AV training event

ANNUAL ACTIVITY LEVEL VERIFICATION

AV training event
16 September 2021

Introduction

- This slide deck was prepared for the online 2021 Accreditation & Verification (A&V) Training Event organised by the EU ETS Compliance Forum secretariat on behalf of the European Commission on 16 September 2021.
- The training aimed at providing a training/information webinar for representatives from the EU ETS Competent Authorities (CAs), verifiers and National Accreditation Bodies (NABs) on verification of annual activity level data and key issues on verification and latest updates of guidance material.
- Over 250 persons from CA, NABs and verifiers participated in a shared discussion

Programme of AV training event

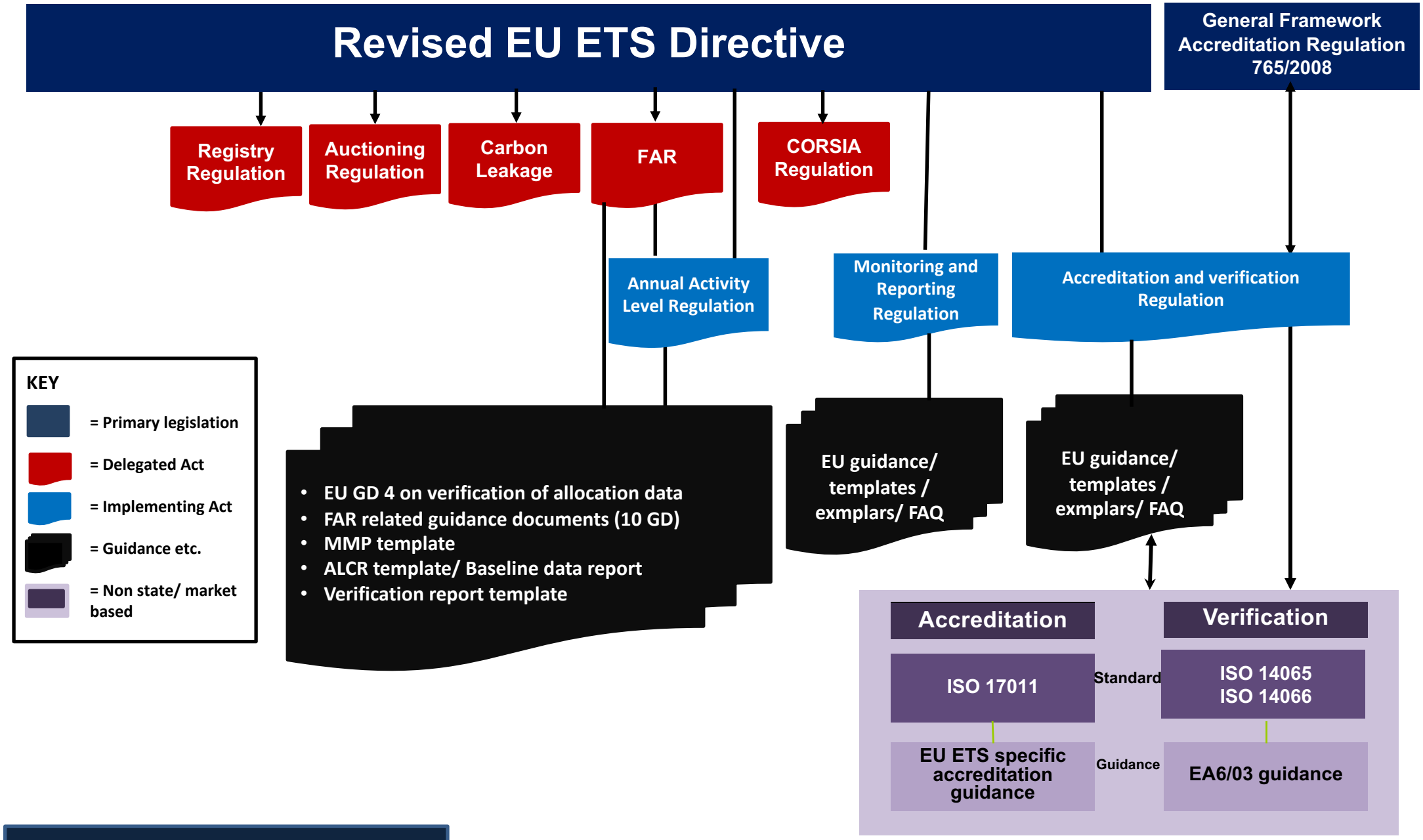
Time	Session	Who
10:00 - 10:05	Opening, welcome, agenda and objectives of the webinar – Rules of communication	Chair
10:05 -10:15	Introduction to training	Machtelt Oudenes
10.15 – 11.00	Verification of annual activity level data	All
11.00- 11.10	Short break	
11:10 - 12:30	Verification of annual activity level data	All
12:30 - 14:00	Lunch	
14:00 - 14:05	Opening of the afternoon training	Chair
14:05 -14.35	Presentation on update of guidance material – followed by discussion	Machtelt Oudenes All
14.35 -15.45	Presentation on NAB's experiences regarding virtual site visits and verification of annual activity level data	Peter Hissnauer
14.45 - 15.45	Sharing views and guidance on verification topics including lessons learnt on virtual site visits	Discussion led by moderator
15:45 - 16:00	Conclusions and AOB	Moderator/ Chair

