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DIRECTORATE-GENERAL

CLIMATE ACTION

Directorate C - Climate strategy, governance, and emissions from non-trading sectors

CLIMA.C.2 - Governance & Effort Sharing

AV Training Handbook (VR classification)

This handbook is intended for use in the training of verifiers involved in the verification of GHG annual emissions reports under the EU ETS, for (lead) assessors of accreditation bodies responsible for oversight and witnessing of verifiers as well as for practitioners of competent authorities responsible for the review of GHG emissions reports and verification reports.

This handbook has been composed on the basis of nine case studies and their model answers developed for the 2015 Accreditation and Verification Training Event that took place on the 8th September 2015 in Brussels, Charlemagne Building. It includes an introduction of the event, as well as a summary of inputs delivered by trainers during and after the training event.

OVERVIEW

This handbook is intended as guidance for the training of verifiers, (lead) assessors of accreditation bodies as well as for practitioners from Competent Authorities in the area of the Verification and Accreditation in EU ETS (European Union Emission Trading System).

The motivation for this handbook and the 2015 Accreditation & Verification (A&V) Training Event was to provide an up to date shared understanding of:

- the correct classification and reporting of outstanding issues in EU ETS verification reports as well as the type of verification opinion statements; and
- the information exchange required between verifiers, the Competent Authorities (CAs) and National Accreditation Bodies (NABs) under Chapter VI of Commission Regulation (EU) No 600/2012 ("the AVR") and how this information is being used.

Feedback from Member States to the Compliance Forum Accreditation and Verification Task Force after the first compliance cycle of Phase III as well as feedback at the 2014 A&V Forum of 5th November showed that there were sometimes marked differences of opinion and understanding held by different EU ETS stakeholders concerning the correct classification and reporting of misstatements, non-conformities, non-compliance with Commission Regulation (EU) No 601/2012 ("the MRR") and recommendations for improvement. Inconsistencies were also observed on the level of detail provided in verification reports.

The importance of a harmonised approach to EU ETS and the need for common understanding in relation to verification reporting is all the more important because of verifiers working across national borders and the inefficiency and additional costs that can result where different interpretations prevail. In response to these concerns a Commission FAQ¹ was drafted to confirm correct interpretation in relation to Commission Regulation (EU) No. 600/2012 (the "AVR"). This FAQ provided most important input to the A&V Training Event of 8th September 2015. In addition, Member States and the European cooperation for Accreditation (EA) have indicated perceived benefit for improving the mutual understanding of the information exchanges required between verifiers, CAs and NABs, in particular concerning how the respective parties make use of the information that is provided to them and the possibility for more effective feedback to be provided. **The training was prepared in close cooperation with the EU ETS Compliance Forum Task Force on Accreditation & Verification and the EA Network of EU ETS NABs.**

Verifiers, NABs and CAs provided real-life examples that led to the development of a range of case studies and model answers for use at the 2015 A&V Training Event. This handbook contains all the case studies and model answers as well as some important findings from the A&V Training Event. The objective is to facilitate further distribution of the knowledge and expertise contained in this handbook to a much wider audience than those present at the original training event. It can be used to cascade that knowledge and expertise further within verification bodies, NABs and CAs and other stakeholder organisations involved or interested in the verification of GHG emissions reports, accreditation of verifiers or the review of verified emissions reports.

The training event was organised by the Compliance Forum secretariat on behalf of the European Commission. It was attended by 50 verifiers, 25 participants from national NABs and 35 staff from CAs. The participants were divided into ten discussion groups each made up of 4-5 verifiers, 3-4 practitioners from the CAs and 2-3 representatives from NABs. The selection of the participants for the discussion

¹ http://ec.europa.eu/clima/policies/ets/monitoring/docs/avr_classification_reporting_issues_en.pdf

groups was made to ensure that in each group the participants came from different countries and organisations so as to maximise the training and learning from the event.

Each discussion group was instructed to discuss the case studies in a given order of priority. All case studies had been made available to each participant in advance of the training. For each discussion group 1-2 trainers were available to guide the discussions in their discussion group. At the end of the sessions, the trainers reported the findings of their discussion group to the project team which summarised the main points for a later plenary discussion and Q&A.

The second part of the training involved a plenary introduction of seven discussion points on information exchange between verifications bodies, NABs and CAs. The participants were then invited to discuss these points in their groups, before the trainers highlighted the main findings in a final plenary session and final Q&A session.

Important Note: It was repeatedly noted throughout the training event that the verifier should make every effort to start verification early and that the verification process should already begin during the year being reported on rather than after the year has ended, as this facilitates checking of conformance and compliance, the timely management of issues and addressing possible data gaps, misstatements or non-conformities identified during the verification. Early identification of misstatements, non-conformities and non-compliance with the M&R regulation should ensure timely correction of these issues which would avoid a situation where the verifier is forced to report them in the verification report. Article 22 AVR requires the operator to correct any identified misstatements and non-conformities, and non-compliance issues should be resolved as soon as possible. Verifiers are advised to adhere to the timeline for verification set out in section 3.2 and Annex I of the Explanatory Guidance (EGD I) ²

This handbook consists of the following chapters:

- I. **Outline and content of the nine case studies**
- II. **Model answers for the case studies**
- III. **Information Exchange: discussion points introduced at the A&V Training Event and findings noted in the discussion groups and in the plenary Q&A**
- Annex I Programme of the 2015 EU ETS Compliance Forum Event: Training on Accreditation and Verification**
- Annex II Introductory presentations to explain Objectives and Aims of the Accreditation and Verification Training**
- Annex III Introductory presentations to the sessions on verification reporting**

Suggestions for the use of this handbook.

To maximise the benefits of this handbook, verification bodies, NABs and CAs are advised to make the case studies available one by one to their staff, and follow the instructions listed for the case study. For the first case study this involves making use of the Excel template of the verification report as it was completed by the verifier. Trainees are invited to assess the Excel template and where needed, correct the findings of the verifier. The trainers are advised to make use of the model answers provided in chapter II, whereby for case study 1 the model answers are provided in a separate Excel template.

² http://ec.europa.eu/clima/policies/ets/monitoring/docs/exp_guidance_1_en.pdf

I. Outline and context of the Case Studies

Case 1 – Template example – see Verification Report template attached

Context:

The operator of a category A installation carries out combustion activities and applies a calculation based methodology using default factors for the net calorific value and the emission factor. The approved monitoring plan (MP) indicates that the installation's source streams are gas, diesel oil and recycled fuel oil. The MP boundary description confirms that the installation consists of an asphalt plant along with a number of other activities (crushing and screening activities) and a smaller asphalt plant within the quarry. For the activity data of the major source streams tier 3 is applied according to the approved MP.

During the verification of the emission report the verifier discovers that light fuel oil consisting of a blend of recycled kerosene and diesel oil, is used within the installation. This has not been notified to the CA. Furthermore, fuel data of the smaller asphalt plant amounting to 10% of the emissions have not been included in the emission report. Fuel data from the crushing and screening activities carried out by the quarry on behalf of the main asphalt plant (belonging to the same installation) have also not been included in the emission report because the operator noted that the data could not be separated from the overall quarry use. Those activities also do not reflect the description provided in the data flow diagram of the MP. Emissions resulting from the fuels used for these activities amount to 10% of the emissions.

Other findings from the verifier are:

- Bottled gas (de-minimis source stream) is being used, but this was not included in the approved MP and not reported in the emission report
- There is no documented risk assessment
- There are no documented procedures while section K of the MP template is completed
- No data reviews or internal audits have been carried out
- Site staff was unaware of the requirements of EU ETS

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

The Verification Report (attached as separate document) provides a classification of the aforementioned issues found by the verifier. Do you agree with the classification of issues that the verifier has made in the Verification Report?

Exercise II – Case 1 : Verification Opinion Statement

In the attached Verification Report a Verification Opinion Statement is selected.

- 1 Do you agree with the selected Verification Opinion Statement?
- 2 Would the conclusion be different if the non-conformities and non-compliance issues do not have an effect on the emission data?
- 3 What are the consequences of the Verification Opinion Statement for question 1 and 2?

Exercise III – Case 1: Annex 1 and 3 of the Verification Report

In Annex 1 and 3 of the Verification Report attached as separate document, the issues classified by the verifier in the exercise are reported. Do you agree with how the verifier has reported the issues in Annex 1 and 3 of the Verification Report? Please correct if necessary.

Case 2 – data gap(s)

Context:

The operator of an installation uses a measurement-based approach (CEMS) for the determination of the emissions. Different fuels are combusted within five boilers (two large and 3 smaller) to produce steam. All fuels combusted contain a biogenic component.

During the verification (started end of February 2015) of the emissions for the reporting year 2014 the verifier identified that the on-line measurement system to determine the biogenic percentage (C^{14}/C^{total}) had been out of order from May 2014 onwards for the two large boilers. This on-line measurement system is an integral part of the continuous emission measurement system that is used to measure the GHG concentration and the flue gas flow. To compensate for the loss of the biogenic measurement from May onwards the operator has calculated the annual emissions based on extrapolation of the emissions data measured January to May.

During the on-site verification visit, the supplier of the equipment for the on-line measurement of the biogenic content was present, and during the interview he confirmed that the on-line measurement equipment installed at the 5 boilers for the determination of the biogenic component had not been maintained as per manufacturer instructions as indicated in the approved MP since the equipment's installation 4 years ago. Therefore the supplier acknowledged the measurements were not likely reliable due to lack of proper maintenance of the equipment and that the on-line measurement to determine the biogenic percentage should not be used. The issue had not been notified to the CA nor did the MP contain an appropriate estimation method in case of missing data. At the end of April 2014 the operator switched the fuel supplier. Therefore the use of historical data and analyses from the previous fuel supplier was not an option.

The operator did not make any corrections to the AER. The verifier did not request the operator to contact the CA but carried out additional verification activities in order to conclude on the materiality and the type of verification opinion statement. The verifier considered that the failure of the online measurement system led to a non-material misstatement. This conclusion was based on the measured C^{14} values of the first four months. A verification opinion statement with comments was issued by the verifier.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement. Please also indicate what the verifier should have done differently in this case.

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 3 – data gap(s)

Context:

The operator of an installation applies the mass balance methodology for the calculation of the emissions. The approved monitoring and sampling plan indicate that the carbon content of the mass streams entering and leaving the installation is determined by means of monthly analysis performed by an EN ISO/IEC 17025 accredited laboratory.

During the verification process for the 2014 emissions data (beginning of March 2015), the verifier observed that for several mass streams the monthly analysis had not been performed during months May-October. Also in the previous reporting period (2013 and stated in the 2014 verification report) analyses of several mass streams had not been conducted in line with the frequency indicated in the MP. Furthermore, the MP does not contain information on an appropriate estimation method in the case of data gaps. There have not been any changes in the MP since 2013.

Last year's improvement report responding to the verifier's comments submitted by the operator to the CA included measures to ensure that monthly analyses would be carried out on all mass streams, measures to ensure that a suitable procedure would be implemented for addressing data gaps as well as measures to improve the effectiveness of the control activities by undertaking thorough cross-checks performed by a colleague belonging to a different department of the installation. However, during the verification of this year's reporting the verifier identified that no effective follow-up actions had been taken concerning the laboratory's monthly analyses and the implementation of a procedure concerning data gaps, and that also other internal improvement measures, i.e. improved cross-checks, had not been implemented.

The operator informed the CA as result of the verification about the failure to implement the measures listed in last year's improvement report, and submitted a method for conservatively estimating emissions. The operator was not able to obtain approval from the CA before the deadline for submission of the verification report.

The verifier performed a detailed check to assess whether the approach used by the operator to complete the missing data ensured that the emissions were not underestimated and that the approach did not lead to a material misstatement.

The verifier concluded that the use of the alternative approach did not lead to underestimation and did not lead to a material misstatement of the emissions reported.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the identified and classified under Exercise I.

Case 4 – Aviation

Context:

During 2014 a commercial aircraft operator (AO) performed Annex I activity flights. The AO carries out flights inside and outside of the EU. The AO did not use the simplified approach and there were no data gaps. The approved MP states that Method A is used to calculate the fuel consumption and that the actual density of the fuel uplift will be used except in specific situations where it is too hazardous and the actual density cannot be determined. In these known and specified situations, the standard density of 0.8kg/litre will be used. The AO increased the number of aircraft in its fleet by one but did not inform the CA by 31 December, and this was not included in the emission report.

