accuracy, in verifying the accuracy of the data, it follows that a reasonable level of assurance should apply.

For this reason, the level of assurance should obtain sufficient appropriate audit evidence comparable to the concept of reasonable assurance engagement contained in ISAE 3000.

*Reasonable assurance engagement – An assurance engagement in which the practitioner reduces engagement risk to an acceptably low level in the circumstances of the engagement as the basis for the practitioner's conclusion. The practitioner's conclusion is expressed in a form that conveys the practitioner's opinion on the outcome of the measurement or evaluation of the underlying subject matter against criteria [ISAE 3000 12(a)(i) a]*

On the other hand, a limited assurance engagement as similarly defined in ISAE 3000 would clearly not be sufficient.

The auditor should provide a statement about the level of assurance of their verification. This should include that the information provided on data flow and data quality assurance procedures were consistent with the level of assurance.

## 5.3. Need for Verification of the accuracy of the data of the full F-gas report

Verification of the full F-gas report applies to high volume HFC producers and importers. According to Article 19(6) of the Regulation, companies must have their full annual F-gas report (but only as regards HFCs) verified when the amount of HFCs placed on the market exceeds 10 000 tonnes CO<sub>2</sub> equivalents. This amount is automatically calculated in the reporting template, Reporting Section 9C. Note that the amount calculated in 9C is before the subtraction of exempted amounts. A description of the 10 000 tonnes CO<sub>2</sub> equivalents threshold, as calculated in 9C is shown under heading 6.1.

These companies will need to keep the verification report for at least five years, and the verification report is to be made available, on request, to the competent authority of the Member State concerned and the Commission. Reporters exceeding this threshold are required to acknowledge this obligation (by ticking the appropriate box in Reporting Section 9 during the online reporting procedure).

## 5.4. Need for Verification of HFCs exempted under Article 15(2)(c) for export

Verification of supplies of quota-exempted HFCs to exporters reported in Reporting Section '5C\_exempted' apply to HFC producers and importers.

Annex V of the Regulation states that transactions referred to in Article 15(2)c shall be verified in accordance with Article 19(6) regardless of the quantities involved. It follows that any transaction reported in Reporting Section '5C\_exempted', for the HFC quota exemption of Article 15(2) c, needs to be verified. This obligation for verification also includes companies where the amount of HFCs placed on the market is below the 10 000 tonnes CO<sub>2</sub> equivalents threshold discussed in section 5.3.

Companies whose annual F-gas report meets this condition are required to acknowledge this obligation by ticking a box in online Reporting Section 9 (see also question [6.3 HFCs exempted under Article 15\(2\)c for export](#) in the [FAQ document for companies reporting on F-gas activities](#)).

The producing or importing company has to prove that the other entity exported the quantities supplied by the producer/importer. This proof could for instance be an official letter from the other entity stating that they have exported a certain number of tonnes of product outside of the EU (provided by the producer or importer in question), plus (in the same letter) an acknowledgement that they will report this quantity as exported in their annual reporting.

## 5.5. Verification upload in the BDR

As a means to transparently provide the verification report to the competent Member State and EU authorities, companies are encouraged to use the dedicated upload facility in the EEA's Business Data Repository (BDR), which is accessible through the company's profile in the F-Gas Portal & HFC Licensing System (click on the orange button in the upper right corner "Reporting") For that purpose, the 'Upload of verification documents (HFC producers and bulk importers)' sub-collection should be used. When submitting their verification report, companies are requested to fill a short questionnaire summarising the key verification conclusions as specified in Part VI of the verification report template in Annex III of this document.

In any case, at any time after the 30 June verification deadline, reporting companies need to be prepared to make the verification report available, on request, to the competent authority of the Member State concerned and to the Commission. Companies are required to keep the verification report for at least five years.

## 6. Particular elements in the F-gas report that the auditor should address

While the legal requirement of verification refers to all Reporting Sections of the reporting sheets related to HFCs, the four most important items that an auditor has to check are:

1. Placing on the market (POM)
2. Quota-exempted amounts placed on the market
3. Calculation of quota-demand
4. Proof of physical supplies for new entrants authorising quota

### 6.1. Placing on the market (POM)

In the context of the reporting requirements, as defined in Article 2(10) of the Regulation, POM means supplying or making available to another party in the Union for the first time, for payment or free of charge, or using for its own account in the case of a producer, and includes customs release for free circulation in the EU.

**POM is the most relevant parameter as each company's compliance with the quota system and reduction of market supply ("phase down") is based on this metric**, please compare Art. 15-18. POM is also the basis for establishing whether a company is required to provide a verification on its F-gas report (based on the 10 000 tonnes CO<sub>2</sub> equivalents threshold, see also 5.3 above).

The amounts available to be placed on the market are tallied within the online questionnaire. The POM amount is calculated using a number of parameters such as the amount of HFCs produced, imported or sold from previously unrealised stocks. The results and the relevant formulas are shown in the F-gas report printout.

**The following parameters are relevant for the calculation of POM at "9C: Total amount of hydrofluorocarbons regarded as placed on the EU market for the first time" and should be checked for accuracy:**

### Section 1: To be filled in by producers of gases

- 1A: Total quantity of production from facilities in the Union, including amounts not captured, unwanted by-products and recovered by-production
- 1Aa: thereof: Amounts not captured
- 1A\_a: thereof: Amounts destroyed
- 1B: - thereof [of 1Ab 'Total amount generated and captured', calculated as  $1Ab = 1A - 1Aa$ ]: quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or those products have been destroyed in the facilities prior to the placing on the market
- 1C: - thereof [of 1Ab 'Total amount generated and captured', calculated as  $1Ab = 1A - 1Aa$ ]: quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation  
those products have been handed over to other undertakings for destruction  
and had not been placed on the market previously

**Section 2: To be filled in by importers of gases**

2A: Total amount imported into the Union

2B: Amount imported into the Union, not released for free circulation and re-exported  
contained in products or equipment

Note that imports and exports are not legally defined in the F-Gas Regulation. Usually the “consignee” as identified on the Standard Administrative Document (SAD) used by customs authorities identifies the importer. Auditors should also check that companies apply a consistent approach to imports and exports in relation to movements of HFCs into and out of customs warehousing. The respective guidance in the reporting FAQ<sup>13</sup> should be consulted

**Section 3: To be filled in by exporters of gases**

3A: Total amount exported into the Union

3B: thereof: Exported amounts from own production or import

**Section 4: To be filled in by producers and importers of gases**

4A: Total 1st January stocks

4B: thereof: 1st January stocks of quantities from own import or production

4C: - thereof: 1st January stocks of quantities from own import or production,  
previously not placed on the market

4F: Total 31st December stocks

4G: - thereof: 31st December stocks of quantities from own import or production

4H: - thereof: 31st December stocks of quantities from own import or production,  
previously not placed on the market

For a complete understanding of the different stocks categories it is suggested to consult the respective guidance in the Reporting FAQ<sup>14</sup>.

**Section 9: To be filled in by producers or importers having authorised the use of a hydrofluorocarbon quota to undertakings placing on the market refrigeration, air conditioning and heat pump equipment charged with hydrofluorocarbons**

9A: Quantities subject to authorisations to use a quota given to producers or importers  
of pre-charged equipment under Article 18(2) of Regulation (EU) No 517/2014

Note that issued authorisations are automatically imported from the F-Gas Portal & HFC Licensing System into section 9A\_imp of the questionnaire. In section 9A\_add, companies have the option to amend the automatically imported data in case they consider them to be incorrect. 9A\_imp and 9A\_add are added up to conclude in 9A authorisation data fed into further automated calculations in the reporting form. Any data reported in 9A\_add should be double checked against the data kept in the F-Gas Portal & HFC Licensing System.