Introduction

Introduction to the morning session on verification of annual activity level data

Machtelt Oudenes SQ Consult

European Commission



EU ETS legal framework

Reporting on annual activity level data

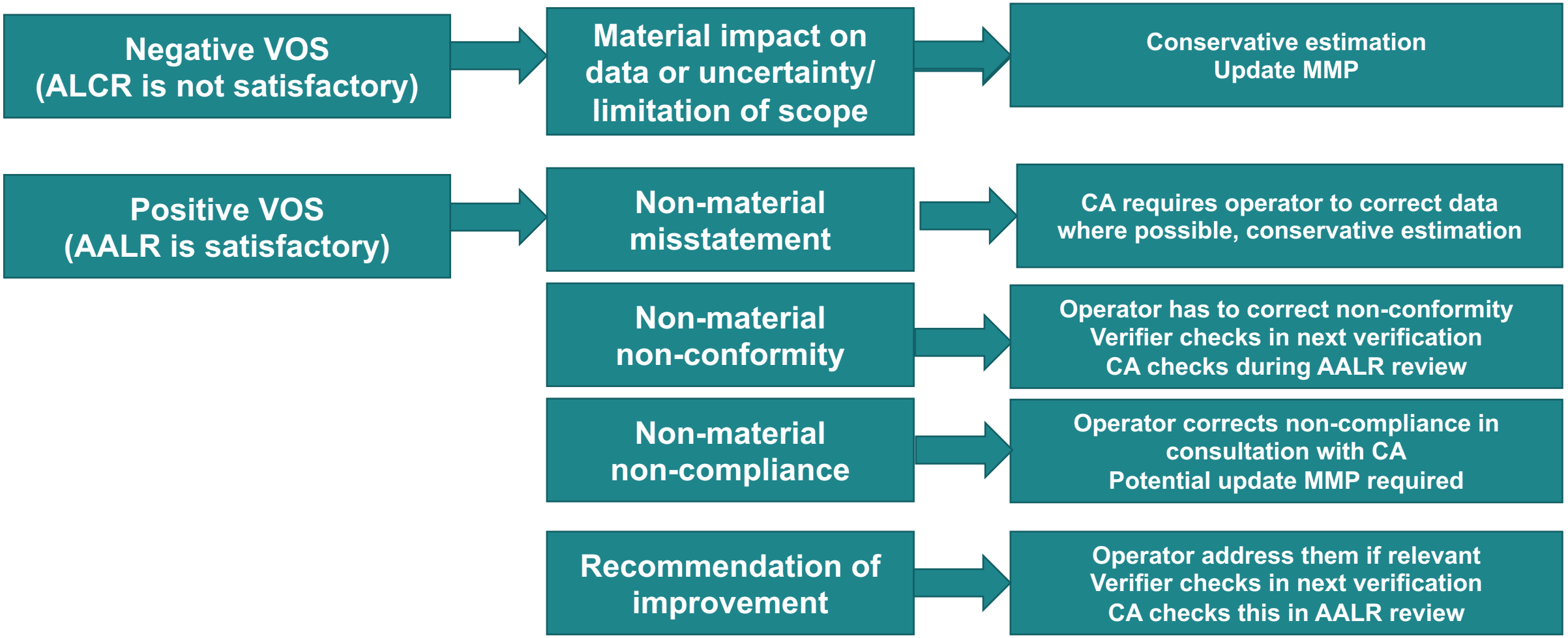
- Operators applying for free allocation need to have an MMP and monitor annual activity level data throughout the calendar year
- Operators must submit verified annual activity level reports to the CA by 31st of March unless an earlier deadline has been set
- Key monitoring and reporting issues for annual activity level data:
  - ✓ Defining monitoring boundaries related to sub-installations
  - ✓ Ensuring completeness and transparency of monitoring
  - ✓ Accuracy of relevant parameters related to benchmarks
  - ✓ Consistency of monitoring and reporting
  - ✓ Proper quality assurance to facilitate monitoring