The AO notified the CA in February 2015 that it would be using Method B to calculate the fuel consumption for the 2014 reporting year. The notification was acknowledged by the CA in March but official approval was not obtained before the verification report needed to be submitted. The MP was also not amended at the time.

The annual emission report stated that 13000 flights were covered by the EU ETS, and that the standard density value was used throughout the year even in situations where it was possible to obtain actual fuel density data. This has an estimated effect of 0,2% on the emissions. The final reported data contained 1 double counted flight that caused an error of the emissions by 0,01%, and contained 4 errors in the aerodrome codes entered in the data collection system and ultimately in the emission report.

The verifier noted that the AO had not carried out internal reviews in accordance with the approved MP. The procedures for quality assurance of the IT systems were found to be ineffective (lack of input and output controls and insufficient back-up procedures) and there was no quality controller double-checking the data entry in the data management system, routine data checks were not carried out and manual data entry was done by junior staff. The verifier observed that the landing time above 40 minutes for flights had not been captured in the data gathering systems and was not taken into account when monitoring the fuel consumption, and was thus not reflected in the reported data (this concerned 0,02% of the total emissions). This means that part of the landing time until block-on was not taken into account. When assessing the aircraft operator's risk assessment, the verifier identified that the risk assessment does not take into account the risk regarding the collection of data on landings.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II : Verification Opinion Statement - not applicable for this case 4

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 5

Context:

An oil refining installation has several major source streams. The 2014 reported emissions were 875720 tonnes of CO₂. The determination of the fuel quality is based on laboratory and on-line measurements.

In accordance with the approved MP the weekly analyses to determine the emission factor are performed by an accredited laboratory. Sampling and weekly analysis for one of the (major) source streams has not been performed in weeks 34 and 35.

In addition, the on-line gas chromatograph on two source streams (refinery mixed gas) requiring daily analysis as indicated in the approved MP, was out of order for 24 consecutive days during April 2014. This led ultimately to the tier not being met for this period. The person responsible for operating the equipment and validating the data was absent from office for a month and other expertise was not arranged for during that time.

In analysing the findings the verifier considers that the deviation between the samples is limited, which led the verifier to conclude that even if the emissions concerning all missed analyses were calculated according to the highest emission factor analysed, the emissions would increase by a maximum of 730 tonnes of CO₂. Due to time constraints the operator did not make changes to the initially reported emissions and did not take corrective action. This was not communicated with the CA.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement.

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 6

Context:

An installation with low emissions uses natural gas and diesel. In 2013 the consumption of natural gas resulted in 3600 tonnes of CO₂ and diesel in 500 tonnes of CO₂. The source streams were classified in the approved MP as a minor source stream and de-minimis source stream respectively. In March 2014 the operator installed an extra boiler using the source stream natural gas that increases the capacity of the installation by 30%.

The emissions of the source stream natural gas have increased to 5300 tonnes of CO₂. The additional boiler is not included in the monitoring plan and the operator has omitted to include the gas consumption in the emission report. During the site visit early March 2015 the verifier identifies the misclassification of the source stream and informs the operator whereupon the operator notifies this and the added boiler to the CA. Approval for this change is obtained from the CA on 8 April but this was not processed in the MP itself before the verification report was issued to the operator. The misstated emissions in the emission report and the missing gas consumption was corrected by the operator as part of the verification.

The Member State in which the installation is located requires the operator to include elements in the monitoring plan (including a procedure) to meet the requirements of Article 24 of Decision 2011/278/EU.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement.

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 7

Context:

The installation (belonging to a company with several installations across Europe and with HQ in another MS) comprises a 35 MW boiler running on natural gas (major source stream) and an emergency generator using diesel (de-minimis). Total emissions amount to 74921 tonnes of CO₂ of which 15 tonnes is related to the use of diesel. The approved MP indicates that the accounting of natural gas is based on invoices provided by the gas supplier. At the time of the site visit in January, the December invoice was not yet received. The operator based the December consumption on internal metering. A week after the site visit (mid-January), the operator provided the December invoice to the verifier.

The invoice indicates a higher amount of gas consumed leading to a total amount of 75102 ton of CO₂. The verifier requested the operator several times to update the annual emission report, but the operator refused to do this stating that the difference was not material.

In addition the operator indicated that the quantities had already been reported internally and that there should not be differences between internal and external reports.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement.

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 8

Context:

A category B installation undergoes an unplanned maintenance period of three months and the operator hires contractors to perform work on site.

The contractors bring in several (back-up) emergency generators which use diesel as fuel and are operated to continue the ETS activities. The fuel used during the maintenance period was charged to the operator by the contractor but the exact amount of fuel used was not specified. The operator did not notify this to the CA, as the operator thinks the units are not his property and thus not part of the installation boundaries. Both the generators and the source stream are not mentioned in the approved monitoring plan. The emissions resulting from the generators and diesel amount to 1000 tonnes of CO₂.

The verifier did not identify other issues.

The verifier identified this error by the operator during the verification but even after frequent formal requests from the verifier the operator refused to adapt the monitoring plan or correct his annual emission report since he is adamant that the units are not part of the installation boundary.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement.

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

Case 9

Context:

An installation with low emissions uses natural gas and diesel. In 2014 the combustion of natural gas resulted in 5300 tonnes of CO₂ and the combustion of diesel with emissions of 100 tonnes CO₂. The source streams were classified as a major (natural gas) and de-minimis (diesel) source stream (used by the emergency back-up generator).

The approved MP states that the diesel consumption is based on supplier invoices and stock taking (tier 1). During the on-site verification the operator could not provide supporting evidence stating the quantity of diesel combusted. Two weeks later the operator provided the verifier with an estimate based on operating hours (automatically registered) and the capacity of the back-up generator (the operator was not able to obtain approval of the CA in time of the alternative estimation approach for the missing data). Verification of the operator's estimation concluded the estimation is conservative.

Exercise I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Please identify and classify any misstatements, non-conformities, non-compliances and recommendations of improvement

Exercise II: Verification Opinion Statement

Please complete the Verification Opinion Statement.

Exercise III: Annex 1 and 3 of the Verification Report

Please complete Annex 1 and 3 on the issues identified and classified under Exercise I.

II. Case Studies – Context and Model Answer

Please note for all model answers in the case studies that the verification process should start during the year being reported on rather than after the year has ended as this facilitates checking of conformance and compliance, the timely management of issues and addressing possible data gaps, misstatements, non-conformities and non-compliance issues identified during the verification. Early identification of misstatements, non-conformities and non-compliance with the M&R regulation should ensure timely correction of these issues which would avoid a situation where the verifier is forced to report misstatements, non-conformities or non-compliances in the verification report. Article 22 AVR requires the operator to correct any identified misstatements and non-conformities, and non-compliance issues should be resolved as soon as possible. For further information please see section 3.2 and Annex I of the AVR Explanatory Guidance Document EGD I.³

Case 1 – Template example – See the Excel template attached to the handbook

Exercise I - Case I: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Model answer to the classification of issues of Case 1 is provided in the Excel file attached separate to the handbook. The black-font text is the verifier's original report, the red-font text makes the necessary additions to provide the model answer and the blue-font text provides further guidance and explanation for the purposes of the training.

Exercise II – Case 1: Verification Opinion Statement

Model answer to Exercise II – the VOS for Case 1 is provided in the Excel file attached to this handbook as a separate document. Further answers to the questions in Exercise II are listed below:

1. Do you agree with the selected Verification Opinion Statement?

The selected verification opinion statement of the verifier (verified with comments) is not correct. The misstatements are material, hence the verification opinion statement should be “not verified”. In this example the misstatement exceeded the materiality threshold (5% for category A installations) and should thus be considered material. Please note that in cases where the materiality threshold is not exceeded, the misstatement can still be material if in the verifier's opinion the use of the report by the CA could still be affected. This verifier's opinion depends on the size, nature and particular circumstances of occurrence of the misstatements (Article 22 of the AVR).

A not-verified opinion statement can also be provided for other reasons (see below). If there are more reasons for issuing a not-verified opinion statement, it is recommended to select all these reasons for completeness in the verification opinion statement section of the Commission template (see the Excel file for the model answer).

³ http://ec.europa.eu/clima/policies/ets/monitoring/docs/exp_guidance_1_en.pdf

2. Would the conclusion be different if the non-conformities and non-compliance issues do not have an effect on the emission data?

If the non-conformities and non-compliance issues did not lead to misstatements, the verification opinion statement would still be “not verified” as there is a limitation of scope (Article 27(1)(c) AVR): there is insufficient evidence/ information available for the verifier to reduce the verification risk to the level needed to provide a positive verification opinion with reasonable assurance. There are missing procedures, no risk assessment, no data review and validation of data (effective control activities are missing), no internal audits and the site staff directly responsible for monitoring and reporting are not competent. The verifier does not have sufficient information to state whether the emission report is free from material misstatements.

Depending on the circumstances and professional scepticism of the verifier there could also be non-conformities that combined provide insufficient clarity and prevent the verifier from stating with reasonable assurance that the report is free from material misstatements. There are no documented procedures, no data reviews and internal audits, and the installation boundaries in the MP do not reflect the actual situation.

3. What are the consequences of the verification opinion statement in question 1 and question 2?

Material misstatements should lead to conservative estimation of emissions by the CA (Article 70 of the MRR).

Non-conformities and recommendations for improvement should lead to an improvement report to be submitted to the CA (Article 69(4) of the MRR).

Non-compliance issues should be addressed immediately in consultation with the CA: e.g. compiling a risk assessment, carrying out data review and internal audits, implementing procedures, notification of the missing source stream to the CA, updating the MP etc.

The CA may take further enforcement action.

Exercise III – Case 1: Annex 1 and 3 of the Verification Report

Model answer to Exercise III – Annex 1 and 3 for Case 1 is provided in the two annexes of the Excel file attached to this handbook as a separate document. The black-font text is the verifier’s original report, the red-font text makes the necessary additions to provide the model answer and the blue-font text provides further explanation for the purposes of the training.

Case 2 – data gap(s)

Exercise 1 – Case 2: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements (if any)

The context indicates that the verifier considered the failure of the C¹⁴ system as a data gap and concluded the misstatement not to be material. The operator did not make any corrections to the AER and the verifier issued a positive verification opinion with comments.

In this case, the determination of the biomass fraction is technically not feasible due to the non-functioning C¹⁴ system. According to Article 39(2) MRR, the operator should have assumed the absence of the biomass fraction and reported the overall CO₂ emissions using the CEMS systems. Alternatively, the operator could have submitted an estimation method to determine the biomass fraction for approval to the CA. But in this case the CEMS system itself functions properly, hence the most practical method would have been measuring and reporting the overall CO₂ emissions.

The operator failed to apply Article 39(2) MRR. During the verification the verifier should have pointed the operator to Article 39(2) MRR so that the situation would have been corrected before issuing the verification report. In that case there would not have been a misstatement.

Non-conformities (if any)

The operator did not maintain the equipment in line with manufacturer instructions. If the overall emissions are monitored by the CEMS or an estimation method is applied to determine the biomass fraction, the data from the faulty C¹⁴ system is not used for reporting the emissions. However, not maintaining the C¹⁴ system is still a non-conformity. The MP describes that the C¹⁴ system is used to monitor the biogenic emissions. But in this case the C¹⁴ system did not function and then Article 39(2) MRR is applicable. The non-conformity has still to be corrected.

The operator calculated the annual emissions based on extrapolation of the emissions data measured January to May. In essence the operator has not followed the MP for 8 months. This is a non-conformity.

Possible non-conformities as a result of not carrying out an internal review and validation of data and not taking corrective action (depending on how these procedures are described in the approved MP).