<sup>13</sup> [https://bdr.eionet.europa.eu/help/faq/F-gases\\_FAQ\\_EN.pdf](https://bdr.eionet.europa.eu/help/faq/F-gases_FAQ_EN.pdf)

## 6.2. Quota Exemptions

If quota-exempted amounts are reported in Reporting Section 5, proof has to be provided that these gases are actually used for the stated purposes. These include:

- HFCs imported for destruction (Art. 15(2)(a)), reported in section 5A of the questionnaire;
- HFCs used by a producer in feedstock applications or supplied directly by a producer or an importer to undertakings for use in feedstock applications (Art. 15(2)(b)), reported in section 5B of the questionnaire;
- HFCs supplied directly by a producer or an importer to undertakings, for export out of the Union, where those HFCs are not subsequently made available to any other party within the Union, prior to export (Art 15(2)(c)), reported in section 5C\_exempted of the questionnaire;
- HFCs supplied directly by a producer or an importer for use in military equipment (Art. 15(2)(d)), reported in section 5D of the questionnaire;
- HFCs supplied directly by a producer or an importer to an undertaking using it for the etching of semiconductor material or the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector (Art. 15(2)(e)), reported in section 5E of the questionnaire; or
- HFCs supplied directly by a producer or an importer to an undertaking producing metered dosed inhalers for the delivery of pharmaceutical ingredients (Art. 15(2)(f)), reported in section 5F of the questionnaire.

These uses are reported in the reporting sheets, reporting Section 5 (5A-5F). The intended use should be established for these exempted gases, e.g. through buyer confirmation.

Note that the export exemption (Art 15(2)(c)) applies to HFCs supplied for bulk export only, to be reported in section 5C\_exempted of the questionnaire. HFCs supplied for export after charging into products or equipment can voluntarily be reported by companies in section 5C\_voluntary, and are not counted as a quota exemption. For amounts reported in 5C\_exempted, the auditor should ascertain that the respective amounts were actually exported from the union.

The definition of military equipment given in Art. 2(35) is limited to:

*"military equipment" means arms, munitions and war material intended specifically for military purposes which are necessary for the protection of the essential interests of the security of Member States.*

### 6.3. Calculation of quota demand

The quota demand (need of quota for HFCs placed on the market) is calculated in the reporting form (section 9F) by subtracting for each HFC exempted amounts (as summarised in section 5I) from amounts physically placed on the market (as calculated in section 5H = 4M), converting those amounts of HFCs into CO<sub>2</sub> equivalents, and subsequently adding given quota authorisations as reported in section 9A. The following formula elaborated will be understood best while referring to a complete F-gas report printout.

Quota-demand at 9F= 9E + 9A

$$\begin{aligned}
 &= 9E + 9A_{imp} + 9A_{add} && [9A= 9A_{imp} + 9A_{add}] \\
 &= 5J + 9A_{imp} + 9A_{add} && [9E = 5J] \text{ (conversion of t of HFCs in t CO}_2\text{e)} \\
 &= 5H - 5I + 9A_{imp} + 9A_{add} && [5J = 5H - 5I] \\
 &= 4M - 5I + 9A_{imp} + 9A_{add} && [5H = 4M] \\
 &= 4M - (5A + 5B + 5C_{exempted} + 5D + 5E + 5F) + 9A_{imp} + 9A_{add} && [5I = 5A + 5B + 5C_{exempted} + 5D + 5E + 5F] \\
 &= 1E + 2A - 2B - 3B + 4C - 4H - (5A + 5B + 5C_{exempted} + 5D + 5E + 5F) + 9A_{imp} + 9A_{add} && [4M = 1E + 2A - 2B - 3B + 4C - 4H] \\
 &= 1A - 1D - 1A_a + 2A - 2B - 3B + 4C - 4H - (5A + 5B + 5C_{exempted} + 5D + 5E + 5F) + 9A_{imp} + 9A_{add} && [1E = 1A - 1D - 1A_a] \\
 &= 1A - (1B + 1C) - 1A_a + 2A - 2B - 3B + 4C - 4H - (5A + 5B + 5C_{exempted} + 5D + 5E + 5F) + 9A_{imp} + 9A_{add} && [1D = 1B + 1C]
 \end{aligned}$$

#### Section 1: TO BE FILLED IN BY PRODUCERS OF GASES

| Transactions/(metric tonnes)  | HFCs<br>unit: t | HFCs<br>unit: t | HFCs<br>unit: t |
|---|-----------------|-----------------|-----------------|
| <b>1A</b> : Total quantity of production from facilities in the Union, including amounts not captured, unwanted by-products and recovered by-production   |                 |                 |                 |
| <b>1Aa</b> : thereof: Amounts not captured  |                 |                 |                 |
| <b>1A_a</b> : thereof: Amounts destroyed  |                 |                 |                 |
| <b>1Ab</b> : thereof: Total amount generated and captured<br><i>[1Ab = 1A - 1Aa]</i>  |                 |                 |                 |
| <b>1B</b> : - thereof: quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or those products have been destroyed in the facilities prior to the placing on the market                                     |                 |                 |                 |
| <b>1C</b> : - thereof: quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or those products have been handed over to other undertakings for destruction and had not been placed on the market previously |                 |                 |                 |
| ...   |                 |                 |                 |
| <b>1D</b> : - thereof: Total quantity of own production destroyed which has not been placed on the market previously<br><i>[1D = 1B + 1C]</i>   |                 |                 |                 |
| <b>1E</b> : Production available for sale or feedstock use<br><i>[1E = 1A - 1D - 1A_a]</i>  |                 |                 |                 |
| ...   |                 |                 |                 |



**Section 2: TO BE FILLED IN BY IMPORTERS OF GASES**

| <b>Transactions/(metric tonnes)</b>  | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> |
|--|-------------------------|-------------------------|-------------------------|
| <b>2A</b> : Total amount imported into the Union   |                         |                         |                         |
| ...  |                         |                         |                         |
| <b>2B</b> : Amount imported into the Union, not released for free circulation and re-exported contained in products or equipment |                         |                         |                         |
| ...  |                         |                         |                         |

**Section 3: TO BE FILLED IN BY EXPORTERS OF GASES**

| <b>Transactions/(metric tonnes)</b>                                 | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> |
|---|-------------------------|-------------------------|-------------------------|
| <b>3A</b> : Total amount exported into the Union                    |                         |                         |                         |
| ...   |                         |                         |                         |
| <b>3B</b> : thereof: Exported amounts from own production or import |                         |                         |                         |
| ...   |                         |                         |                         |