Verification of ALCR verification

- In principle the same principles and steps in the verification process apply:
  - ✓ Reasonable level of assurance and the concept of materiality (both types!)
  - ✓ Process steps, how to address misstatements, non-conformities and non-compliance issues; and the principles of sampling
  - ✓ Checking conformity with MMP and checking accuracy of data, the MMP implementation and quality control measures in line with FAR
- Some specific rules on verification of ALCR data:
  - ✓ MMP specific checks: e.g. sub-installation boundaries, FAR checks
  - ✓ Specific parameters to check: e.g. energy efficiency, proper attribution to sub-installation, data in benchmarks, double counting
  - ✓ Application of materiality level, site visits, specific verifier competence & impartiality rules
  - ✓ Reporting on verification: e.g. confirmation of changes in certain parameters

Review of ALCR by competent authority

- CA checks verified ALCR, in particular issues reported by verifier



Feedback after verification

- Information exchange between NAB and CA
  - ✓ NAB shares issues identified during accreditation and surveillance in management report
  - ✓ CA shares with NAB issues identified from the review of ALCR and inspection
  - ✓ Information exchange template has been updated to cover ALCR verification
- Importance of communicating back to verifier

Experiences on 2021 ALCR verification

- Some MS extended the submission deadline → not to be repeated in 2022
- Impact of COVID on 2021 verification → virtual site visits as per Article 34a AVR
- Initial experiences from 2021:
  - ✓ Insufficient time may have been allocated to ALCR verifications
  - ✓ Errors in the ALCR have been overlooked by verifiers (internal inconsistencies in ALCR, inconsistencies with MMP, anomalies in data)
  - ✓ Verifiers did not always report non-compliance with the FAR as CA had approved MMP
  - ✓ Assessment of qualitative materiality not always carried out (properly)
  - ✓ Difficulties in checking energy efficiency and data related to heat benchmarks

Purpose of this training

- Shared discussion between CAs, verifiers and NABs
- Reach a common understanding on some ALCR verification issues
  - ✓ Time allocation
  - ✓ Scope of verification and roles of different parties
  - ✓ Checks on annual activity level data
  - ✓ How to verify heat benchmark related data? What to consider?
  - ✓ Application of the materiality concept
  - ✓ How to report and follow-up on issues reported by the verifier
- Answer your questions on ALCR verification

Next steps

- Afternoon session will elaborate on update of guidance material to new AVR and general issues related to verification and accreditation: e.g.
  - ✓ Sharing experiences on virtual site visits
  - ✓ Questions on A&V received before event or in the chat
  - ✓ Remaining questions on verification of ALCR
- After the training event, the training slides will be updated for cascading further in your organisation/MS
- Slides will be sent to all participants and published on the Commission's Website: https://ec.europa.eu/clima/policies/ets/monitoring_en#tab-0-1

European Commission

Time allocation & Timeliness

10.15 – 10.40 : Allocating sufficient time for ALCR verification

Lucy Candlin

Moderator: Machtelt Oudenes

European Commission

Do verifiers have enough time?

Feedback on reports and VOS after the 2021 verification cycle indicated that there were:

- Data errors in CHP tool
- Negative or 100% heat losses declared
- Unrealistic heat generation efficiencies given
- Wrong data attributions eg
  - Eligible heat not included in Heat S-I
  - Heat from electricity included
- Production data omitted from Heat & Fuel S-Is (or incorrect product attributed)
- Technical connections omitted (both ETS and non-ETS)
- Inappropriate attribution of emissions to S-Is (impacts the EF determined for the S-I)
- And other simple mistakes!

Either verifiers don't know the rules!

OR they don't have enough time to do the work properly!

SO……

European Commission

Do verifiers have enough time?

Reasonable Assurance requires:

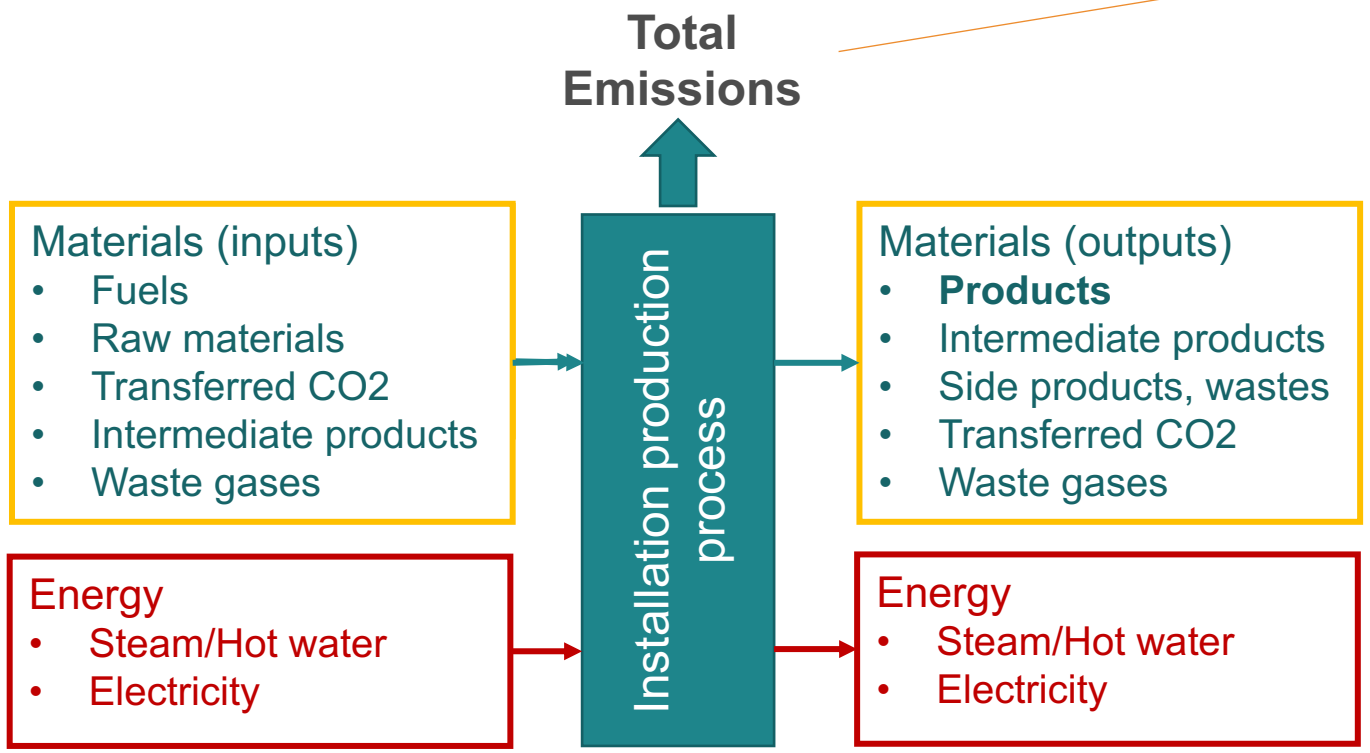
- Verifier to confirm that the "**data ARE correct**"
- **Sufficient testing to have been done** on a large enough sample of the data set and internal controls to make this positive statement
- **Sufficient testing takes time to plan and implement**

Noting commercial markets…… **verification teams need to spend the time regardless of the quoted fee. I.E……**

- If the sales team quotes 3 days for €2700 (fee rate = €900/day)
- But the Lead Verifier needs 5 days to complete work to the standard required
- Either the VB requires an additional 2 days from the client OR
- The VB accepts a fee rate of €540/day

Do verifiers have enough time?

Consider the AER reporting framework:



Site inspection; checks on data, labs, instruments; checks on risk assessment, internal controls, data validation, reporting etc