Non-compliances (if any)

There are several non-compliance issues:

- The operator has not implemented adequate quality control assurance activities which is not in line with Article 59 MRR.*
- Considering the duration of the data gap (from May 2014 onwards) one can conclude that the internal review and validation of data (Article 62 MRR) has not been performed. This is a non-compliance with Article 62 MRR. (This could also be a non-conformity if the internal review and validation data process is defined in the approved MP).*

Non-compliances (if any) - Continued

There are several non-compliance issues:

- *A number of control activities (as part of the control system) were found to be ineffective and not commensurate with the risks identified. The operator did not seek to improve the control system and did not update the MP or the procedures. This is a non-compliance with Article 58(4) MRR and Article 14(2) (d) MRR. The verifier should have referred the operator to the CA.*
- *The operator has not notified the deviation from the monitoring plan and the tiers to the CA. It basically did not follow the MP for 8 months and calculated the emissions based on extrapolation of the emissions data measured January to May. Not notifying the temporary change is not in line with Article 23 MRR.*

Exercise II - Case 2: Verification Opinion Statement

The model answers in Exercise II reflect the situation that Article 39(2) MRR has been applied. This means that the verification opinion statement is verified with comments.

OPINION	
OPINION – verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments:	<i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:</i>
Comments which qualify the opinion:	<i>1. The operator did not maintain the equipment in line with manufacturer instructions as indicated in the approved MP. Furthermore, internal review and validation of data as well as corrective action was not carried out properly (see Annex I).</i>
	<i>2. Some non-compliance issues were identified (see Annex I).</i>
	<i>3.</i>
	-
OPINION - not verified:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emission Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to
	-uncorrected material misstatement (individual or in aggregate)
	-uncorrected material non-conformity (individual or in aggregate)
	-limitations in the data or information made available for verification
	-limitations of scope due to lack of clarity & or scope of the approved monitoring plan
	-the monitoring plan is not approved by the competent authority

Explanation

In this case the verifier made several mistakes:

- the verification should have started much earlier (although this may not be the fault of the verifier, depending on when the contract with the operator was agreed)*
- the verifier should have pointed the operator to Article 39(2) MRR (see exercise 1). Then there would have been no misstatements. The verification opinion statement would have been verified with comments (non-conformities and non-compliance issues). Special attention for the CA is that the MP needs to be updated;*
- in this case Article 39(2) MRR was not applied which meant that there was a data gap because of the faulty C¹⁴ system (the system for the two main boilers was out of order since May). The verifier issued a positive verification opinion statement and concluded that the data gap did not result in a material misstatement. However, the size of the misstatement could not be quantified because the verifier does not have sufficient information available to conclude whether the misstatement is material or not. Since the maintenance was not performed for the last four years, the reported biogenic content is likely not free of misstatement. Furthermore, there was a change in supplier. The verifier based its conclusion regarding materiality on the first four months when the C¹⁴ system was still functioning.*
- the missing data resulted in a limitation of scope which should have prevented the verifier from collecting the evidence required to reduce the verification risk to the level needed to obtain a reasonable level of assurance. The verification opinion statement should in that case have been a negative verification opinion statement (the emission report is not verified as satisfactory due to limitation of scope).*

Consequences of issues identified in the verification opinion statement and Annex I:

If Article 39(2) MRR had been applied there would only have been non-conformities and non-compliance issues. For the non-conformities an improvement report must be submitted by 30 June.

For non-compliance issues the operator must address these in close consultation with the CA. Immediate action is required (e.g. updating the MP, implementing adequate quality control and quality assurance activities, improving the control system, implementing internal review and validation of data. etc.).

As Article 39(2) MRR was not applied there would also be a limitation of scope, and a not-verified verification opinion statement should have been issued which means that the CA should conservatively estimate the emissions in accordance with Article 70 MRR.

Exercise III - Case 2: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

The model answers in Exercise III reflect the situation that Article 39(2) MRR has been applied. This means that there are only non-conformities and non-compliance issues.

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1		-- select --
A2		-- select --
A3		-- select --
A4		-- select --
A5		

B. Uncorrected Non-conformities with approved Monitoring Plan
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification **Material?**

B1	<i>Since its installation 4 years ago, the on-line measurement equipment for the determination of the biogenic component installed at 5 boilers A, B, C, D, and E, has not been maintained in line with manufacturer instructions as required in the approved MP.</i>	No
B2	<i>The approved MP describes a procedure for internal review and validation of data. Considering the duration of the data gap (since May 2014) no proper internal review and validation of the data has been carried out. There is not sufficient data available to assess the magnitude of the non-conformity. There is in fact no effect on the overall emission data since the overall emissions are acquired by a total CO₂ CEMS (independent of the C¹⁴ measurement) and, therefore, could have been reported if MRR Article 39(2) was applied (but it was not)</i>	No
B3	<i>The approved MP describes a procedure for taking corrective action. Considering the duration of the data gap (since May 2014) no corrective action on the data has been carried out. There is not sufficient data available to assess the magnitude of the non-conformity but there is no effect on the emission data since the overall emissions are reported correctly.</i>	No
B4	<i>The operator calculated the annual emissions based on extrapolation of the emissions data measured January to May. In essence the operator has not followed the approved MP for 8 months. There is not sufficient data available to assess the magnitude of the non-conformity</i>	No
B5		-- select --
B6		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification

		Material?
C1	<i>Considering the duration of the data gap (since May 2014) it is obvious that no effective internal review and validation of data has been performed. This is a non-compliance with Article 62 MRR. There is not sufficient evidence available to assess the magnitude of this non-compliance but there is no effect on the emission data since the overall emissions are reported correctly. (COULD ALSO BE A NON-CONFORMITY DEPENDING ON HOW IT IS DESCRIBED IN THE MP, SEE FOR PHRASING B2)</i>	No
C2	<i>The operator has not made any corrections nor taken corrective actions. This is a non-compliance with Article 63 MRR. There is not sufficient evidence available to assess the magnitude of this non-compliance but there is no effect on the emission data since the overall emissions are reported correctly. (THIS COULD ALSO BE A NON-CONFORMITY DEPENDING ON HOW IT IS DESCRIBED IN THE MP, SEE B3)</i>	No
C3	<i>The operator has not implemented adequate quality assurance activities (Article 59 MRR). During an on-site verification visit, the supplier of the equipment for the on-line measurement of the biogenic content was interviewed. The supplier acknowledged that the on-line measurement equipment had not been properly maintained since the equipment's installation 4 years ago.</i>	No
C4	<i>A number of control activities (as part of the control system) was found to be ineffective and not commensurate with the risks identified. The operator did not seek to improve the control system and did not update the MP or its procedures. This is a non-compliance with Article 58(4) MRR. The MP needs to be updated.</i>	No
C5	<i>The operator has not notified the deviation from the monitoring plan and the tiers to the CA. It basically did not follow the MP for 8 months and calculated the emissions based on extrapolation of the emissions data measured January to May. Not notifying the temporary change is not in line with Article 23 MRR.</i>	No

D. Recommended Improvements, if any

D1	
D2	
D3	
D4	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>Not applicable.</i>
E2	
E3	
E4	

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	<i>Yes</i>
If Yes, was this approved by the CA before completion of the verification?	<i>No. The operator did not notify the malfunctioning to the CA.</i>
If No, - - was the method used conservative (If No, please provide more details) - did the method lead to a material misstatement (If Yes, please provide more details)	
	<i>No – an inappropriate alternative method was applied.</i>
	<i>Yes. The evidence required to reduce the verification risk to the level needed to obtain a reasonable level of assurance is not available.</i>

Annex 3 - Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not applicable</i>
2	
3	
4	
5	
6	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Not applicable</i>
2	
3	
4	
5	

Case 3 – data gap(s)

Please note that both the operator and the CA have their own responsibilities. In this case the operator should among other things have implemented the measures listed in the improvement report. It is good practice for CA to be attentive on whether the measures listed in the improvement report have been implemented, in particular when the measures require updates of the monitoring plan.

Exercise I – Case 3: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements

There is no misstatement because the data gap is corrected through a conservative estimation method. However approval for this method has been requested but not yet obtained.

Non-conformities

During the reporting period the operator deviated from the approved monitoring methodology (not following the analysis frequency listed in the approved MP): this is a non-conformity.

Non-compliances

There are several non-compliance issues:

- *Approval of the method for determining conservative surrogate data has been requested but was not obtained in time. The requirements of Article 65 MRR seem to have been met by the operator. However the estimation method and data gap procedure is subject to approval of the CA. It could still be a non-compliance if the CA does not approve of the method. For more information on how a verifier checks data gaps please see KGN II.3 on process analysis.*
- *The operator did not implement the measures listed in the improvement report: i.e. implementing more effective control activities and updating the MP to include those more effective control activities. This is a non-compliance with Article 9 MRR (the operator shall take account of the recommendations of improvement made by the verifier), Article 62 MRR (not implementing cross-checks) and Articles 58(4) and 14(2) (f) MRR.*
- *The operator did not correct the non-conformity regarding missing analyses from last year, which is not in line with Art 22(1) AVR.*

Recommendations of improvement

The operator has requested approval for the estimation method to correct the data gaps but this was not obtained in time. It is recommended to obtain approval as soon as possible from the CA and to update the MP accordingly.

Exercise II – Case 3: Verification Opinion Statement

OPINION	
OPINION—verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments:	<i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:</i>
Comments which qualify the opinion:	<ol style="list-style-type: none"> <i>1. The operator did not perform the monthly analysis as indicated in the approved monitoring plan for streams [reference source stream 1], [reference source stream 2], [reference source stream 3] from May to October 2014. The event was only notified to the CA together with an alternative approach after the site visit on (insert date) – the operator was not able to obtain approval from the CA before the deadline of submission of the verification report. Assessment of the alternative approach does not lead to under-estimation or to a material misstatement of emissions reported (see Annex I).</i> <i>2. A similar event occurred in the previous reporting period and last year’s recommendations of the verifier to enhance the control activities and included within the last improvement report were not implemented by the operator (see Annex I).</i> <i>3. Several non-compliance issues were identified (see Annex I)</i>
OPINION— not verified:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to <delete as appropriate>
	– uncorrected material misstatement (individual or in aggregate)
	– uncorrected material non-conformity (individual or in aggregate)
	– limitations in the data or information made available for verification
	– limitations of scope due to lack of clarity & or scope of the approved monitoring plan
	– the monitoring plan is not approved by the competent authority

Explanation

The verification opinion statement is verified with comments. There are non-conformities and non-compliance issues but these are not such that these, based on size, nature and individual circumstances, lead to material misstatements. Special attention for the CA is that the MP needs to be updated and that the measures laid down in the improvement report must be implemented.

Consequences of issues identified in the verification opinion statement and Annex I:

Non-conformities mean that the operator must submit an improvement report by 30 June.

Non-compliance issues mean that the operator must address these in consultation with the CA (e.g. updating the MP, implementing the measures laid down in the improvement report from last year, implementing a written procedure for data gaps)

Exercise III – Case 3: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1		-- select --
A2		-- select --
A3		-- select --
A4		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification **Material?**

B1	<i>The monthly analysis for source streams [reference source stream 1], [reference source stream 2] and [reference source stream 3] was not conducted as per approved monitoring methodology for the months May, June, July, August, September and October 2014. The operator used an alternative approach which did not lead to underestimation and material misstatement of the emissions reported. Due to time constraints the approval of the alternative approach was not obtained from the CA before the verification deadline.</i>	No
B2		-- select --
B3		-- select --
B4		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification **Material?**

C2	<i>The operator did not implement the measures listed in the improvement report, which is a non-compliance with Article 9 MRR (operator shall take account of the recommendations of improvement made by the verifier) and this has led to a non-compliance with Article 62 MRR (not implementing cross-checks). As the control activities listed in the improvement report have not been implemented and the procedures for these control activities are not effective, the non-compliance is likely to reoccur. Furthermore, since 2013 there have not been any changes in the MP while the improvement report did contain measures to implement more effective control activities which would have required an update of the MP. This is a non-compliance with Article 58(4) and 14(2) (f) MRR.</i>	No
C3	<i>The operator did not correct the non-conformity (B1) that was already identified in the previous reporting period, which was not in line with Art 22(1) AVR. The non-conformity had no known impact on the stated emissions data (see B1).</i>	No
C4		-- select --
C5		-- select --

D. Recommended Improvements, if any

D1	<i>Subject to CA approval of the method, the MP needs to be updated to include the estimation method for conservative surrogate data (required by Article 14 MRR)</i>
D2	

D3	
D4	

E. Prior year Non-conformities that have NOT been resolved. Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>See the explanation below on how to report</i>
E2	
E3	

Please note: this section needs be completed because the non-conformity also existed in 2013 and the case study implies that the non-conformity re-occurred. Measures to implement more effective control activities listed in the 2014 improvement report were not taken up.