**Section 4: TO BE FILLED IN BY PRODUCERS AND IMPORTERS OF GASES**

| <b>Transactions/(metric tonnes)</b>  | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> |
|--|-------------------------|-------------------------|-------------------------|
| <b>4A</b> : Total 1st January stocks   |                         |                         |                         |
| <b>4B</b> : - thereof: 1st January stocks of quantities from own import or production  |                         |                         |                         |
| <b>4C</b> : - thereof: 1st January stocks of quantities from own import or production, previously not placed on the market   |                         |                         |                         |
| ...  |                         |                         |                         |
| <b>4F</b> : Total 31st December stocks   |                         |                         |                         |
| <b>4G</b> : - thereof: 31st December stocks of quantities from own import or production                                      |                         |                         |                         |
| <b>4H</b> : - thereof: 31st December stocks of quantities from own import or production, previously not placed on the market |                         |                         |                         |
| ...  |                         |                         |                         |
| <b>4M</b> : Total amount physically placed on the market<br><b>[4M = 1E + 2A - 2B - 3B + 4C - 4H]</b>                        |                         |                         |                         |

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation

**Section 5: QUANTITIES FOR USES EXEMPTED UNDER ARTICLE 15(2), TO BE FILLED IN BY PRODUCERS AND IMPORTERS OF HYDROFLUOROCARBONS**

| <b>Transactions/(metric tonnes)</b>   | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> | <b>HFCs<br/>unit: t</b> |
|---|-------------------------|-------------------------|-------------------------|
| <b>5A</b> : Quantity imported into the Union for destruction  |                         |                         |                         |
| <b>5B</b> : Quantity used by a producer or importer in feedstock applications or supplied directly by a producer or an importer to undertakings for use in feedstock applications                                 |                         |                         |                         |
| <b>5C_exempted</b> : Quantity supplied directly to undertakings for export out of the Union, where those quantities were not subsequently made available to another party within the Union prior to export        |                         |                         |                         |
| <b>5D</b> : Quantity supplied directly for use in military equipment  |                         |                         |                         |
| <b>5E</b> : Quantity supplied directly to an undertaking using it for the etching of semiconductor material or the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector |                         |                         |                         |
| <b>5F</b> : Quantity supplied directly to an undertaking producing metered dose inhalers for the delivery of pharmaceutical ingredients   |                         |                         |                         |
| <b>5H</b> : Total amount of hydrofluorocarbons physically placed on the market<br><i>[5H = 4M]</i>  |                         |                         |                         |
| <b>5I</b> : Total quantities of exempted uses of hydrofluorocarbons<br><i>[5I = sum(5A) + sum(5B) + sum(5C_exempted) + sum(5D) + sum(5E) + sum(5F)]</i>   |                         |                         |                         |
| <b>5J</b> : Calculated amount of hydrofluorocarbons physically placed on the market, excluding exempted uses<br><i>[5J = 5H - 5I]</i>   |                         |                         |                         |
| ...   |                         |                         |                         |

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation

**Section 9:** TO BE FILLED IN BY PRODUCERS OR IMPORTERS HAVING AUTHORISED THE USE OF A HYDROFLUOROCARBON QUOTA TO UNDERTAKINGS PLACING ON THE MARKET REFRIGERATION, AIR CONDITIONING AND HEAT PUMP EQUIPMENT CHARGED WITH HYDROFLUOROCARBONS

| Transactions/(metric tonnes)   | Amount of HFCs<br>unit: t CO <sub>2</sub> -equivalents |
|--|--|
| <b>9A_imp</b> : Quota authorisations given to importers of refrigeration, air conditioning and heat pump equipment charged with hydrofluorocarbons (automatically imported from the HFC registry)                      |  |
| <b>9A_add</b> : Quota authorisations given to importers of refrigeration, air conditioning and heat pump equipment charged with hydrofluorocarbons (additional to registry data)                                       |  |
| <b>9A</b> : Quantities subject to authorisations to use a quota given to producers or importers of pre-charged equipment under Article 18(2) of Regulation (EU) No 517/2014<br><b>[9A = Sum(9A_imp) + Sum(9A_add)]</b> |  |
| <b>9B</b> : Total amount of hydrofluorocarbons physically placed on the market<br><b>[9B = 5H]</b>   |  |
| <b>9C</b> : Total amount of hydrofluorocarbons regarded as placed on the EU market for the first time<br><b>[9C = 9B + Sum(9A)]</b>  |  |
| ...  |  |
| <b>9E</b> : Calculated amount of bulk hydrofluorocarbons physically placed on the market excluding exempted uses<br><b>[9E = 5J]</b>   |  |
| <b>9F</b> : Total calculated need of quota for hydrofluorocarbons placed on the market<br><b>[9F = 9E + 9A]</b>  |  |
| ...  |  |

#### 6.4. Proof of physical supplies for new entrants authorising quota

Undertakings having received their quota exclusively from the so-called New Entrants Reserve (i.e. based on a declaration pursuant to Article 16(2) or (4)), must prove physical supplies in case they authorise their quota to other undertakings (proof could be e.g. bill of lading, receipt of delivery of physical goods). Such undertakings are identified in the reporting questionnaire by means of the tick box ‘Undertaking having received its quota exclusively on the basis of a declaration pursuant to Article 16(2) (new entrants reserve) (AND having given an authorisation for the use of HFC quota)’ in the ‘Activities’ section of the reporting questionnaire.

When verifying a report of such a ‘new entrant’, the auditor should ascertain the proof provided for all physical supplies reported in this Section 10A of the reporting questionnaire.

**Note that the physical sale of the gas does not necessarily have to be to the recipient of the authorisation.**

#### 6.5. Other Reporting Sections of the reporting form

All other Reporting Sections are also principally relevant for verification as long as they refer to HFCs, such as Reporting Sections 7, 8 and 13a of the reporting forms.

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation For Reporting Section 6 on intended applications (contrary to reported data on gases for exempted uses as discussed under Reporting Section 6.3), it is not expected that the auditor would collect evidence from the recipients of these gases to ascertain the veracity of the stated application use.

Reporting Section 11, 12 and 13 are relevant for importers of pre-charged equipment only. The verification of their reports is not the focus of this document.<sup>14</sup>

## 7. Assessing whether data are free from material misstatements

When completing the verification and considering all the evidence gathered during the verification, the auditor is required to verify that the data is free from material misstatements (errors) and they have gathered sufficient evidence to support the verification opinion statement. The auditor has to check first and foremost:

- Does the reported data match company accounts?
  - Are the data reported in the correct units (tonnes)?

It is also important to keep the following points in mind for this verification:

- The reported amount of mixtures compared to the quantity of constituent gases:
  - Is there any discrepancy between traded mixtures and reported components?
  - Note that mixtures will generally be reported as mixtures rather than as their constituent gases (unless they are blended within the EU).
- End of year stocks can only be calculated from balance sheets:
  - Reported stocks as per annual F-gas report may deviate from something that is physically measurable because stocks of different categories (such as own production and total import compared to own production and import not placed on the market) will usually not be physically separated. For these reasons a stock balance approach is suggested.
- Is the import date equal to the customs clearance date?

Generally, the internal company data should be cross-checked with customs data for imports.

The auditor generally obtains more assurance from consistent evidence obtained from different sources or from evidence of a different nature than from items of evidence considered individually. When evidence obtained from one source is inconsistent with that obtained from another, the auditor will determine what additional verification activities mentioned under the process analysis are necessary to resolve the inconsistency (See 5.1).