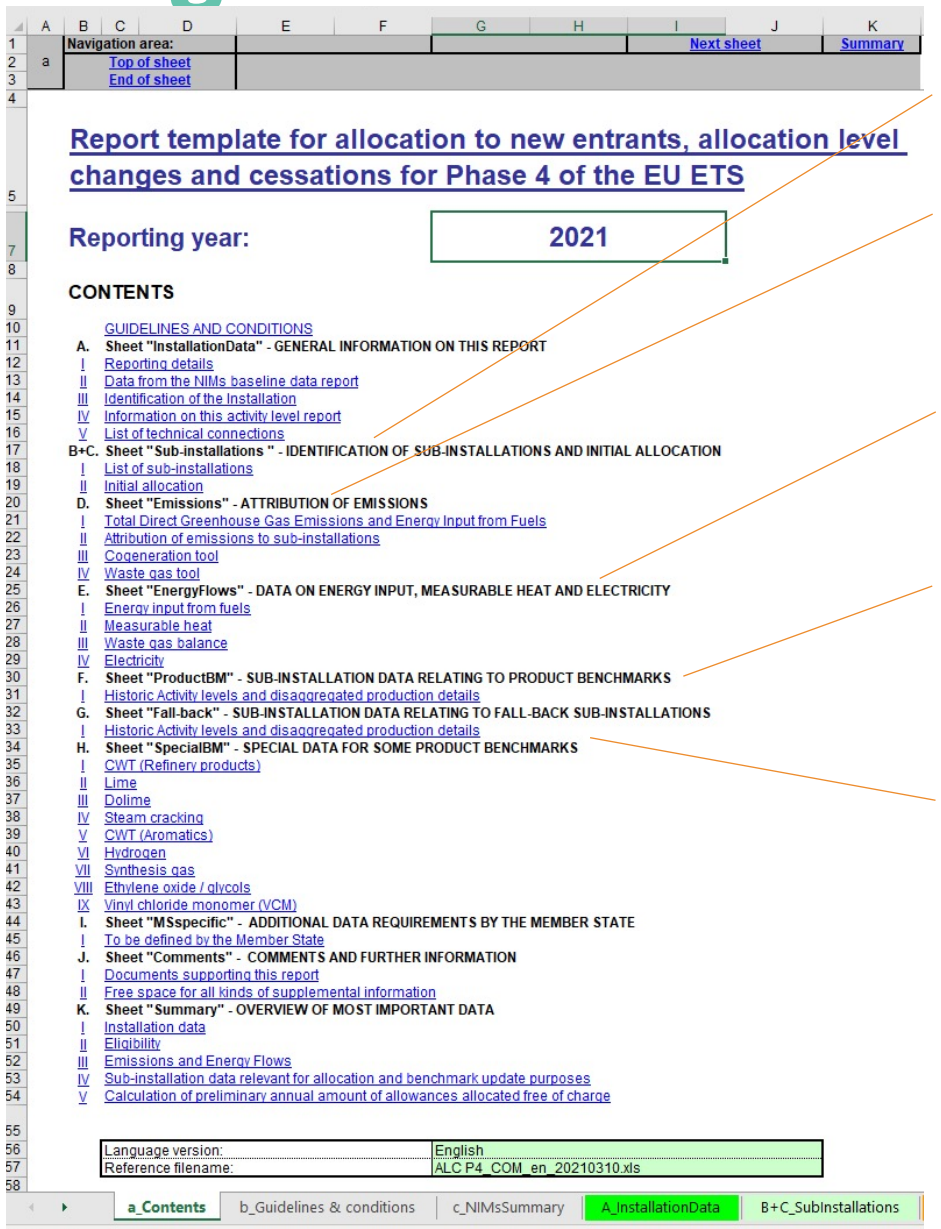
ALCR: bigger data set, more complicated… **Sufficient time??**

Now add the data required for the additional ALCR work!

Now multiply that by the number of applicable sub-installations!

European Commission

How big is the ALCR data set??



Navigation area: Next sheet | Summary

a Top of sheet / End of sheet

Report template for allocation to new entrants, allocation level changes and cessations for Phase 4 of the EU ETS

Reporting year: 2021

CONTENTS

- GUIDELINES AND CONDITIONS
- **A. Sheet "InstallationData" - GENERAL INFORMATION ON THIS REPORT**
  - I Reporting details
  - II Data from the NIMs baseline data report
  - III Identification of the Installation
  - IV Information on this activity level report
  - V List of technical connections
- **B+C. Sheet "Sub-installations " - IDENTIFICATION OF SUB-INSTALLATIONS AND INITIAL ALLOCATION**
  - I List of sub-installations
  - II Initial allocation
- **D. Sheet "Emissions" - ATTRIBUTION OF EMISSIONS**
  - I Total Direct Greenhouse Gas Emissions and Energy Input from Fuels
  - II Attribution of emissions to sub-installations
  - III Cogeneration tool
  - IV Waste gas tool
- **E. Sheet "EnergyFlows" - DATA ON ENERGY INPUT, MEASURABLE HEAT AND ELECTRICITY**
  - I Energy input from fuels
  - II Measurable heat
  - III Waste gas balance
  - IV Electricity
- **F. Sheet "ProductBM" - SUB-INSTALLATION DATA RELATING TO PRODUCT BENCHMARKS**
  - I Historic Activity levels and disaggregated production details
- **G. Sheet "Fall-back" - SUB-INSTALLATION DATA RELATING TO FALL-BACK SUB-INSTALLATIONS**
  - I Historic Activity levels and disaggregated production details
- **H. Sheet "SpecialBM" - SPECIAL DATA FOR SOME PRODUCT BENCHMARKS**
  - I CWT (Refinery products)
  - II Lime
  - III Dolime
  - IV Steam cracking
  - V CWT (Aromatics)
  - VI Hydrogen
  - VII Synthesis gas
  - VIII Ethylene oxide / glycols
  - IX Vinyl chloride monomer (VCM)
- **I. Sheet "MSspecific" - ADDITIONAL DATA REQUIREMENTS BY THE MEMBER STATE**
  - I To be defined by the Member State
- **J. Sheet "Comments" - COMMENTS AND FURTHER INFORMATION**
  - I Documents supporting this report
  - II Free space for all kinds of supplemental information
- **K. Sheet "Summary" - OVERVIEW OF MOST IMPORTANT DATA**
  - I Installation data
  - II Eligibility
  - III Emissions and Energy Flows
  - IV Sub-installation data relevant for allocation and benchmark update purposes
  - V Calculation of preliminary annual amount of allowances allocated free of charge