The section needs to be completed in such a way that the user of the verification report is aware of the type of non-conformity that has not been resolved. In this case the description should include:

- the fact that there has been recurrence of the failure to obtain monthly analyses for certain source streams (reference) in line with the approved MP for the specific time (e.g. the number of months or weeks)*
- not implementing the control activities listed in the procedures described in the MP*
- not securing approval for an alternative emission estimation method to fill the data gaps*

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	Yes
If Yes, was this approved by the CA before completion of the verification?	No
If No, -	
- was the method used conservative (If No, please provide more details)	Yes. <i>The alternative approach used by the operator did not lead to underestimation</i>
- did the method lead to a material misstatement (If Yes, please provide more details)	No.

Annex 3 - Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	
2	
3	
4	
5	
6	
7	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Approval of the use of an alternative approach for completing the missing data was requested on [date] but this approval was not obtained before issuing this verification report (see Annex I) Subject to CA approval of the method, the MP needs to be updated to include the estimation method (required by Article 14 MRR)</i>
2	
3	
4	
5	
6	
7	

Case 4 – Aviation

Exercise I – Case 4: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements

There is one occasion of a double counted flight which had an impact on emissions (0,01% of the total emissions) and is thus an error in the emission report. Using the standard density factor has an estimated effect on the emission data of 0,2 % and is a misstatement.

The data from landings that last longer than 40 minutes (data concerning the landing time over 40 minutes) were not captured in the data gathering systems. This meant that emissions related to the landing time over 40 minutes were not taken into account. It affected 0,02% of the total emissions.

Non-conformities

The approved MP allows deviations for fuel density measurements in specified circumstances. However, the standard fuel density was applied throughout the year and to flights where it was possible to obtain actual fuel density data. This is not in line with the approved emissions MP and thus a non-conformity.

The approved MP describes a procedure for internal reviews. However, these internal reviews were not carried out and the procedure was not implemented. For example a quality controller should double check data entries in the internal IT systems and routine data checks should be performed).

Method B was applied whereas the approved MP still states that Method A should be applied. A request for change of the monitoring methodology was made and acknowledged by the CA, however official approval was not obtained at the point of finalising the verification. The MP should be updated.

There are 4 aerodromes that were not correctly included in the data collection system and therefore not captured correctly in Annex I of the emission report. This is a non-conformity with the MP (description of the procedure to monitor the completeness of the list of flights operated under the unique designator by aerodrome pair). The procedure is not carried out correctly.

Non-compliances

The approved MP allows deviations for fuel density measurements in known, specified circumstances. However, the standard fuel density was applied throughout the year also to flights where it was possible to obtain actual fuel density data. This is a non-compliance with Article 52(6) MRR.

The AO did not carry out internal reviews of its data during the year. This is a non-compliance with Article 62 MRR.

Furthermore, relevant data and information must be confirmed by at least one person that was not involved in the determination and recording of the data and the competence of personnel should be managed. Using only a junior staff for data entries in the data management systems could be considered non-compliant with Article 61 MRR.

The landings with a duration of over 40 minutes have not been properly captured in the data gathering systems and the time above the 40 minutes have thus not been taken into account when monitoring the fuel consumption. This is a non-compliance with Annex III MRR (not taking into account the landing time above 40 minutes is not in line with Method B). To determine the fuel consumption the AO must take into account the fuel remaining and contained in the tanks at block-on (the moment of engine shut down). This applies to all landings of all ETS flights, and should include also the time of landings above 40 minutes.

The quality assurance of the IT system is ineffective (no input and output controls and insufficient back-up procedures) and not commensurate with the risks concerned. This is not in line with Article 58(4) MRR. The risk assessment does not take into account the risks concerned with the collection of data on landings. The increased risk of properly collecting data on landings that take longer than 40 minutes is not considered. The procedures for completeness of flights and quality assurance of IT systems are not commensurate with the risks involved which is not in line with Article 58(4) MRR. The risk assessment should be updated (example of recommendation related to non-compliance).

Recommendations of improvements:

- the data management and collection system should be improved to ensure that all data until block-on are included and the risks to errors in the reported data is mitigated.
- provide necessary training to persons involved in data gathering.

Other points:

The AO is not required to update the MP if there are changes in fleet numbers and so this is neither a non-conformity nor a non-compliance as long as the procedure required in accordance with paragraph 1(c) of Part 2 of Annex I MRR is being properly implemented and maintained. In practice, the list outlined in the emission report will not correspond with the number of aircraft submitted in the MP since the latter number only concerns aircraft that were operated at the time of submission of the MP. The verifier does not have to check consistency between the MP and the emission report with respect to this point, unless it is of interest to substantiate the activity of the aircraft as approved in the MP in relation to reported data. For more information please see Chapter 5 of Guidance Document III on the verification for aviation.

Exercise II – Case 4: Verification Opinion Statement – not applicable

Exercise III – Case 4: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1	<i>There was one occasion of a double counted flight that was not included correctly in the emission report. It did affect the final emissions data as reported in the emissions report (0,01% of the total emissions).</i>	No
A2	<i>The data from landings that last longer than 40 minutes (data concerning the landing time over 40 minutes) were not captured in the data gathering systems. This meant that emissions related to the landing time over 40 minutes were not taken into account. It affected 0,02% of the total emissions. As the data gathering system is not sufficiently robust, the risk of reoccurrence is high.</i>	No
A3	<i>The standard fuel density was applied throughout the year for all flights, including flights where it was possible to obtain actual fuel density data and where the circumstances are not considered hazardous. This had an estimated effect on the total emission data of 0,2%. The risk of reoccurrence is high since this procedure is consistently applied by the aircraft operator.</i>	No
A4		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification **Material?**

B1	<i>The approved MP allows deviation for actual fuel density measurements in specified and hazardous circumstances. In those cases the standard fuel density factor of 0,8 kg/litre may be used. However, the aircraft operator has applied the standard fuel density throughout the year for all flights, including flights where it was possible to obtain actual fuel density data and where the circumstances were not considered hazardous. This is not in line with the approved MP. The risk of reoccurrence is high since this procedure is consistently applied by the aircraft operator.</i>	No
B2	<i>The approved MP describes a procedure for internal review and validation of data. The aircraft operator did not carry out any internal review in the reporting year and the procedure was not implemented. There is no quality control of the data entries in the data gathering systems and the internal IT systems and routine data checks were not carried out. This has led to a non-material misstatement (see A2).</i>	No
B3	<i>Method B was applied whereas the approved MP still states that method A should be applied. A request for change of the monitoring methodology was made and acknowledged by the CA. However official approval was not obtained. The MP should be updated.</i>	No
B4	<i>There are 4 errors in the aerodrome codes entered in Annex I of the emissions report. It concerns the following aerodromes: aerodrome departure with code ** which was reported as **, aerodrome of arrival with code ** which was reported as **, aerodrome of departure with code ** which was reported as **, aerodrome of arrival with code ** which was reported as **. This is a non-conformity with the MP since the error occurred in the data collection system that was not in line with the procedure implemented to monitor the</i>	No

	<i>completeness of the list of flights operated under the unique designator by aerodrome pair.</i>	
B5		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification ⁴

Material?

C1	<i>The standard density factor of 0,8 kg/ litre was applied throughout the reporting period for all flights, including to aerodromes where it was possible to determine the actual fuel density and where the circumstances were not considered hazardous. This is not in line with Article 52(6) of the MRR (see also B1).</i>	No
C2	<i>The aircraft operator did not carry out internal review of the data. No routine data checks were performed by a competent person. Furthermore there is no quality controller double-checking the data entry in the data gathering and IT systems. Not carrying out a proper internal review of the data is a non-compliance with Article 62 of the MRR and the non-compliance led to a non-material misstatement (see A2). As the procedure for internal review is not properly implemented the risks of misstatements and non-conformities reoccurring is high. The non-compliance lasted the whole reporting year.</i>	No
C3	<i>Only junior staff was used to enter data in the data management systems. There was no quality control by a second person of the data entries. This is not in line with Article 61 of the MRR. Relevant data and information must be confirmed by at least one person that was not involved in the determination and recording of data and the competence of personnel should be managed. Junior staff could not be considered sufficiently competent to be solely responsible for data entries without quality control.</i>	No
C4	<i>The landings with a duration of over 40 minutes have not been properly captured in the data gathering systems and the time above the 40 minutes for those landings has thus not been taken into account when monitoring the fuel consumption. This is a non-compliance with Annex III of the MRR. Not taking into account the landing time above 40 minutes is not in line with Method B as described in Annex III of the MRR. To determine the fuel consumption, the aircraft operator must take into account the fuel remaining and contained in the tanks at block-on (the moment of engine shut down). This applies to all landings of all ETS flights, including the time of landings above 40 minutes. The risk of reoccurrence is high since there is no control on data entries and no internal review and validation of the data is carried out.</i>	No
C5	<i>The quality assurance of the internal IT systems is ineffective (no input and output controls are implemented and there are insufficient back-up procedures). The quality assurance is not commensurate with the risks to misstatements and non-conformities. This is not in line with Article 58(4) of the MRR.</i>	No
C6	<i>The risk assessment does not take into account the risks concerned with the collection of data on landing times. The increased risk of properly collecting data on landings that take longer than 40 minutes is not considered. The risk assessment does not reflect the risks to misstatement and non-conformities correctly. As a result, the procedure of completeness of flights is not commensurate with the increased risks to misstatements. This is not in line with Article 58(4) of the MRR. The risk assessment must be updated and the procedure of completeness of flights must be strengthened to ensure that all flights are included in its totality.</i>	No
C8		-- select --

⁴ **Please note:** for completeness reasons various non-compliances with the MRR are listed.

D. Recommended Improvements, if any

D1	<i>The data management system and collection system should be improved to ensure that all data until block-on are included and the risks to errors in the reported data is mitigated.</i>
D2	<i>It is recommended to provide necessary training to persons involved in data gathering.</i>
D3	
D4	
D5	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	
E2	
E3	
E4	
E5	

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	
If Yes, was this approved by the CA before completion of the verification?	
If No, -	
- was the method used conservative (If No, please provide more details)	
- did the method lead to a material misstatement (If Yes, please provide more details)	

Annex 3 – Case 4: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	
2	
3	
4	
5	
6	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Approval for using method B to determine the fuel consumption was requested on [date] but this approval was not obtained before issuing this verification report (see Annex I). It was unofficially acknowledged by the CA.</i>
2	
3	
4	
5	
6	

Case 5

Exercise I – Case 5: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements

There is a misstatement. If the emissions concerning all missed analyses would be calculated according to the highest emission factor, the emissions would increase. The total emissions are therefore not correct. A conservative estimate by the verifier indicates that the emissions might be underreported by 730 tonnes CO₂.

Please note that this case study has two options for a verification opinion statement: these are reflected in option A and B.

Non-conformity

There is also a non-conformity with the approved MP (the frequency of the analyses is not carried out in accordance with the approved MP).

Not taking corrective action could be considered a non-conformity if this is not in line with a procedure for data gaps described in the approved MP. It depends how the procedure is described in the approved MP (see also non-compliance).