## 8. What should a company do if the auditor detects inaccuracies in the report?

If the auditor finds inaccuracies in the company's F-Gas report **before the 31 March deadline**<sup>15</sup> for the submission of the F-Gas report:

- a) The company should resubmit a corrected F-Gas report in the BDR by 31 March.
- b) The company should have the corrected resubmission verified by 30 June.
- c) The company is encouraged to upload the verification report of the resubmitted corrected F-Gas report in the BDR (see section 5.5)

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<sup>14</sup> See also heading 2 of this document

<sup>15</sup> Reporting deadline pursuant to Art 19(1) of the F-Gas Regulation

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation

If the auditor finds inaccuracies in the company's F-Gas report **after the 31 March deadline**<sup>16</sup> for the submission of the F-Gas report:

- a) The company is encouraged to upload to the BDR (see section 5.5) the verification report identifying the inaccuracy in the F-Gas report.
- b) The company should resubmit a corrected F-Gas report in the BDR as soon as possible.
- c) The company should have the corrected resubmission verified by 30 June.
- d) The company is encouraged to upload the verification report of the resubmitted corrected F-Gas report in the BDR (see section 5.5)
- e) The company (not the auditor!) should alert the European Commission<sup>16</sup> and the competent Member State authorities<sup>17</sup>. For non-EU companies, the authorities governing the company's only representative (OR) in the EU should be contacted. Please note that the acceptance of late submissions after 31 March that acceptance of late resubmissions after 31 March is subject to case-by case decision by the competent authorities.

## **9. What should an auditor do if the company is not in compliance with the Regulation?**

Auditors are not required to judge compliance with the Regulation. Auditors are required to verify the accuracy of the reported data. The auditor should point out any inaccuracies found.

## **10. Further information**

For questions related to verification of F-gas data reports please contact the Member State National Contact Points for F-gases:

[https://ec.europa.eu/clima/system/files/2021-09/contact\\_list\\_en.pdf](https://ec.europa.eu/clima/system/files/2021-09/contact_list_en.pdf)

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<sup>16</sup> The European Commission can be addressed by e-mail at [CLIMA-HFC-REGISTRY@ec.europa.eu](mailto:CLIMA-HFC-REGISTRY@ec.europa.eu)

<sup>17</sup> A list of respective Member State contacts is given in [https://ec.europa.eu/clima/system/files/2021-09/contact\\_list\\_en.pdf](https://ec.europa.eu/clima/system/files/2021-09/contact_list_en.pdf).

## Annex I Company F-gas data reporting

The format and means for companies to submit reports on their F-gas activity is established by the [Commission Implementing Regulation \(EU\) No 1191/2014](#) ('the Implementing Regulation'). Companies report F-gas activity using the electronic reporting tool provided by the EEA, accessible from the [F-gas portal \(webgate.ec.europa.eu/ods2/\)](#) on the website of the European Commission. The electronic reporting tool is part of the EEA's [Business Data Repository \(BDR\) \(bdr.eionet.europa.eu\)](#).

### I.1. Reporting structure

The printed F-gas report (or the pdf of the report) will have the title:

**'Questionnaire on production, import, export, feedstock use and destruction of the substances listed in Annexes I or II of the F-Gas regulation.'**

The first part of the report contains headings for company details as well as specific information on activities (producer, importer, exporter) and gases & mixtures:

- Organisation details
- Organisation name
- Contact Information
- Voluntary identification of members of own company group
- Activities
- Selection of gases & mixtures

The second part of the report contains numbered section headings (and sub-headings with capital letters). These match the Reporting Sections of the online questionnaire which in turn match the Reporting Sections of the Annex of the Implementing Regulation:

- Section 1: TO BE FILLED IN BY PRODUCERS OF GASES
- Section 2: TO BE FILLED IN BY IMPORTERS OF GASES
- Section 3: TO BE FILLED IN BY EXPORTERS OF GASES
- Section 4: TO BE FILLED IN BY PRODUCERS AND IMPORTERS OF GASES
- Section 5: QUANTITIES FOR USES EXEMPTED UNDER ARTICLE 15(2), TO BE FILLED IN BY PRODUCERS AND IMPORTERS OF HYDROFLUOROCARBONS
- Section 6: CATEGORIES OF APPLICATION OF GASES FOR THE EU MARKET, TO BE FILLED IN BY PRODUCERS AND IMPORTERS OF GASES
- Section 7: TO BE FILLED IN BY FEEDSTOCK USERS OF GASES
- Section 8: TO BE FILLED IN BY UNDERTAKINGS HAVING DESTROYED GASES
- Section 9: TO BE FILLED IN BY PRODUCERS OR IMPORTERS HAVING AUTHORISED THE USE OF A HYDROFLUOROCARBON QUOTA TO UNDERTAKINGS PLACING ON THE MARKET REFRIGERATION, AIR CONDITIONING AND HEAT PUMP EQUIPMENT CHARGED WITH HYDROFLUOROCARBONS
- Section 10: TO BE FILLED IN BY UNDERTAKINGS WHICH HAVE RECEIVED THEIR QUOTA EXCLUSIVELY ON THE BASIS OF A DECLARATION PURSUANT TO ARTICLE 16(2) OF REGULATION (EU) NO 517/2014 AND WHICH HAVE AUTHORISED THE USE OF A HYDROFLUOROCARBON QUOTA TO UNDERTAKINGS PLACING ON THE MARKET REFRIGERATION, AIR CONDITIONING AND HEAT PUMP EQUIPMENT CHARGED WITH HYDROFLUOROCARBONS
- Section 11: TO BE FILLED IN BY UNDERTAKINGS HAVING PLACED ON THE MARKET GASES CONTAINED IN PRODUCTS OR EQUIPMENT PURSUANT TO ARTICLE 19(4) OF REGULATION 517/2014
- Section 12: TO BE FILLED IN BY IMPORTERS OF REFRIGERATION, AIR CONDITIONING OR HEAT PUMP EQUIPMENT CHARGED WITH HYDROFLUOROCARBONS, WHERE THE HYDROFLUOROCARBONS CONTAINED IN THE IMPORTED EQUIPMENT HAD PREVIOUSLY BEEN EXPORTED FROM THE UNION AND ACQUIRED BY MANUFACTURERS OF EQUIPMENT DIRECTLY FROM THE EXPORTING UNDERTAKING, AND HAD BEEN SUBJECT

## **I.2. Sub-headings (1A, 1B etc.)**

The sub-headings 1A, 1B et cetera are in effect Reporting Section sub-headings; these are used in the online reporting form (questionnaire) and the printed F-gas report. The sub-headings are in line with their use and definition in the Annex of the Implementing Regulation<sup>18</sup>.

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<sup>18</sup> See Commission Implementing Regulation (EU) No 1191/2014, consolidated version ([https://eur-lex.europa.eu/eli/reg\\_impl/2014/1191/2019-04-17](https://eur-lex.europa.eu/eli/reg_impl/2014/1191/2019-04-17))

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The following excerpt shows Section 1 from the Annex of the Implementing Regulation according to the latest amendment<sup>19</sup> which includes sub-headings 1A, 1Aa, 1A\_a, 1Ab, 1B, 1C, 1C\_a, 1C\_a1, 1C\_a2, 1C\_b, 1D and 1E:

The Annex to Regulation (EU) No 1191/2014 is amended as follows:

(1) In Section 1, the table is replaced by the following:

| INFORMATION TO BE REPORTED                 |   | COMMENTS  |
|--|---|---|
| 1A   | Total quantity of production from facilities in the Union   |   |
| 1Aa  | — thereof: Amounts not captured   |   |
| 1A_a                                       | — thereof: Amounts destroyed  | If the in-line destruction is carried out by another undertaking, the latter should be specified<br><br>Reports from producers which carry out destruction on the total quantities destroyed shall be made in reporting Section 8 |
| <b>AUTOMATICALLY CALCULATED QUANTITIES</b> |   |   |
| 1Ab  | — thereof: Total amount generated and captured  | 1Ab = 1A - 1Aa  |
| <b>INFORMATION TO BE REPORTED</b>          |   |   |
| 1B   | — thereof: Quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or those products have been destroyed in the facilities prior to the placing on the market                                     | Reports from producers which carry out destruction on the total quantities destroyed shall be made in reporting Section 8   |
| 1C   | — thereof: Quantity of production from facilities in the Union consisting of recovered by-production or unwanted products where that by-production or those products have been handed over to other undertakings for destruction and had not been placed on the market previously | The undertaking carrying out the destruction shall be identified  |
| 1C_a                                       | — thereof: Amounts of hydrofluorocarbons produced for feedstock uses within the Union   | The Member State where feedstock use will take place shall be indicated   |
| 1C_a1                                      | — thereof: Without prior capture  | Only to be reported for HFC-23  |
| <b>AUTOMATICALLY CALCULATED QUANTITIES</b> |   |   |
| 1C_a2                                      | — thereof: After prior capture  | 1C_a2 = 1C_a - 1C_a1;<br>To be calculated only for HFC-23   |
| <b>INFORMATION TO BE REPORTED</b>          |   |   |
| 1C_b                                       | — thereof: Amount of hydrofluorocarbons produced for uses within the Union exempted under the Montreal Protocol   | The type of exempted use shall be specified   |
| <b>AUTOMATICALLY CALCULATED QUANTITIES</b> |   |   |
| 1D   | — thereof: Total quantity of own production captured and destroyed which has not been placed on the market previously   | 1D = 1B + 1C  |
| 1E   | Production available for sale or feedstock use  | 1E = 1A - 1D - 1A_a'  |

<sup>19</sup> See Amendment in Commission Implementing Regulation (EU) 2019/522 of 27 March 2019 amending Implementing Regulation (EU) No 1191/2014 as regards the reporting of data on production and on imports and exports of polyols containing hydrofluorocarbons pursuant to Article 19 of Regulation (EU) No 517/2014;  
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32019R0522>



## **Annex II References to verification in the Regulation and Implementing Regulation**

In the following excerpts, text and terms that may be relevant to verification have been underlined. Only some of the surrounding text is shown below, auditors are advised to consult the [Regulation](#) and the [Implementing Regulation](#) directly.

### **II.1. Regulation (EU) No 517/2014 of the European Parliament and of the Council**

**of 16 April 2014**

**on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

...  
*Acting in accordance with the ordinary legislative procedure,*  
*Whereas:*

...  
(18) The Commission should ensure that a central electronic registry is in place to manage quotas, for the placing of hydrofluorocarbons on the market, and the reporting, including the reporting on equipment placed on the market, in particular where the equipment is pre-charged with hydrofluorocarbons that have not been placed on the market prior to the charging, thus requiring verification, through a declaration of conformity and subsequent third party verification, that the quantities of hydrofluorocarbons are accounted for under the Union quota system.

#### **Article 2 Definitions**

For the purposes of this Regulation the following definitions apply:

- ...  
2. 'hydrofluorocarbons' or 'HFCs' means the substances listed in section 1 of Annex I, or mixtures containing any of those substances;  
...  
5. 'mixture' means a fluid composed of two or more substances, at least one of which is a substance listed in Annex I or in Annex;

#### **Article 14 Pre-charging of equipment with hydrofluorocarbons**

1. From ... 2017... equipment charged with hydrofluorocarbons shall ... be ... accounted for within the quota system referred to in Chapter IV.  
2. ... manufacturers and importers shall ensure that compliance with paragraph 1 is fully documented and shall draw up a declaration of conformity ...

From ... 2018 ... by 31 March every year the accuracy of the documentation and declaration of conformity is verified, for the preceding calendar year, by an independent auditor. The auditor shall be either:

- (a) accredited pursuant to Directive 2003/87/EC of the European Parliament and of the Council; or  
(b) accredited to verify financial statements in accordance with the legislation of the Member State concerned.

- ...  
4. The Commission shall, by means of implementing acts, determine the detailed arrangements relating to the declaration of conformity and the verification by the independent auditor referred to in the second subparagraph of paragraph 2 of

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 24.

...  
**Article 15**      **Reduction of the quantity of hydrofluorocarbons placed on the market**

...

2. ...

- (c) hydrofluorocarbons supplied directly by a producer or an importer to undertakings, for export out of the Union, where those hydrofluorocarbons are not subsequently made available to any other party within the Union, prior to export;

...

**Article 19**      **Reporting on production, import, export, feedstock use and destruction of the substances listed in Annexes I or II**

1. By 31 March 2015 and every year thereafter, each producer, importer and exporter that produced, imported or exported one metric tonne or 100 tonnes of CO<sub>2</sub> equivalent or more of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Commission the data specified in Annex VII on each of those substances for that calendar year. This paragraph shall also apply to undertakings receiving quotas pursuant to Article 18(1).

...

5. Each importer of equipment that place on the market pre-charged equipment where hydrofluorocarbons contained in this equipment have not been placed on the market prior to the charging of the equipment shall submit to the Commission a verification document issued pursuant to Article 14(2).

6. By 30 June 2015 and every year thereafter, each undertaking which under paragraph 1 reports on the placing on the market 10 000 tonnes of CO<sub>2</sub> equivalent or more of hydrofluorocarbons during the preceding calendar year shall, in addition, ensure that the accuracy of the data is verified by an independent auditor. The auditor shall be either:

(a) accredited pursuant to Directive 2003/87/EC; or

(b) accredited to verify financial statements in accordance with the legislation of the Member State concerned.

The undertaking shall keep the verification report for at least five years. The verification report shall be made available, on request, to the competent authority of the Member State concerned and to the Commission.

**ANNEX V**

...

Transactions referred to in point (c) of Article 15(2) shall be verified in accordance with Article 19(6) regardless of the quantities involved.

...

## II.2. Commission Implementing Regulation (EU) No 1191/2014

of 30 October 2014

determining the format and means for submitting the report referred to in Article 19 of Regulation (EU) No 517/2014 of the European Parliament and of the Council on fluorinated greenhouse gases

...  
ANNEX

...  
Section 5: Quantities for uses exempted under Article 15(2), to be filled in by producers and importers of 19(1), (2) (3) and (4) of Regulation (EU) No 517/2014 and points 1(b) and 2(a) of Annex VII to Regulation (EU) No 517/2014

Applicable for the first time to reporting on activities carried out in 2014 (by 31 March 2015 at the latest).