Language version:	English
Reference filename:	ALC P4_COM_en_20210310.xls

a_Contents | b_Guidelines & conditions | c_NIMsSummary | A_InstallationData | B+C_SubInstallations

Mostly auto link to NIMS (unless edited)

~20 data points/year (1x Cogen & 1 x Waste gas)

~34 data points/year (inc Waste gas & Electricity)

Variable – depends on Product BM. PLUS – BM update data min ~30 data points

1 of each S-I: ~50 data points if all elements apply including BM update data

Approx 134 data points to be checked if all elements apply & both HAL and BM update data is included PLUS all the underlying calculations!

European Commission

ALCR time allocation?

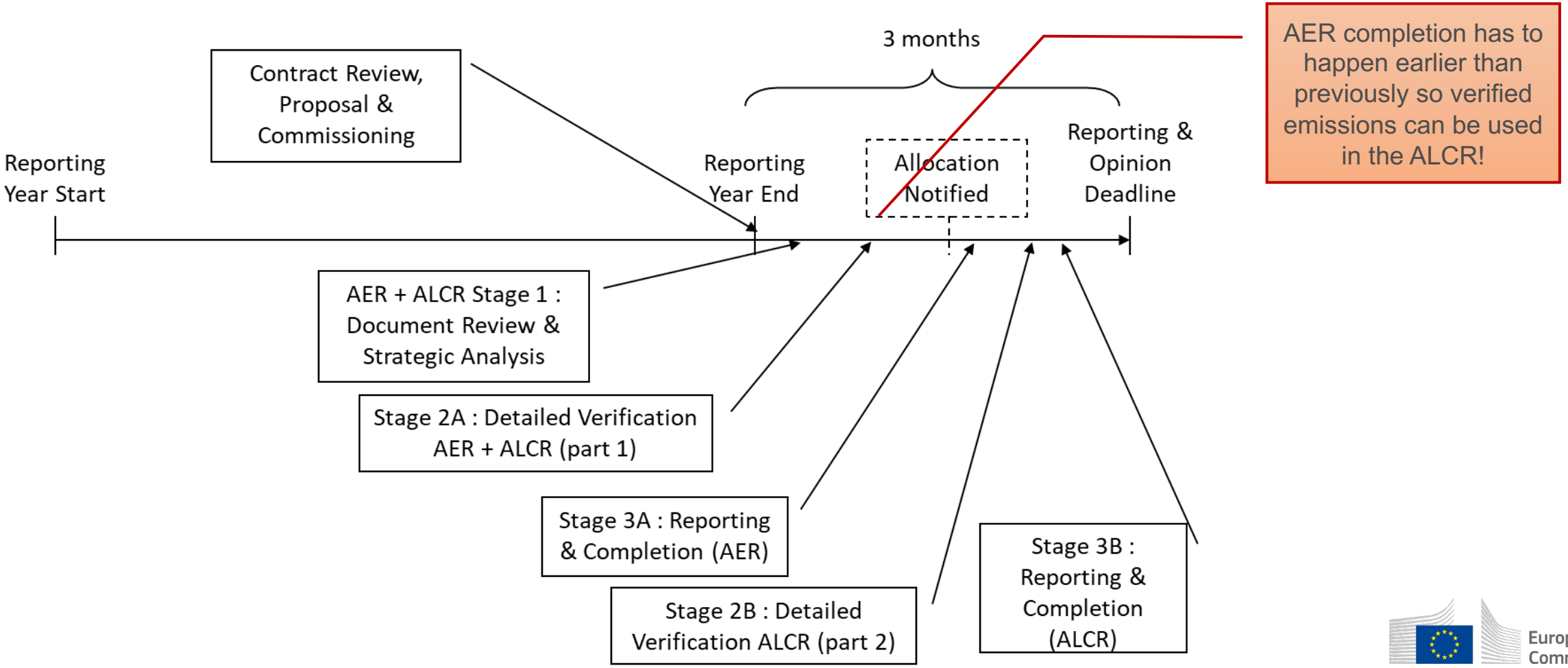
Principles in existing guidance can be applied eg:

AER approach	ALCR approach example
Number of emissions sources *(& installation complexity)*	Number of sub-installations Number of technical connections
Number of source streams	Number of relevant elements eg: • Products (CL, Non-CL & shared!) • Waste gases • Electricity (import, cogen, etc) • Heat applicable? • Benchmark update data
Type of source stream	Nature of ALCR elements eg: • Simple: eg Fuel, Process • Complex: eg Product, Heat (production/consumption), Cogen
Amount of emissions	Scale of ALCR elements • Amount of emissions, energy, heat, electricity
Complexity – data flow Robustness - internal control	As for AER plus additional procedures and instruments etc for inspection
	Calculation approach: Linked to AER PLUS additional elements Different approach/calculation

Except for simple installations, ALCR can't just be AER + a little bit of time!

Timeliness?

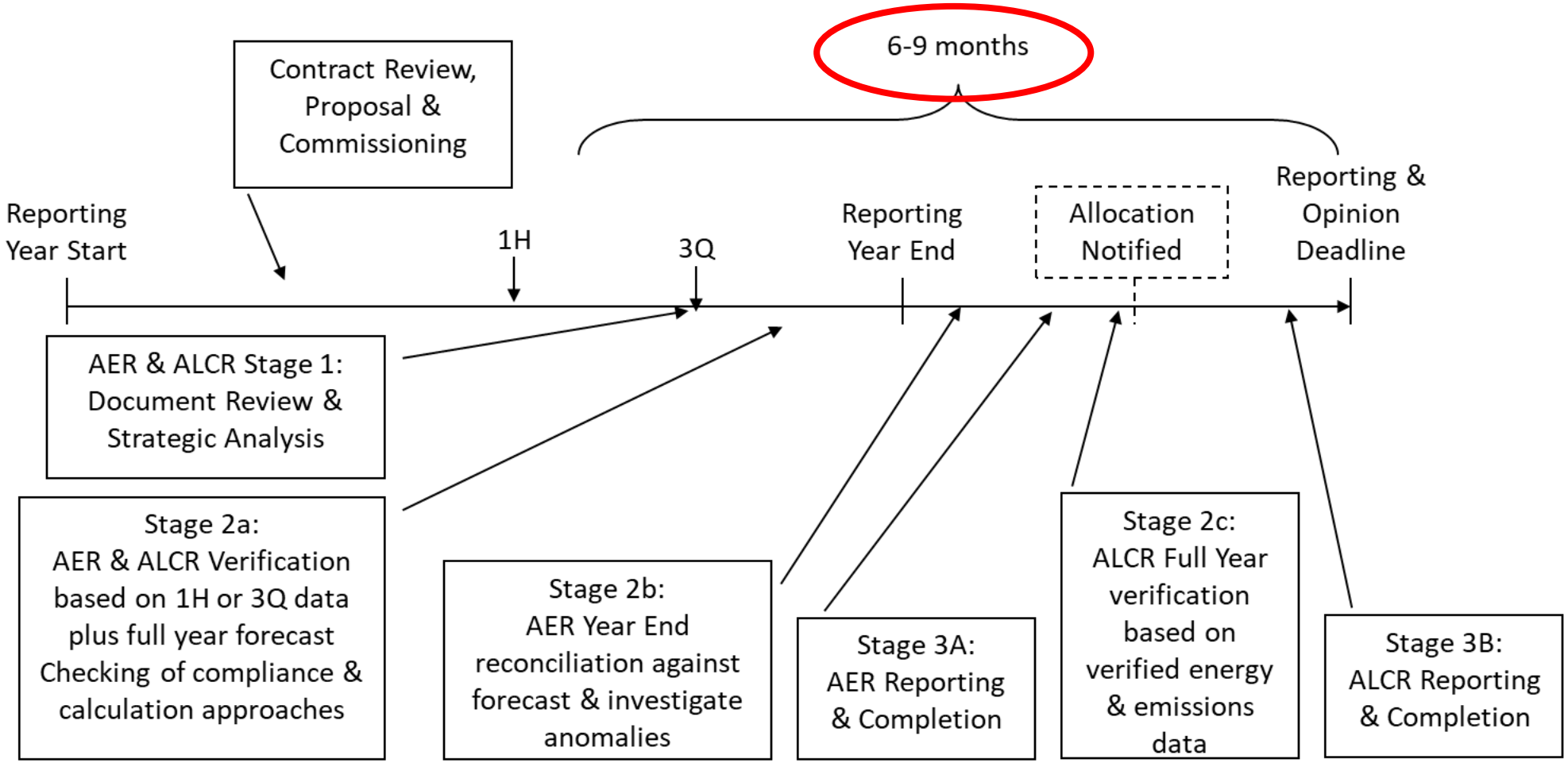
Starting after the reporting Year End……..