Non-compliances

There are several non-compliance issues:

- *The operator has not complied with the approved sampling plan (the sampling is not carried out for two weeks). This is a non-compliance with the sampling plan.*
- *The analysis frequency for refinery mixed gas as approved in the MP has not been followed during 24 consecutive days (this is not in line with Art 35 and Annex VII MRR). This Annex requires at least daily analyses using appropriate procedures at different parts of the day.*
- *Internal reviews and validation of data have not been carried out effectively. The data review has not been performed by independent and competent personnel. This is a non-compliance with Article 61 and 62 MRR*
- *The operator has not made corrections in the data and taken corrective action when it was apparent that the control activity was not functioning effectively. This is a non-compliance with Article 63 MRR. See also non-conformity depending how it is described in the approved MP.*
- *The operator has not applied an estimation method to complete the data gaps nor obtained approval for such method. This is a non-compliance with Article 65 MRR. Directly linked to this non-compliance issue is the instruction to establish a written procedure and to update the MP accordingly (Article 65(1) MRR). For more information on how to check data gaps please see KGN II.3 on process analysis.*
- *The operator has not notified the temporary change of the approved monitoring methodology to the CA. This is a non-compliance with Article 23 MRR.*
- *The operator has not corrected the emission data in the emission report which is a non-compliance with Article 22 AVR.*

Exercise II – Case 5: Verification Opinion Statement – Option A

OPINION	
We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.	
We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:	
1.	
2.	
3.	
OPINION - not verified:	<i>We have conducted a verification of the greenhouse gas data reported by the above operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to - <delete as appropriate></i>
	<i>- uncorrected material misstatement (individual or in aggregate)</i>
	-uncorrected material non-conformity (individual or in aggregate)
	-limitations in the data or information made available for verification
	-limitations of scope due to lack of clarity & or scope of the approved monitoring plan
	-the monitoring plan is not approved by the competent authority

Explanation

The installation is a category C installation. In accordance with Article 23 AVR, the materiality level is 2%. The error in the reported emissions falls below this margin but the size, nature and individual circumstances of the occurrence of the misstatements are such that the verifier considers the misstatement material. The misstatement, non-conformities and non-compliance issues are such that in the opinion of the verifier they would affect the CA decision⁵. This is because of the following reasons:

- the misstatement can be easily corrected by the operator but the operator has not corrected the misstatements due to time constraints;*
- The verifier identified that the emissions might be under-reported. There is no conservative estimation of emissions for the data gap.*
- There are non-compliance issues. Some of them are likely to reoccur (e.g. lack of internal review and validation of data by competent personnel, not taking corrective action, data gaps).*

The verification opinion statement is 'not verified'.

⁵ Material misstatement means a misstatement that, in the opinion of the verifier, individually or when aggregated with other misstatements exceeds the materiality level or could affect the treatment of the operator’s or aircraft operator’s report by the competent authority (Article 3(5) AVR). It is the verifier professional judgment to consider misstatements below the materiality threshold material where this is justified by the size, and nature of the misstatements and the particular circumstances of their occurrence (Article 22(3) AVR). For more guidance please see section 3.2.9 Explanatory Guidance (EGD I) and Aviation Verification Guidance (GD III) as well as the FAQ on the classification and reporting of outstanding issues in the verification report.

Consequences of issues identified in the verification opinion statement and Annex I:

The CA shall conservatively estimate the emissions in accordance with Article 70 MRR.

For the non-conformities an improvement report must be submitted by 30 June.

The non-compliance issues must be addressed in close consultation with the CA (e.g. updating the MP, implementing more robust procedures on internal review and validation of data, setting-up and implementing a procedure on data gaps, ensuring that operator follows the sampling plan and analysis frequency). The CA may take further enforcement action.

Exercise II- Case 5: Verification Opinion Statement – Option B

OPINION	
OPINION – verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments:	<p><i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:</i></p> <ol style="list-style-type: none"> <i>1. The weekly sampling and analysis on source stream [reference] (major) was not performed in weeks 34 and 35. In addition, the on-line GC on source stream [reference],[reference] (refinery mixed gas) was out of order for 24 consecutive days (from X April to X+24 April). The operator did not use (conservative) surrogate data for the data gaps within the AER (see Annex I).</i> <i>2. A conservative estimate by the verifier indicates emissions might be underreported by 730 tonnes CO₂ (see Annex I).</i> <i>3. Several non-compliance issues were identified (see Annex I)</i>
Comments which qualify the opinion:	
OPINION – not verified:	<p>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to <delete as appropriate></p> <ul style="list-style-type: none"> – uncorrected material misstatement (individual or in aggregate) – uncorrected material non-conformity (individual or in aggregate) – limitations in the data or information made available for verification – limitations of scope due to lack of clarity & or scope of the approved monitoring plan – the monitoring plan is not approved by the competent authority

Explanation

The installation is a category C installation. In accordance with Article 23 AVR the materiality level is 2%. The error in the reported emissions falls below this margin and the size, nature and individual circumstances of the occurrence of the misstatements are not such that the verifier considers the misstatement material. ⁶ This is because of the following reasons:

- There is not a direct refusal to correct the misstatements. Correction was not made because of time constraints rather than deliberate intent;*
- The verifier identified that the emissions might be under-reported. But the effect on the total emissions would be very small (<0.085%).*

⁶ Material misstatement means a misstatement that, in the opinion of the verifier, individually or when aggregated with other misstatements exceeds the materiality level or could affect the treatment of the operator's or aircraft operator's report by the competent authority (Article 3(5) AVR). It is the verifier's professional judgment consider misstatements below the materiality threshold material where this is justified by the size, and nature of the misstatements and the particular circumstances of their occurrence (Article 22(3) AVR). For more guidance please see section 3.2.9 Explanatory Guidance (EGD I) and Aviation Verification Guidance (GD III) as well as the FAQ on the classification and reporting of outstanding issues in the verification report.

- All verification steps could be carried out and the verifier could make a final assessment of the data;
- The analysis frequency was not followed for only 24 consecutive days.
- The non-compliance issues can be easily corrected, and their magnitude is not such that they provide insufficient clarity on the accuracy of the data or would warrant a not verified opinion

The verification opinion statement is verified with comments.

Consequences of issues identified in the verification opinion statement and Annex I:

Non-conformities mean that the operator must submit an improvement report by 30 June.

Non-compliance issues mean that the operator must address these in consultation with the CA (e.g. updating the MP, implementing more robust control activities, implementing written procedure for data gaps)

Non-material misstatements: the CA shall assess those misstatements and make a conservative estimation of emissions where appropriate. The CA shall inform the operator whether and which corrections are required to the emission report. The operator shall make that information available to the verifier.

Exercise III - Case 5: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

The template below is completed based on option B.

A. Uncorrected Misstatements that were not corrected before issuance of the verification report Material?

A1	<i>The weekly sampling and analysis of source stream [reference] (major) was not performed in weeks 34 and 35. In addition the on-line GC on source stream [reference], source stream [reference] (both refinery mixed gas) was out for 24 consecutive days (from X April to X+24 April). The operator did not use surrogate data for the data gaps within the AER. Replacement of the missing data with highest (conservative) values indicates that the reported emissions might be underreported by 730 tonnes of CO₂.</i>	No
A2		-- select --
A3		-- select --
A4		-- select --
A5		-- select --
A6		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan

including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification

		Material?
B1	<i>The frequency of the analyses is not carried out in accordance with the approved MP. As the procedures for internal review and validation of data are not effective, the non-conformity is likely to reoccur. The non-conformity lasted for two weeks and led to a non-material misstatement (see A1)</i>	No
B2		-- select --
B3		-- select --
B4		-- select --
B5		-- select --
B6		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification

		Material?
C1	<i>The operator did not comply with the approved sampling plan (the sampling was not complied with for two weeks). This is a non-compliance with the sampling plan. This non-compliance led to a non-material misstatement (see A1)</i>	No
C2	<i>The analysis frequency for refinery mixed gas as approved in the MP is not in line with Article 35 and Annex VII MRR. This Annex requires at least daily analyses using appropriate procedures at different parts of the day. The required frequency has not been followed for 24 consecutive days. This non-compliance led to a non-material misstatement (see A1)</i>	No

C3	<i>Internal reviews and validation of data have not been carried out effectively. The data review has not been performed by independent and competent personnel. This is a non-compliance with Article 61 and 62 MRR. The likelihood of this non-compliance reoccurring is high since procedures for internal review and validation of data and managing the competencies of personnel are not sufficiently robust.</i>	No
C4	<i>The operator has not made corrections in the data and taken corrective action when it was apparent that the control activity was not functioning effectively. This is a non-compliance with Article 63 MRR. The likelihood of this non-compliance reoccurring is high since the procedures for control activities are not sufficiently effective and robust.</i>	No
C5	<i>The operator has not applied an estimation method to complete the data gaps nor obtained approval from the CA for such method. This is a non-compliance with Article 65 MRR. In accordance with Article 65(1) MRR the operator must establish a written procedure and update the MP accordingly.</i>	No
C6	<i>The operator has not notified the temporary change of the approved monitoring methodology to the CA. This is a non-compliance with Article 23 MRR.</i>	No
C7		-- select --
C8		-- select --

D. Recommended Improvements, if any

D1	<i>The operator's risk assessment should be regularly updated to reflect the inherent and control risks involved. This will enable the operator to establish and strengthen the control activities and the procedures that are commensurate with the risks involved.</i>
D2	<i>The procedures for internal review and validation of data, the managing the competencies of personnel and corrective action should be strengthened to commensurate with the risks to misstatements and non-conformities.</i>
D3	
D4	
D5	
D6	
D7	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>Not applicable.</i>
E2	
E3	
E4	
E5	
E6	
E7	
E8	

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	<i>Yes</i>
If Yes, was this approved by the CA before completion of the verification?	<i>No</i>
If No, -	
- was the method used conservative (If No, please provide more details)	<i>The operator did not correct the emissions reported. A conservative estimate indicates that the reported emissions might be underreported by 730 tonnes of CO₂.</i>
- did the method lead to a material misstatement (If Yes, please provide more details)	<i>No</i>

Annex 3 – Case 5: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not applicable.</i>
2	
3	
4	
5	
6	
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8	
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B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Not applicable.</i>
2	
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Case 6

Exercise I – Case 6: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements

The misstatement was corrected in the emission report which means that it does not have to be reported in the verification report. It does however need to be documented in the internal verification documentation.

Non-conformities

Mis-categorisation is a non-conformity with the MP - the minor source stream became a major one permanently (the capacity of the boiler has increased).

The additional boiler is not included in the MP. It needs to be updated.

The MS has chosen to apply Article 12(3) MRR and requires a procedure for reporting changes in the capacity, activity level and operation of the installation to be included in the MP. The operator has not followed the procedure.

Non-compliances

Not including the boiler in the MP is an incorrect definition of the monitoring boundaries and is not in line with Article 20 MRR and Article 12(1) and Annex I of the MRR.

There is also a non-compliance with the national legislation implementing Article 24(1) of Decision 2011/278/EU requiring operators to report such changes to the CA by the 31st of December.

The capacity of the installation has increased by 30%. This is a capacity change that has not been reported to the CA by 31st December in accordance with the procedure required under Article 12(3) MRR. This needs to be reported in the verification report (Annex 3).

Exercise II – Case 6: Verification Opinion Statement

OPINION	
OPINION - verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments: Comments which qualify the opinion:	<p><i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:</i></p> <ol style="list-style-type: none"> <i>1. Boiler [reference] using natural gas was added to the installation that increases the capacity of the installation by 30%. As a result the emissions of the source stream natural gas [reference] increased to 5300 tonnes of CO₂ and became a major source stream (whereas the MP indicated that that specific source stream was a minor one.). The MP did not include the additional boiler and did not reflect the new classification of the major source stream (see Annex I)</i> <i>2. The capacity change has not been reported to the CA (see Annex I and III) although the approved MP includes a procedure ensuring the operator regularly checks if information on planned or effective changes to the capacity are relevant and such information is reported to the CA by the 31st of December (see Annex I).</i> <i>3. Not reporting relevant capacity changes to the CA by the 31st December is a non-compliance with the national legislation implementing Article 24(1) of Decision 2011/278/EU (see Annex I)</i>
OPINION – not verified:	<p>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to – <delete as appropriate></p> <ul style="list-style-type: none"> – uncorrected material misstatement (individual or in aggregate) – uncorrected material non-conformity (individual or in aggregate) – limitations in the data or information made available for verification – limitations of scope due to lack of clarity & or scope of the approved monitoring plan – the monitoring plan is not approved by the competent authority

Explanation

There are no misstatements since these were corrected as part of the verification. The non-conformities and non-compliance issues are not such that these warrant a negative verification opinion statement. There is sufficient clarity and certainty for the verifier to make an assessment of the accuracy of the data.

Consequences of issues identified in verification opinion statement and Annex I:

Non-conformities mean that the operator must submit an improvement report by 30 June. This also applies to installations with low emissions. Non-compliance issues mean that the operator must address these in consultation with the CA (e.g. updating the MP).