...

|    | INFORMATION TO BE REPORTED   | COMMENTS  |
|----|--|---|
| 5C | Quantity supplied directly to undertakings for export out of the Union, where those quantities were not subsequently made available to another party within the Union prior to export. | The exporting undertaking/s shall be specified.<br><u>Verification documents should be provided.</u><br>Only hydrofluorocarbons in bulk shall be reported, not quantities contained in products or equipment. |

### Annex III Verification report template

| <b>Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |  | <b>Explanations</b>   |
|--|--|---|
| <b>I) Summary of reporting and verification obligations</b>  |  | <i>The auditor should summarise the relevant reporting and verification obligations in their report</i>   |
| <b>Reporting obligation</b>  | Regulation (EU) No 517/2014 on fluorinated greenhouse gases, Article 19 (1):<br>By 31 March 2015 and every year thereafter, each producer, importer and exporter that produced, imported or exported one metric tonne or 100 tonnes of CO <sub>2</sub> equivalent or more of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Commission the data specified in Annex VII on each of those substances for that calendar year. This paragraph shall also apply to undertakings receiving quotas pursuant to Article 18(1). |   |
| <b>Verification obligations</b>  | Article 19 (6):<br>By 30 June 2015 and every year thereafter, each undertaking which under paragraph 1 reports on the placing on the market 10 000 tonnes of CO <sub>2</sub> equivalent or more of hydrofluorocarbons during the preceding calendar year shall, in addition, ensure that the accuracy of the data is verified by an independent auditor.   | <i>The 10 000 t CO<sub>2</sub> e threshold should be checked against the amount calculated in section 9C of the undertaking's report, i.e. before subtraction of exempted amounts.</i>  |
| Verification obligations may also apply for HFCs exempted under Article 15(2)c for export  | Annex V [...] Transactions referred to in point (c) of Article 15(2) shall be verified in accordance with Article 19(6) regardless of the quantities involved.<br>Article 15(2)<br>This Article shall also not apply to the following categories of hydrofluorocarbons:[...] (c) hydrofluorocarbons supplied directly by a producer or an importer to undertakings, for export out of the Union, where those hydrofluorocarbons are not subsequently made available to any other party within the Union, prior to export; [...]  | <i>Any amounts under the exemption of Art 15(2)c would be reported in section 5C_exempted of the undertaking's report.</i>  |
| <b>Intended users</b>  | Article 19 (6): [...] The undertaking shall keep the verification report for at least five years. The verification report shall be made available, on request, to the competent authority of the Member State concerned and to the Commission.   | <i>Undertakings are strongly encouraged to upload the verification report as soon as it is available to the 'upload of verification documents (HFC producers and bulk importers)' subcollection within the undertaking's F-gases reporting folder in the EEA's business data repository BDR</i> |

| <b>Elements to be taken up in the independent auditor’s verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |  | <b><i>Explanations</i></b>  |
|--|--|---|
|  |  | <i>(<a href="https://bdr.eionet.europa.eu/">https://bdr.eionet.europa.eu/</a>)</i>  |
| <b>II) Undertaking’s details</b>   |  | <b><i>The auditor should clearly identify the undertaking whose report was verified.</i></b>  |
| Organisation name  |  |   |
| Organisation address   |  |   |
| VAT number   |  |   |
| Only Representative in the EU  |  | <i>Identifying the only representative is relevant in case the reporting undertaking is located outside the EU</i>  |
| Address of Only Representative   |  |   |
| Contact (first name, last name)  |  | <i>For reporting undertakings located in the EU this would be the contact person(s) of the undertaking. For reporting undertakings located outside the EU this would be the contact person(s) of the only representative.</i> |
| Contact email  |  |   |

| Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases |   | Explanations  |
|---|---|---|
| III) F-gas report details   |   | <i>It is of utmost importance to clearly identify the undertaking's report subject to the verification as undertakings may possibly submit several versions of the report in the BDR.</i> |
| Transaction year  |   | <i>The transaction year is the year the production or import of HFCs has taken place in.</i>  |
| URL of the submitted report in the BDR  |   |   |
| Date and time of the BDR submission   |   |   |
| Activities  | <input type="checkbox"/> EU producer of: <ul style="list-style-type: none"> <li><input type="checkbox"/> HFCs (Annex I, section 1)</li> <li><input type="checkbox"/> Other fluorinated gases of Annex I or Annex II of Regulation (EU) No 517/2014</li> </ul> <input type="checkbox"/> Importer (bulk gases) of: <ul style="list-style-type: none"> <li><input type="checkbox"/> HFCs (Annex I, section 1) or mixtures (including pre-blended polyols) containing HFCs</li> <li><input type="checkbox"/> Other fluorinated gases of Annex I or Annex II of Regulation (EU) No 517/2014</li> </ul> <input type="checkbox"/> Exporter of bulk gases<br><input type="checkbox"/> EU feedstock user<br><input type="checkbox"/> EU destruction company<br><input type="checkbox"/> Importer of products/equipment containing F-gases of Annex I or II: <ul style="list-style-type: none"> <li><input type="checkbox"/> Importer of refrigeration, air conditioning or heat pump equipment pre-charged with HFCs or HFC-containing mixtures</li> <li><input type="checkbox"/> Importer of other products or equipment containing fluorinated gases of Annex I or Annex II of Regulation (EU) No 517/2014</li> </ul> <input type="checkbox"/> Undertaking having given an authorisation to use its HFC quota to another undertaking: <ul style="list-style-type: none"> <li><input type="checkbox"/> Undertaking having received its quota exclusively on the basis of a declaration pursuant to Article 16(2) (new entrants reserve) (AND having given an authorisation for the use of HFC quota)</li> </ul> | <i>Quote selection of activities in the verified report.</i>  |

| <b>Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |  | <b><i>Explanations</i></b>   |
|--|--|--|
|  | <input type="checkbox"/> <i>Not obliged to report (NIL report)</i> |  |
| <b>IV) Surrounding conditions</b>  |  | <b><i>The auditor should summarise relevant (changes to the) undertaking's operational framework.</i></b>        |
| <b>Changes compared to previous years</b>  |  | <b><i>Summarise changes in undertaking's activities, other request from authorities, new gases etc. ....</i></b> |

| <b>Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |   | <b><i>Explanations</i></b>                      |
|--|---|---|
| <b>V) Summary of verification process</b>  |   |   |
| <b>Verification approach</b>   |   | <i>Describe verification approach</i>           |
| ▪ <i>Risk Assessment:</i>  |   | <i>(high, moderate, low)</i>                    |
| ▪ <i>Sampling Strategy</i>   |   | <i>(complete data check, random sampling..)</i> |
| ▪ <i>amount of days spent on verification</i>  |   |   |
| <b>Site verification details</b>   | <b><i>Undertakings visited during verification:</i></b> |   |
| ▪ <i>Date(s) of visit(s):</i>  |   |   |
| ▪ <i>Name of F-gas (lead) auditor(s) / technical experts undertaking site visit(s):</i>  |   |   |
| ▪ <i>Justification for not undertaking site visit</i>  |   |   |



| Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases |  | Explanations   |
|---|--|--|
| <b>VI) Verification results</b>   |  |  |
| <b>General Assessment</b>   |  | <i>General statements should be made in particular with regard to the categories below</i>   |
| ▪ <i>Accuracy / Uncertainty</i>   |  | <i>Is all required data considered being accurate and complete? Has the conservativeness principle been applied? Does the auditor have evidence that HFC supplies reported in section 5 (under the quota exemptions of Art 15 of the Regulation) were actually used by the recipient as declared?</i>  |
| ▪ <i>Completeness</i>   |  | <i>Have all F-gases addressed by the Regulation been reported? Have all relevant sections of the F-Gas Report been completed?</i>  |
| ▪ <i>Consistency with the previous report</i>   |  | <i>Auditors should in particular check whether 1<sup>st</sup> January stocks are consistent to 31<sup>st</sup> December stocks reported the year before.</i>   |
| ▪ <i>Internal consistency</i>   |  | <i>Are there any contradictions between any data entered in different sections of the report?<br/>Auditors should also check whether the undertaking used consistent approaches to define imports (2A) and exports (3A), for example in relation to gases under customs warehousing surveillance. The respective explanations in the reporting FAQ should be considered.</i> |