Exercise III – Case 6: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1	<i>Not applicable</i>	
A2		-- select --
A3		-- select --
A4		-- select --
A5		-- select --
A6		-- select --
A7		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification **Material?**

B1	<i>Boiler [reference boiler] has been added to the installation, which caused the emissions of the source stream natural gas to increase to 5300 emissions making this source stream a major one. In the approved MP the source stream is still described as a minor source stream. This has been the case since March 2014. The MP needs to be updated and approval must be obtained from the CA (see Annex III)</i>	No
B2	<i>The operator's MP includes a description of the procedure for regularly checking changes in the capacity, activity level and operation of the installation and reporting these by 31st of December to the CA. The operator did not apply this procedure.</i>	No
B3	<i>Boiler [reference boiler] has been added to the installation which is not included in the MP. This has been the case since March 2014. It led to a misstatement which was corrected by the operator as part of the verification. A request for approval for a change to the MP was requested at [date], but approval was not obtained in time before the verification report had to be submitted (see Annex III).</i>	No
B4		-- select --
B5		-- select --
B6		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification **Material?**

C1	<i>The capacity of the installation has increased by 30%. This is a capacity change that may have an impact on the installation's allocation of emission allowances, and that has not been reported to the CA by 31st December. This is a non-compliance with Article ** of [national legislation implementing Article 24(1) of Decision 2011/278/EU]</i>	No
-----------	--	----

C2	<i>Boiler [reference boiler] has been added to the installation which has not been included in the MP. This means that the monitoring boundaries have not been defined correctly in line with Article 20 and Annex I MRR (see Annex III).</i>	No
C3		-- select --
C4		-- select --
C5		-- select --
C6		-- select --

D. Recommended Improvements, if any

D1	
D2	
D3	
D4	
D5	
D6	

Annex 3 – Case 6: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not applicable</i>
2	
3	
4	
5	
6	
7	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>The capacity of the installation has increased by 30% because boiler [reference boiler] was added to the installation. This is a capacity change that was not reported to the CA by 31st December.</i>
2	<i>Approval was requested from the CA for the change in the categorisation of the minor source stream into a major source stream and for the addition of the boiler. The request for updating the MP was submitted to the CA on [date]. Approval was not obtained before submission of the verification report to the operator.</i>
3	
4	
5	
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Case 7

Exercise I – Case 7: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

<p>Misstatements</p> <p><i>There is a misstatement because the total emission data contains an error. The gas invoice of December indicates a higher amount of gas consumed than the amount of gas measured by the internal meter. Although the impact on the emission data is not high, the misstatement is still material for the following reasons: 1) the likelihood of reoccurrence is high, 2) the operator refuses to correct the data although this has been requested by the verifier on several occasions, 3) the operator deliberately uses internal reporting instead of the more accurate data in conformance with the approved MP, which is a non-compliance.</i></p> <p>Non-conformities</p> <p><i>There is also a non-conformity with the approved MP (the operator has based the December data on internal metering instead of invoices which was required by the approved MP).</i></p> <p>Non-compliance</p> <p><i>The verifier has to apply Article 22 AVR. Pursuant to the same article, the operator is required to correct any identified misstatements and non-conformities. This is a non-compliance with Article 22 AVR.</i></p> <p>Recommendations of improvement</p> <p><i>It is recommended to align internal reporting after closure of the external annual emission report.</i></p>

Exercise II – Case 7: Verification Opinion Statement

OPINION	
OPINION – verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION – verified with comments:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:
Comments which qualify the opinion:	1.
	2.
	3.

OPINION: Not Verified	<i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to - <delete as appropriate></i>
	<i>- uncorrected material misstatement (individual or in aggregate)</i>
	<i>- uncorrected material non-conformity (individual or in aggregate)</i>
	<i>- limitations in the data or information made available for verification</i>
	<i>- limitations of scope due to lack of clarity & or scope of the approved monitoring plan</i>
	<i>- the monitoring plan is not approved by the competent authority</i>

Explanation:

The installation is a category B installation. In accordance with Article 23 AVR, the materiality level is 5%. The error in the reported emissions falls well below this margin but the size, nature and individual circumstances of the occurrence of the misstatements are such that the verifier considers the misstatement material. The misstatement, non-conformities and non-compliance issues are such that they, in the opinion of the verifier, would affect the CA decision,⁷ because:

- The misstatement can be easily corrected by the operator but the operator refuses to do so;*
- It is very likely that the misstatement and the other issues identified will reoccur. It is the operator's standard procedure to adhere to internal reporting regardless of when external reporting is closed;*
- The misstatement and non-compliance is the result of an act with intent: the operator deliberately uses internal reporting instead of the invoiced data required under the approved MP;*
- There is non-compliance with Article 22 AVR.*

The verification opinion statement is not verified.

Consequences of issues identified in the verification opinion statement and Annex I:

*The CA shall conservatively estimate the emissions in accordance with Article 70 MRR.
For the non-conformities an improvement report must be submitted by the 30 June.
The CA may take further enforcement action.*

⁷ Material misstatement means a misstatement that, in the opinion of the verifier, individually or when aggregated with other misstatements exceeds the materiality level or could affect the treatment of the operator's or aircraft operator's report by the competent authority (Article 3(5) AVR). It is the verifier's professional judgment to consider misstatements below the materiality threshold material where this is justified by the size, and nature of the misstatements and the particular circumstances of their occurrence. For more guidance please see section 3.2.9 Explanatory Guidance (EGD I) and Aviation Verification Guidance (GD III) as well as the FAQ on the classification and reporting of outstanding issues in the verification report.

Exercise III – Case 7: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report Material?

A1	<i>The operator did not correct the gas consumption using the invoices as per approved MP for the month December. Instead internal metering data has been used. The December invoice indicates a slightly higher gas consumption. The overall emissions stated in the AER (as 74921 tonnes of CO₂) are therefore underestimated by 181 tonnes of CO₂. Although the impact on the emission data is not high, the misstatement is still material. The likelihood of the misstatement reoccurring is high, the operator refuses to correct the data, the act has been carried out with intent, there is non-compliance.</i>	Yes
A2		-- select --
A3		-- select --
A4		-- select --
A5		-- select --
A6		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan

including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification

Material?

B1	<i>The gas consumption during the month December is based upon internal metering and not on upon supplier invoice (as per approved MP). This led to an underestimation of emissions (see A1).</i>	No
B2		-- select --
B3		-- select --
B4		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification

Material?

C1	<i>Pursuant to Article 22 AVR the operator is required to correct any identified misstatements and non-conformities. The operator refused to correct the misstatement. There is therefore a non-compliance with Article 22 AVR. As it is common procedure within the company to not differentiate between internal and external reporting, not correcting data to avoid differences between internal and external reporting will likely reoccur.</i>	Yes
C2		-- select --
C3		-- select --

D. Recommended Improvements, if any

D1	<i>It is recommended to align internal reporting after closure of the external report.</i>
D2	
D3	
D4	
D5	
D6	
D7	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>Not applicable</i>
E2	
E3	
E4	
E5	
E6	
E7	

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	<i>No</i>
If Yes, was this approved by the CA before completion of the verification?	-- select --
If No, -	
- was the method used conservative (If No, please provide more details)	--select--
- did the method lead to a material misstatement (If Yes, please provide more details)	--select--

Annex 3 – Case 7: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not Applicable</i>
2	
3	
4	
5	
6	
7	
8	
9	
10	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Not Applicable</i>
2	
3	
4	
5	
6	
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8	
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Case 8

Exercise I – Case 8: Classification of misstatements, non-conformities, non-compliances and recommendations of improvement

Misstatements

There is an uncorrected misstatement since the emissions related to the fuel use of the emergency generators are not included in the emission report. The emissions of these generators amount to 1000 tonnes of CO₂. The operator has knowingly under-reported its emissions by 1000 tonnes of CO₂.

Non-conformities

N/A

Non-compliance

The use of generators and the source stream diesel is a temporary deviation from the tiers applied, and the source stream listed in the approved MP: this has not been notified to the CA and is therefore not in line with Article 23 MRR. If the MP states that the back-up generators will be used by the operator during the maintenance period to continue its normal ETS operations, it could also be classified as a non-conformity.

Not listing the generators and source streams in the MP is also not in line with Article 20 MRR, Article 12(1) and Annex I MRR. Emissions from regular operations and abnormal events including start-up and shut-down and emergency situations must be included in the determination of the emissions. The installation's boundaries have not been correctly defined.

Recommendations of improvement

The verifier could make a recommendation for the operator to review the risk assessment and evaluate the effectiveness of the procedure required to check whether the MP reflecting the nature and functioning of the installation is effective. The contractors could not provide accurate information on their fuel use. The operator could be recommended to improve its procedures that control the out-sourced process (Article 64 MRR) to improve this in future.

Exercise II – Case 8: Verification Opinion Statement

OPINION	
OPINION – verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION – verified with comments:	We have conducted a verification of the greenhouse gas data reported by the above operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:
Comments which qualify the opinion:	1.
	2.
OPINION - not verified:	<p><i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to - <delete as appropriate></i></p> <p><i>- uncorrected material misstatement (individual or in aggregate)</i></p> <p><i>- uncorrected material non conformity (individual or in aggregate)</i></p> <p><i>- limitations in the data or information made available for verification</i></p> <p><i>- limitations of scope due to lack of clarity & or scope of the approved monitoring plan</i></p> <p><i>- the monitoring plan is not approved by the competent authority</i></p>

Explanation

The installation is a category B installation. In accordance with Article 23 AVR, the materiality level is 5%. The error in the reported emissions falls below this margin, but the size, nature and individual circumstances of the occurrence of the misstatement are such that they, in the opinion of the verifier, would affect the CA's decision and must be considered material⁸, because:

- The misstatement is the under-reporting of emissions and can be easily corrected by the operator. The operator refused to do so after repeated formal requests from the verifier.*
- It is very likely that the misstatement and other issues will reoccur. The operator thinks that the units are not his property and thus not part of the installation boundary.*
- The misstatement and non-compliance issue opinion are the result of an act with intent: the operator deliberately did not take into account the units and refused to correct the issue.*
- There is non-compliance with Article 22 AVR.*

The verification opinion statement is not verified.

⁸ Material misstatement means a misstatement that, in the opinion of the verifier, individually or when aggregated with other misstatements exceeds the materiality level or could affect the treatment of the operator's or aircraft operator's report by the competent authority (Article 3(5) AVR). It is the verifier professional judgment to consider misstatements below the materiality threshold material where this is justified by the size, and nature of the misstatements and the particular circumstances of their occurrence. For more guidance please see section 3.2.9 Explanatory Guidance (EGD I) and Aviation Verification Guidance (GD III) as well as the FAQ on the classification and reporting of outstanding issues in the verification report.

Consequences of issues identified in the verification opinion statement and Annex I:

Non-compliance issue means that the operator must address these in consultation with the CA (e.g. notification of change to the monitoring methodology)

To address verifier's recommendations of improvement, the operator must submit an improvement report by 30 June.

Material misstatements: the CA shall make a conservative estimation of emissions in accordance with Article 70 AVR.

Exercise III – Case 8: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1	<i>The emissions resulting from the diesel used by generators [reference] and [reference] amount to 1000 tonnes of CO₂, was not included in the total emission data of the emission report (see non-compliance C1). The operator refused to notify this to the CA (despite frequent formal requests from the verifier). It is very likely that the misstatement will reoccur because the operator is of the opinion that, as the units are not its property, these are thus not part of the installation. The misstatement is the result of an act with intent: the operator deliberately did not take into account the emissions from the generator units and refused to correct the issue which is not in line with Article 22 AVR (see C3).</i>	Yes
A2		-- select --
A3		-- select --
A4		-- select --
A5		-- select --
A6		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan **Material?**
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification

B1	<i>Not applicable</i>	
B2		-- select --
B3		-- select --
B4		-- select --
B5		-- select --
B6		-- select --
B7		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification **Material?**

C1	<i>The approved MP does not reflect the actual situation of the installation (generators [reference] and [reference] and source stream diesel [reference] that should have been notified to the CA as a temporary change to the monitoring methodology in accordance with Article 23 MRR. This is a non-compliance with Article 20 (the installation's monitoring boundaries have not been properly defined). This is a temporary situation since the generators are only to be used during the maintenance period. However this has an effect on the data and has led to a material misstatement (see A1)</i>	No
C2	<i>The use of generators and the source stream diesel is a temporary deviation of the tiers applied and the source stream listed in the approved MP which was not notified to the CA. This is not in line with Article 23 MRR.</i>	No
C3	<i>The operator refused to correct the misstatement which is not in line with Article 22 AVR (see A1).</i>	Yes

C4		-- select --
C5		-- select --
C6		-- select --
C7		-- select --

D. Recommended Improvements, if any

D1	<i>During the verification the verifier observed that the installation boundary was incorrect. The operator was recommended to review the risk assessment and the procedure for regular review of appropriateness of the MP to ensure that all emission sources and source streams are included.</i>
D2	<i>During the verification the operator could not provide accurate data from his contractor on how much fuel had been used. The operator is recommended to review his outsourced processes to ensure that more complete and accurate data are available in future.</i>
D3	
D4	
D5	
D6	
D7	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>Not applicable</i>
E2	
E3	
E4	
E5	
E6	
E7	

Annex 3 – Case 8: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not applicable</i>
2	
3	
4	
5	
6	
7	
8	
9	
10	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Not applicable</i>
2	
3	
4	
5	
6	
7	
8	
9	
10	

Case 9

Exercise I – Case 9: Classification of misstatements, non-conformities and non-compliances

Misstatements

N/A

Non-conformities

The operator has not followed the approved MP (the diesel consumption is not based on supplier invoices and stock taking as outlined in the approved MP). This is a non-conformity.

Non-compliances

There is a non-compliance issue:

- *Approval of a method for conservative estimation has been requested but not obtained in time. The requirements of Article 65 MRR seem to have been met by the operator. However the estimation method and data gap procedure is subject to approval of the CA. It could still be a non-compliance if the CA does not approve of the method. For more information on how a verifier checks data gaps please see KGN II.3 on process analysis.*
- *The internal review carried out by the operator did not include the consumption of diesel. This means that the internal review is not 'effective' and thus not in line with Article 58(4) MRR (the control system has been found ineffective).*

Recommendations of improvement

A possible recommendation of improvement that can be made is evaluating the appropriateness of the MP on a regular basis as well as the robustness of the procedure for evaluating the MP.

The operator has requested approval for the estimation method completing the data gaps but this was not obtained in time. It is recommended to obtain approval as soon as possible from the CA and to update the MP accordingly (Article 65(1) MRR).

Exercise II – Case 9: Verification Opinion Statement

OPINION	
OPINION – verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments: Comments which qualify the opinion:0	<p><i>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:</i></p> <ol style="list-style-type: none"> <i>1. The approved MP specifies that the diesel consumption (de-minimis) is to be determined based on supplier invoices and stock taking: this is a non-conformity (see Annex I).</i> <i>2. At the time of the site visit the operator could not provide supportive evidence for the diesel consumption, hence an alternative method was applied (based upon operating hours and installed capacity). The operator did not obtain approval from the CA before the deadline of submission of the verification report. Verification of the operator’s alternative approach did not lead to underestimation of the emissions nor material misstatements. Furthermore, the control system was found to be ineffective (see Annex I non-compliances).</i>
OPINION – not verified:	<p>We have conducted a verification of the greenhouse gas data reported by the above Operator in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to –<delete as appropriate></p> <ul style="list-style-type: none"> – uncorrected material misstatement (individual or in aggregate) – uncorrected material non-conformity (individual or in aggregate) – limitations in the data or information made available for verification – limitations of scope due to lack of clarity & or scope of the approved monitoring plan – the monitoring plan is not approved by the competent authority

Explanation

There are non-conformity and non-compliance issues which do not have an effect on the emission data. The non-conformity and non-compliance issues are not such that these would lead to a negative verification opinion statement. There are no misstatements, there is no limitation of scope and the non-conformity does not provide insufficient clarity on the accuracy of the data. The verification opinion statement is thus verified with comments.

Consequences of the verification opinion statement and issues identified in Annex I:

Installations with low emissions are not required to submit an improvement report responding to recommendations of improvement reported by the verifier in the verification report. However in this case, there is a non-conformity and then an improvement report must be submitted to cover the non-conformity (Art 69(4) MRR).

Exercise III – Case 9: Report the outstanding issues in Annex I (and if relevant Annex III) of the Commission verification report template

Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements

A. Uncorrected Misstatements that were not corrected before issuance of the verification report **Material?**

A1	<i>Not applicable</i>	-- select --
A2		-- select --
A3		-- select --
A4		-- select --
A5		-- select --
A6		-- select --
A7		-- select --

B. Uncorrected Non-conformities with approved Monitoring Plan
including discrepancies between approved plan and actual sources, source streams and boundaries etc. identified during verification **Material?**

B1	<i>For the reporting year, the diesel consumption (de-minimis source stream) was not determined following the methodology described in the approved MP. The quantity consumed has been estimated based on operation hours and installed capacity. Verification of the operator’s estimation method concludes the estimation to be conservative and that there is no known impact on the stated emission data.</i>	No
B2		-- select --
B3		-- select --
B4		-- select --
B5		-- select --
B6		-- select --
B7		-- select --

C. Uncorrected Non-compliances with MRR which were identified during verification **Material?**

C1	<i>The internal review carried out by the operator did not include the consumption of diesel. This means that the internal review is not effective and thus not in line with Article 58(4) MRR as the control system has been found ineffective. This non-compliance issue did not have an effect on the emission data and its magnitude is relatively small.</i>	No
C2		-- select --
C3		-- select --
C4		-- select --
C5		-- select --

D. Recommended Improvements, if any

D1	<i>(in case the alternative approach is more accurate/practice)</i> <i>The operating hours of the equipment using diesel are automatically registered. Hence fuel consumption can be measured directly. It is recommended to update/revise the method described in the monitoring plan to reflect the practice.</i>
D2	<i>Subject to CA approval of the method, the MP needs to be updated to include the estimation method for conservative surrogate data (required by Article 14 MRR)</i>
D3	
D4	
D5	
D6	

E. Prior year Non-conformities that have NOT been resolved.

Any prior year Non-conformities reported in the previous Verification Report that have been resolved do not need to be listed here.

E1	<i>Not applicable</i>
E2	
E3	
E4	
E5	
E6	

Annex 1B - Methodologies to close data gaps

Was a data gap method required?	<i>Yes</i>
If Yes, was this approved by the CA before completion of the verification?	<i>No.</i>
If No, -	
- was the method used conservative (If No, please provide more details)	<i>Yes</i>
- did the method lead to a material misstatement (If Yes, please provide more details)	<i>No</i>

Annex 3 – Case 9: Summary of conditions / changes/ clarification / variations

A) approved by the Competent Authority but which have NOT been incorporated within a re-issued Permit/ Monitoring Plan at completion of verification

1	<i>Not Applicable</i>
2	
3	
4	
5	
6	

B) identified by the verifier and which have NOT been reported by 31 December of the reporting year

This should include changes to capacity, activity levels and/or operation of the installation that could impact upon the allocation of allowances; and changes to the monitoring plan that have not been approved by the Competent Authority before completion of the verification

1	<i>Approval of the alternative approach to close the data gap and subsequently update the MP was requested on [date]. However approval by the CA was not obtained before issuing this verification report. Subject to CA approval of the method, the MP needs to be updated to include the estimation method (required by Article 14 MRR)</i>
2	
3	
4	
5	
6	

III. Information Exchange: discussion points and findings noted in the discussion groups and in the plenary Q&A

At the A&V Training Event, a main topic during the afternoon was devoted to Information Exchange between verifiers, national accreditation bodies (NABs) and competent authorities (CAs). The session started with an introduction to seven major discussion points to feed into the discussion of the training groups, followed by each group discussing the information exchange and subsequent feedback from the group trainers to the plenary.

I. Discussion Points on Information Exchange

1. Article 76 AVR requires verifiers to notify planned verifications to the NAB by the 15th of November. After that date there may be changes compared to the notified information. The AVR requires notification of such changes within a timeframe agreed with the NAB. There are differences in how NABs have determined that timeframe and experience has shown that updates of the notification are not carried out in some MS.
 - ***What would you recommend to support a harmonised process for notification of changes?***
2. The NAB's work programme required by the 31st of December, provides CAs with information on planned activities related to accreditation (e.g. planned witness audits).
 - ***Do you have suggestions concerning improvements that could be made to the work programme exchange process?***
 - ***How can the CA use the information in the work programme most effectively and efficiently?***
3. The NAB's management report required by the 1st June, provides the CA with information on the activities carried out by the NAB in the preceding 12 months. It also includes information on complaints and main findings.
 - ***Do you have suggestions concerning improvements that could be made to the management report exchange process?***
 - ***How can the CA use the information in the management report most effectively and efficiently?***
4. Article 72 AVR requires the CA of the MS where the verifier is carrying out the verification to exchange certain information with the NAB that has accredited the verifier. This information enables the NAB to take action concerning a particular verifier if the CA has identified issues related to that verifier during inspection or the review of the operator's reports, the evaluation of the internal verification documentation or through complaints submitted to the CA.
 - ***Is the information presently provided in the information exchange from the CA to the NAB sufficient or do you have suggestions for improving the process?***

5. ***Are the responsibilities and roles of verifiers, NABs and CAs sufficiently clear and delineated in relation to information exchange?***
6. ***What form of acknowledgement or other feedback is relevant in connection with the various for information exchanges?***
7. If a verifier accredited in one MS carries out verification in another MS, the accrediting NAB has to submit the work programme and management report to the CAs of both MS. CAs must exchange information required by Article 72 AVR with all NABs that have accredited verifiers working in the CA's MS.
 - ***Do you have suggestions to improve the information exchange across borders?***
 - ***What do you do if a NAB or a CA does not comply with the required information exchange, or if the content of the required information is incomplete?***

II. Observations and Responses from Participants on the Discussion Points on Information Exchange:

- Most participants were in favour of regular updates of the notifications of planned verifications by verifiers as required by Article 76 AVR (e.g. monthly updates on 15th December, 15th January, 15th February);
- The notification template should include information on the Annex I activity of the installation and the names of the members in the verification team. N.B. Updates of the notification and work programme information exchange templates have been re-endorsed by the European Commission's Climate Change Committee and published on the documentation page of DG Climate Action's EU ETS MRV website, http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm.
- The work programme process functions well and provides useful information for CAs. The question is whether the work programme should also be updated regularly. It is noted that the management report provides feedback on what activities the NAB has carried out in the preceding 12 months and includes further interim and more definitive information on the verifications;
- The management report does not replace the added benefit of physical meetings between the CA and the NAB;
- The management report should contain outstanding non-conformities or other issues that need to be solved. There is only one management report per year which can quite quickly date or limit the usefulness of the information provided..
- One of the discussion groups expressed the need to know whether outstanding issues have been solved. An option could be to mention in the description of outstanding issues in the management report the timeframe for solving the outstanding issue. In any case the NAB is required to provide feedback to the CA on complaints of verifier's non-compliance within 3 months after the complaint has been received;

- Various participants expressed the need for the verifier to receive feedback from the CA after the CA's review of the emission and verification report (e.g. in a seminar between CAs, verifiers and NABs).
- If concerns identified in the CA's review of the emission report and verification report are reported to the verifier by the CA, these have to be addressed as complaints in line with ISO 14065. Some participants expressed concern about the verifier being approached directly by the CA. It is primary the responsibility of the NAB to assess the verifier's performance and take action if the verifier is non-compliant.
- In some Member States the NAB is not active in the accreditation of EU ETS verifier. These NABs are not involved in the information exchange. Some participants expressed the need for these NABs to be nonetheless included in the information exchange under Chapter VI of the AVR to keep them informed.
- Two of the ten discussion groups recommended the setting-up of an internet based platform where CAs, verifiers and NABs can exchange additional ad hoc information with each other.
- In general participants expressed the wish for the NAB and the CA to provide feedback to each other on what they do with the information they receive from the information exchange.

Annex I: Programme of the 2015 EU ETS Compliance Forum Event: Training on Accreditation and Verification

Date: Tuesday 8th September 2015

Venue: Charlemagne Building, Rue de la Loi 170, Brussels

Objective: Training for representatives from the EU ETS Competent Authorities (CAs), Verification Bodies and National Accreditation Bodies (NABs) on some of the more complex issues associated with reporting of EU ETS verification, based on real-life case studies discussed in small groups facilitated by dedicated trainers.

Reasons for attending this Training Event:

This training event will provide an up to date shared understanding of:

- the correct classification and reporting of outstanding issues in EU ETS verification reports; and
- the information exchange required between verifiers, the CAs and NABs under Chapter VI of Commission Regulation (EU) No 600/2012 ("the AVR") and how this information is being used.

The event is an excellent opportunity for representatives of EU ETS verifiers, CAs and NABs to come together to exchange important information and ideas in an interactive manner. The training is intended for actual practitioners rather than beginners.