| <b>Elements to be taken up in the independent auditor’s verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b>  |   | <b><i>Explanations</i></b>  |
|---|---|---|
| <ul style="list-style-type: none"> <li>▪ <i>Transparency</i></li> </ul>   |   | <i>Describe if there are clear and transparent audit trails</i>                                 |
| <ul style="list-style-type: none"> <li>▪ <b>Data management and control system</b></li> </ul>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>Data management covers all aspects of a state of the art quality management system (QMS) incl. qualification of key personnel, documented data collection procedures and control procedures, data archiving and internal verification.</i></li> <li><input type="checkbox"/> <i>Data management outlines some aspects of QMS incl. qualification, documented procedures and control, data archiving and internal verification.</i></li> <li><input type="checkbox"/> <i>Data management does not follow a documented QMS.</i></li> </ul> | <i>Auditors should assess the data management and control system applied by the undertaking</i> |
| <p><b>Verified need of quota for HFCs placed on the EU market by the undertaking in the specified calendar year [in units of tonnes CO<sub>2</sub> equivalents calculated in accordance with Regulation (EU) No 517/2014]</b></p> |   | <i>Auditors should specify the verified quota need as to be reported in section 9F.</i>         |

| <b>Elements to be taken up in the independent auditor’s verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b>  |  | <b><i>Explanations</i></b>  |
|---|--|---|
| <b>Auditor’s key conclusions</b>  |  | <i>Key verification conclusions to be reported by undertakings while uploading the verification report to the BDR</i> |
| <ul style="list-style-type: none"> <li>▪ <i>Verification opinion</i></li> </ul>   | <p>We carried out the test with the aim of determining whether the F-Gas report is sufficiently reliable free of material misstatements.</p> <p><b>Audit decision:</b> We have audited the F-Gas reporting as outlined above. Based on our exam ...</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> we confirm at a reasonable level of assurance that the F-Gas reporting is satisfactory and accurate</li> <li><input type="checkbox"/> we find at a reasonable level of assurance that the F-Gas reporting - with the following comments – is satisfactory and accurate<br/>(Comments to be specified)</li> <li><input type="checkbox"/> it cannot be ascertained with sufficient certainty that the F-Gas reporting does not contain any material misstatements..</li> </ul> |   |
| <ul style="list-style-type: none"> <li>▪ <b>Total <i>calculated need of quota</i> for hydrofluorocarbons placed on the market, as given in <b>section 9F</b> of the Art. 19 data report identified above</b></li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>The quota need as given in section 9F is fully confirmed.</i></li> <li><input type="checkbox"/> <i>The verification report concludes in a higher quota need than given in 9F.</i></li> <li><input type="checkbox"/> <i>The verification report concludes in a lower quota need than given in 9F.</i></li> </ul>   |   |
| <ul style="list-style-type: none"> <li>▪ <b>Quantity supplied directly to undertakings for <i>export out</i></b></li> </ul>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>No amounts were reported in section 5C_exempted.</i></li> <li><input type="checkbox"/> <i>The verification report fully confirms the amounts reported in section 5C_exempted.</i></li> <li><input type="checkbox"/> <i>The verification report does NOT fully confirm the amounts reported in section 5C_exempted.</i></li> </ul>   |   |

| <b>Elements to be taken up in the independent auditor’s verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b>   |  | <b><i>Explanations</i></b> |
|--|--|----------------------------|
| <p><i>of the Union, where those quantities were not subsequently made available to another party within the Union prior to export, as given in <b>section 5C exempted</b> of the Art. 19 data report identified above</i></p>  |  |                            |
| <p>▪ <i>Amounts of <b>gas physically supplied</b> by a new entrant quota holder which are <b>linked to authorisations</b> given to importers of refrigeration, air conditioning and heat pump equipment charged with hydrofluorocarbons, as given in <b>section 10A</b> of</i></p> | <p><input type="checkbox"/> <i>No amounts were reported in section 10A..</i></p> <p><input type="checkbox"/> <i>The verification report fully confirms the amounts reported in section 10A.</i></p> <p><input type="checkbox"/> <i>The verification report does NOT fully confirm the amounts reported in section 10A.</i></p> |                            |

| <b>Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |  | <b><i>Explanations</i></b>  |
|--|--|---|
| <i>the Art. 19 data report identified above</i>  |  |   |
| <b>Auditor's recommendation(s) for improvement</b>   |  | <i>If any recommendation needs to be made, it should be given in a manner that enables understanding by individuals familiar with the implementation of the Regulation, but without specific knowledge of the Undertaking's procedures.</i> |

| <b>Elements to be taken up in the independent auditor's verification report pursuant to Art 19(6) of Regulation (EU) No 517/2014 on fluorinated greenhouse gases</b> |  | <b><i>Explanations</i></b>   |
|--|--|--|
| <b>VII) Auditor and accreditation information</b>  |  |  |
| Lead auditor   |  |  |
| Independent reviewer   |  | <i>Identify independent reviewer within accredited verification body</i>           |
| Contact address  |  |  |
| Date of verification contract  |  |  |
| <b>Stamp and signatures, date</b>  |  | <i>Signatures of Lead Auditor &amp; independent reviewer for Verification Body</i> |
| <b>The auditor / verification body is:</b>   | <input type="checkbox"/> <i>accredited pursuant to Directive 2003/87/EC; or</i><br><input type="checkbox"/> <i>accredited to verify financial statements in accordance with the legislation of the Member State concerned.</i> |  |
| <b>accreditation certificate</b>   |  | <i>No. and date of issuance</i>  |

## Annex IV Some general information and clarifications

### IV.1. What are fluorinated greenhouse gases and hydrofluorocarbons (HFCs)?

Fluorinated greenhouse gases are man-made chemicals used in several sectors and applications. They are used to substitute certain ozone-depleting substances, such as chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) that are being phased-out globally under the Montreal Protocol. Although fluorinated greenhouse gases do not have ozone-depleting properties, they still contribute significantly to climate change. The climate impact of these gases across all applications is equivalent to that of the entire aviation sector.

The term ‘**F-gases**’ refers to the gases listed in **Annex I** to the F-gas Regulation. They are:

1. hydrofluorocarbons (HFCs)
2. perfluorocarbons (PFCs)
3. sulphur hexafluoride (SF<sub>6</sub>).

**Annex II** to the Regulation lists ‘**other fluorinated greenhouse gases**’ (**Annex II gases**). These include unsaturated hydro(chloro)fluorocarbons, fluorinated ethers and alcohols and other perfluorinated compounds.

The terms ‘F-gases’, ‘HFC’ and ‘Annex II gases’ also cover **any mixture (or "blend") containing any of these fluids**. Gases and mixtures may be commonly known by multiple names. For example, HFC-134a is also known as R134a, and R404A is a mixture of R125, R143a and R134a, all of which are HFCs.

**Please note: The obligation for an independent verification relate only to HFCs and any mixture containing HFCs!**

### IV.2. What does ‘global warming potential’ (GWP) mean?

Each F-gas and Annex II gas has a ‘global warming potential’ (GWP) assigned to it. For a mixture, the GWP is calculated on the basis of the individual components of that mixture<sup>20</sup>. The GWP is used to indicate the extent to which a gas warms the atmosphere. It is calculated based on the 100-year warming potential of one kilogram of an F-gas/Annex II gas relative to one kilogram of CO<sub>2</sub>.