Experience as well as feedback at the 2014 A&V Forum has shown that there are sometimes marked differences of opinion and understanding held by different EU ETS stakeholders concerning the correct classification and reporting of misstatements, non-conformities, non-compliance with Commission Regulation (EU) No 601/2012 ("the MRR") and recommendations for improvement; also inconsistencies observed in the level of detail provided in verification reports. The importance of a harmonised approach to EU ETS has always been recognised. The need for common understanding in relation to verification reporting is all the more important due to verifiers working across national borders and the inefficiency and additional costs that can result where different interpretations prevail. Following the request of the Member States a Commission FAQ⁹ has been drafted as a first response to the main concerns. In addition, Member States and the European cooperation for Accreditation (EA) have indicated perceived benefit for improving the mutual understanding of the information exchanges required between verifiers, CAs and NABs, in particular concerning how the respective parties make use of the information that is provided to them and the possibility for more effective feedback to be provided. The training is being prepared in close cooperation with the EU ETS Compliance Forum Task Force on Accreditation & Verification and the EA Network of EU ETS NABs.

Set-up of the training

The training is being arranged to allow exchange of views and discussions based on practical case studies and more complex verification and accreditation topics between the three directly involved stakeholders. The aim is to achieve a better understanding of the MRR and AVR requirements with a view to promoting improved harmonisation.

The main sessions in the training programme will start with a short introduction and outline of related case studies. Beforehand participants will be arranged into discussion groups, each consisting of 10-12 participants representatively drawn from MS CAs, NABs and verifiers. After a short introduction each discussion group will discuss the case studies and further explore the issues at stake. Group trainers will be assigned to each discussion group to provide further instruction and to answer specific questions on the case studies (including to promote better understanding of the case studies and the issues concerned). Each session will be closed by the group trainer drawing conclusions on behalf of the group. Following three training sessions in the morning, a plenary session will be held after lunch to review the main conclusions that have come up. The afternoon training session will then focus on information exchange between verifiers, NABs and CAs and how the information is being used.

⁹ http://ec.europa.eu/clima/policies/ets/monitoring/docs/avr_classification_reporting_issues_en.pdf

Morning Programme of the A&V Training

Time	Session	Approach	Who
09:30-09:45	Introduction and explanation of objectives of the training event	Plenary presentation	Chair
09:45-10:45	Classification of misstatements, non-conformities, non-compliance and recommendations for improvement	<ul style="list-style-type: none"> • Plenary presentation based on COM FAQ on classification of outstanding issues followed by introduction of case studies (10 minutes) • Discussion of the case studies in smaller groups (45 minutes) and drawing conclusions (5 minutes) 	Trainer Participants & group trainers
10:45-11:00	Coffee break		
11:00-11:45	Verification Opinion Statement <ul style="list-style-type: none"> • When is an emission report verified as satisfactory (verified or verified with comments)? • When is an emission report verified as not satisfactory? (material misstatement, limitation of scope, non-conformities that provide insufficient clarity and prevent the verifier from stating with reasonable assurance that the emissions report is free from material misstatements) • Consequences of different opinion statements 	<ul style="list-style-type: none"> • Plenary presentation based on COM FAQ and introduction of case studies (5 minutes) • Discussion of the case studies in smaller groups (35 minutes) and drawing conclusions (5 minutes) 	Trainer Participants & group trainers
11:45- 12:30	How to report the outstanding issues in Annex I of the Commission verification report template? <ul style="list-style-type: none"> • In what detail should outstanding issues be reported? • How does Annex I relate to the opinion statement (compliance with EU ETS rules section in verification report template)? Completion of Annex II and III	<ul style="list-style-type: none"> • Plenary presentation based on COM FAQ and introduction of case studies (5 minutes) • Discussion of the case studies in smaller groups (35 minutes) and drawing conclusions (5 minutes) 	Trainer Participants & group trainers
12:30- 13:45	Lunch		

Afternoon Programme of the A&V Training

Time	Session	Approach	Who
13:45- 14:30	Review of issues raised in discussion groups on the three A&V topics dealt with in the morning seeking commonalities	<ul style="list-style-type: none"> • Plenary presentation on the main conclusions drawn by the discussion groups concerning the three training sessions in the morning (15 minutes) • Further plenary discussion (30 minutes) 	Trainer All
14:30- 15:30	Information exchange between verifiers, CAs and NABs and how the information is used <ul style="list-style-type: none"> • Notification template • Work programme • Management report • Information exchange between CAs and NABs 	<ul style="list-style-type: none"> • Plenary presentation based on COM guidance (KGN II.10) and introduction of case studies (10 minutes) • Discussion of the case studies in smaller groups (40 minutes) • Plenary feedback from the smaller group discussions (10 minutes) 	Trainer Participants & group trainers All
15:30-15:45	Tea break		
15:45- 16:15	Further participant questions on A&V issues	Discussion based on questions from audience including questions covering other A&V topics	Participants & trainers
16:15- 16:30	Wrapping up – recommendations		Chair

Annex II Introductory presentations to explain Objectives and Aims of the Accreditation and Verification Training

I. Training aims to increase harmonised understanding on:

- *the correct classification of misstatements, non-conformities, non-compliance issues and recommendations of improvement in the verification report*
- *the different types of verification opinion statements and the follow-up of outstanding issues by the operator and the CA*
- *the detail to which outstanding issues need to be reported in the verification report*
- *the requirements on information exchange between the verifiers, NABs and CAs → how to use the information*

II. Organisation of the training

- *10 discussion groups with one or two trainers – you have been notified in which group you are*
- *each discussion group contains 5-6 verifiers, 2-3 NABs and 2-4 representatives from CAs*
- *each session will be introduced by a short plenary presentation followed by discussion in the discussion groups*
- *for the three morning sessions on verification reporting the discussion will focus on the case studies sent to you*
- *for the afternoon session on information exchange the discussion will focus on the discussion points indicated*

III. Organisation: morning sessions

- *group trainers will provide guidance and facilitate the discussion in your group – they will also answer specific questions on the case studies*
- *each session will be closed by the group trainer drawing conclusions on behalf of the group*
- *during lunch the organising team will collect the conclusions and main discussion points of each group and summarise these in bullet points*
- *in the plenary session (after lunch) the summary bullet points will be presented and where relevant, further explained, and then discussed in plenary*

IV. Organisation: afternoon

- *discussion points have been prepared on information exchange between verifiers, NABs and CAs*
- *discussion points cover several aspects of information exchange, including how the information can be used by parties*
- *discussion on these points in the discussion groups followed by short plenary feedback*
- *a plenary Q&A session after tea-break provides further opportunity to ask additional questions, including on other parts of the AVR guidance and issues*

VI. Next steps

- *You will be invited to feedback your thoughts on the A&V Training Event (Excel file)*
- *After the training event a handbook will be prepared that will contain all case studies including model answers and explanation*
- *Handbook will be sent to all participants for further cascade*

Annex III Introductory presentations to the two morning training sessions

Session I: *Classification of misstatements, non-conformities, noncompliance and recommendations for improvement*

1.1 FAQ on classification and reporting

- **Concern misclassification in 2014 verification reports**
- **Difficulty and differences in the interpretation of materiality**
- **Inconsistencies in how issues are reported in Annex I and III**
- **FAQ was developed by the European Commission in 2015 to:**
 - support verifiers in completing the verification report
 - support CA, NAB and verifiers on how issues should be classified and reported
 - create more uniformity on how issues are reported
- **FAQ published on Commission's website:**
http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm

1.2 What is in FAQ on classification?

- **FAQ provides explanation and examples of:**
 - Misstatements → errors, omissions or misrepresentation of data
 - Non-conformities → act or omission of act that is not in line with the approved MP or (for installations) the permit
 - Non-compliance → act or omission of act that is not in line with the MRR or relevant national legislation
 - Recommendation of improvement → suggestion from verifier to improve the operator's performance in monitoring and reporting emissions
- **Some issues fall under multiple classifications**
 - Non-conformity/ non-compliance affecting reported data is misstatement
 - Some non-conformities can also be a non-compliance with MRR
 - If an issue falls under multiple classifications, this must be reported under those multiple classifications
- **If the approved MP is not in line with the MRR, the verifier must report this in the VR (Art 7(5) AVR)**
- **Sometimes recommendations of improvement can be made that are related to non-conformities or non-compliance**
 - Misstatement, non-conformity, non-compliance to be reported as such
 - Preferred approach is to report related recommendations within the item non-conformity or non-compliance

- *Separate recommendation is also allowed under the AVR but it should be clear that the recommendation is related to the specific non-conformity or non-compliance*
- **When making a recommendation for improvement, a verifier:**
 - *should state why the recommendation is relevant*
 - *should abstain from stating how the operator should resolve the identified weakness*

1.3 Case studies session I

- **FAQ should be followed in the training sessions**
- **Case studies reflect different situations that can be traced back to the FAQ - examples**
 - *Missing source streams and units*
 - *Discrepancies with procedures in approved MP*
 - *Recommendations related to non-compliance and non-conformities*
 - *How to deal with data gaps/ multiple classifications*
- **Case study 1 to be read together with Excel template which contains some errors in classification – aim is to correct errors**
- **Aim other case studies is to classify the issues from context**

Session II: Verification Opinion Statement

2.1 Verification opinion statements

- **Verified (emissions report is satisfactory)**
- **Verified with comments (emissions report is satisfactory but the verifier has identified issues that must be corrected):**
 - *Non-material misstatements*
 - *Non-conformities, non-compliance issues or recommendations of improvement*
- **Not verified (emission report is not satisfactory)**
 - *Material misstatement (individually or combined)*
 - *Limitation of scope*
 - *Non-conformities that individually or combined provide insufficient clarity and prevent the verifier from stating with reasonable assurance that the emissions report is free from material misstatements*

2.2 Materiality of misstatements

- **Definition of material misstatement concerns two parts**
 - whether the misstatement (individually or combined) exceeds the materiality threshold
 - whether in the opinion of the verifier the misstatement (individually or combined) could affect the treatment of the emissions report by the CA → qualitative assessment based on nature, size and individual circumstances
- **Section 3.2.9 EGD I and FAQ explain factors that can be taken into account when making the qualitative assessment**
 - Likelihood of reoccurrence, duration, non-compliance etc.
- **Please note**
 - Materiality is just a tool to plan and conclude on the verification
 - Materiality is not a tolerance band → any identified misstatement, non-conformity or non-compliance must be corrected by the operator

2.3 Follow-up on issues identified

- **Section 3.2.13 and 3.3 EGD I, KGN II.6 and Diagram in FAQ explain the type of follow-up actions required for the different types of issues**
- **Possible follow-up actions – depending on the type of issue**
 - Submission of improvement reports
 - Immediate action by CA
 - Conservative estimation of emissions
 - Further enforcement action
- **Any outstanding issue that is reported in Annex I of the verification report must be resolved**

Session III: How to report the outstanding issues in Annex I of the Commission verification report template? How to complete Annex 3

3.1 Issues to be reported in Annex I (1)

- **All outstanding issues that have not been corrected by the operator must be reported in the Verification Report**
- **Annex I is part of the verification opinion statement**
- **FAQ outlines how to report misstatements, non-conformities and non-compliance – interpretation of Article 27(3) (4) AVR**
 - Size of the issue: size of impact on emission data
 - Nature of the issue: what does the issue entail, likelihood, duration
 - Whether an issue has material effect on data (reasons if material)
 - Which element of AER/ MP or MRR the issue relates to
- **Recommendation to be reported in such a way that it is clear to which element of the MR process it relates and that it is understandable for the operator, the CA and the NAB**

3.2 Issues to be reported in Annex I (2)

- **Other elements to be reported in Annex I**
 - Prior year non-conformities that have not been corrected by the operator
 - Information on data gaps if applicable (see KGN II.3 on process analysis) and KGN II.6 on verification report):
 - ✓ whether method for completing gap did not lead to approval by CA
 - ✓ if the method was not approved by CA whether the method was conservative and lead to material misstatements
- **KGN II.6 explains information to be included in Annex III**
 - Changes approved by the CA but not processed yet in MP or permit (3.A)
 - Changes to the MP that were not notified to the CA
 - Any changes to activity level, capacity or operation of installation not reported to the CA by 31 December
 - Significant changes to the MP for which approval of CA was not obtained