The GWP of F-gases and mixtures commonly used today is in the thousands. R404A (GWP 3 922) for example is 3 922 times more potent than CO<sub>2</sub>. Preventing F-gases from entering the atmosphere is a very effective way of reducing emissions.

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<sup>20</sup> The calculation method is explained in Annex IV to the Regulation.

**Table I: Global warming potentials of common greenhouse gases, refrigerants and other fluorinated compounds**

| Gas                       | GWP (AR4 <sup>21</sup> , 100 year) |
|---------------------------|------------------------------------|
| CO <sub>2</sub>           | 1                                  |
| Methane                   | 25                                 |
| Nitrous oxide             | 298                                |
| HFC-134a                  | 1 430                              |
| R407C (mixture with HFCs) | 1 774                              |
| R410A (mixture with HFCs) | 2 088                              |
| R404A (mixture with HFCs) | 3 922                              |
| HFC-125                   | 3 500                              |
| PFC-14                    | 7 390                              |
| SF <sub>6</sub>           | 22 800                             |

### IV.3. What does 'HFC phase-down' and 'HFC quota system' mean?

The Regulation requires that the amount of HFCs placed on the market in the EU must be reduced (or 'phased down') by 79 % between 2015 and 2030. HFC amounts are calculated as CO<sub>2</sub> equivalent (Article 15). The phase-down is carried out using an HFC quota system (Article 16), as part of which producers and importers of bulk gases are given quotas that limit their right to place bulk gases on the market.

### IV.4. Quota holders, incumbents and new entrants

Producers and importers of bulk HFCs must have a quota in order to place bulk HFCs on the market. 'Incumbents' are companies that reported placing bulk gases on the market during the period 2009-2012 (Article 16(1)). These companies are allocated a quota by the European Commission on the basis of their historic market share.

The list of incumbents for 2018 - 2020 can be found in Commission Implementing Decision (EU) 2017/1984.<sup>22</sup> The Commission will update this list, which is based on the market players in 2015 and 2016, every three years.

'New entrants' are companies that did not report placing on the market of bulk HFCs during a specific reporting period (or the reference period initially), but intend to do so in the coming year. The Commission has allocated them a quota based on a declaration stating their intent to place bulk HFCs on the market (Article 16(2) or (4)). The quota comes from a reserve set aside for this purpose, and is allocated on a pro-rata basis.

Importers of equipment pre-charged with HFCs are not importing bulk gases, they are neither incumbents nor new entrants. These terms relate only to producers and importers placing bulk gases on the market.

### IV.5. Who is the importer?

The importer is the legal person importing the gas or the equipment when it clears EU customs. For complying with the F-gas Regulation, the paper documentation at customs is relevant as it provides proof

<sup>21</sup> AR4: Fourth Assessment Report of the International Panel on Climate Change (IPCC)

<sup>22</sup> Commission Implementing Decision (EU) 2017/1984 of 24 October 2017 determining, pursuant to Regulation (EU) No 517/2014 of the European Parliament and of the Council on fluorinated greenhouse gases, reference values for the period 1 January 2018 to 31 December 2020 for each producer or importer which has lawfully placed on the market hydrofluorocarbons from 1 January 2015 as reported under that Regulation (notified under document C(2017) 7080)  
[https://eur-lex.europa.eu/eli/dec\\_impl/2017/1984/oj](https://eur-lex.europa.eu/eli/dec_impl/2017/1984/oj)



Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation of the importing entity. **The importer is identified in this documentation as the ‘consignee’** (Field 8 of the customs declaration document or Single Administrative Document (SAD)).

f

Companies are only considered to be importers if they import equipment from countries outside the EU. Companies are not considered to be importers if they only buy or sell pre-charged equipment from or to companies in other Member States. Shipments between Member States are not considered to be imports/exports.

#### **IV.6. What date does an import take place on?**

Some companies may have difficulty in determining the date of import. While there is no legal definition of import date, it is common procedure to use the day of the first customs clearance as the date of import.

#### **IV.7. What does ‘placing on the market’ mean?**

Article 2 of the Regulation defines ‘placing on the market’ as: *‘supplying or making available to another party in the Union for the first time, for payment or free of charge, or using for its own account in the case of a producer, and includes customs release for free circulation in the EU.’*

This means that if bulk gases are supplied/made available in the EU they are considered to have been placed on the market. If gases are imported into the EU, they are considered to have been placed on the market when they are released for free circulation. If, for example, the gases are imported under the inward processing procedure, they are not considered to have been placed on the market. Other customs procedures that are not considered placing on the market are import for transit, temporary storage, customs warehousing or duty free zone procedures.<sup>23</sup>

The same is true for imports of precharged equipment, i.e. only **once the equipment is released for free circulation, it is considered to have been placed on the market.**

#### **IV.8. What is pre-charged equipment?**

Pre-charged equipment in the context of the Regulation<sup>24</sup> refers to equipment that is already (at least partially) charged with an HFC refrigerant or a mixture containing at least one HFC at the time of import. Typically, the pre-charging occurs during the manufacture of the equipment. During installation, it may also be necessary to add an additional charge to the equipment e.g. to accommodate for on-site conditions, such as pipes exceeding the standard length.

#### **IV.9. How to determine if the reporting thresholds are exceeded?**

Some reporting thresholds are defined in units of CO<sub>2</sub> equivalents (see question 2.3). In order to convert the weight of reportable gases into CO<sub>2</sub> equivalents, use the GWPs as specified in Annexes I and II of the Regulation. The GWP is multiplied with the metric tonnes to obtain tonnes of CO<sub>2</sub> equivalent. 1 metric tonne of a substance with a GWP of 1000 will therefore give 1000 CO<sub>2</sub> equivalents. For the GWP of mixtures, please refer to the method for calculating GWPs as specified in Annex IV of the Regulation.

#### **IV.10. What are the thresholds subject to obligatory reporting?**

Article 19 of the Regulation defines activity thresholds for the reporting obligation. Each company that exceeds the thresholds during the preceding calendar year must submit a report by 31 March every year. The thresholds refer to the sum of reportable gases or mixtures; they are not to be understood as to apply for each gas separately. The new reporting requirements affect each:

1. producer, importer and exporter that produced, imported or exported one metric tonne or 100 tonnes of CO<sub>2</sub> equivalent or more of reportable gases. The reportable quantity of gases imported or exported

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<sup>23</sup> Unless such imports remain in the customs territory of the Community longer than 45 days or that they are subsequently presented for release for free circulation in the Community or processed

<sup>24</sup> In the F-gas Regulation, the term ‘pre-charged equipment’ refers only to RACHP equipment pre-charged with HFCs, e.g. in Article 14.

Independent verification of reporting on hydrofluorocarbons (bulk) under the F-gas Regulation covers bulk shipments, including gases shipped with equipment for the purpose of charging that equipment.

2. company that destroyed 1 metric tonne or 1 000 tonnes of CO<sub>2</sub> equivalent or more of reportable gases;
3. company that used 1 000 tonnes of CO<sub>2</sub> equivalent or more of reportable gases as feedstock;
4. company that placed on the EU market 500 tonnes of CO<sub>2</sub> equivalent or more of reportable gases contained in imported products or equipment where the gases had not been placed on the market previously. Note that placing on the EU market (see definition in question 2.4 below) may take place in a year subsequent to the import year.