European Commission

Timeliness?

Starting before the reporting Year End……..



European Commission

Example: Non-Conformity – Time allocation

Chemical Industry – Production of basic chemicals (AVR-Techn. Area 8.3)

Verifier AVR compliance status:

Article 13(4) says:
*…set up and **implement** plan so verification risk is reduced to an acceptable level to obtain reasonable assurance*

AVR Article	Status	Note
13 ✓	Part-Compliant	AER data, allocation data & measuring equipment included in verification plan
14 ✗	Non-compliant	Verification plan not implemented in full as only part of selected sample was tested due to time constraints: • no inspections on measuring devices recording heat quantities and consumption of electricity • Insufficient checks on activity data and allocation-relevant calculation factors
9 ✗	Non-compliant	Insufficient time allocated to allow sufficient testing to be done to achieve reasonable assurance of: • allocation elements; heat and power consumption; & product emission value • corresponding measuring equipment • Insufficient checks on activity data and allocation-relevant calculation factors *(e.g power consumption for interchangeability factor).*

Article 14 says:
*The verifier shall **implement** the verification plan….*

This is the root cause finding of the NAB

Likely to be considered a significant accreditation finding!

European Commission

Questions and comments from audience

Role of verifier and CA in ALCR verification

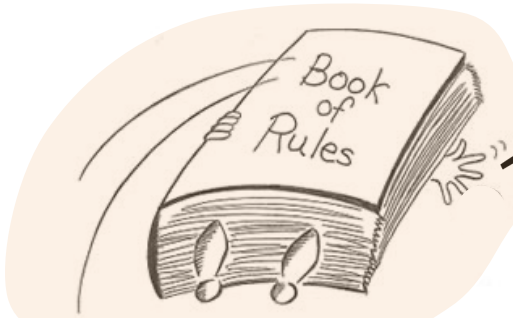
10.40 – 11.00 : Role of the CA and verifier in checking compliance with FAR

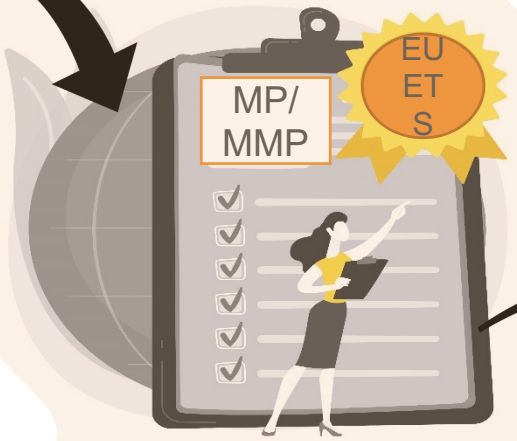
Lucy Candlin

Moderator: Machtelt Oudenes

European Commission

Compliance: who does what?





CAs **approve** Plans as meeting FAR

Operator **implement**s Plan in conformance AND compliance

Verifiers **check** implementation conforms to the MP/MMP; also identify if plans don't comply with rules

European Commission

Verifier's responsibility for compliance?

AVR Article 7(5):

If the verifier discovers that an operator or an aircraft operator is not complying with Implementing Regulation (EU) 2018/2066 or the operator is not complying with, Delegated Regulation (EU) 2019/331 or Implementing Regulation (EU) 2019/1842, that irregularity shall be included in the verification report even if the monitoring plan or monitoring methodology plan concerned, as appropriate, has been approved by the competent authority.

Example: Verifier's findings on compliance

COMPLIANCE WITH EU ETS RULES	
MMP in compliance with the ALCR rules (including the underlying FAR rules)?	**No, because the MMP approved by the regulator does not comply with the rules with respect to Article #**
FAR Article 9: Changes to activity level/ operational activity (that might affect allocation or MMP) reported to the CA?	Yes
EU Regulation on A&V met:	
Article 11(4)(d): modifications to MMP notified to CA?	Yes
Article 16(2)(b): Boundaries of installation and sub-installation(s) are correct?	Yes
Article 16(2)(c): Source streams and emissions sources are complete?	Yes
Articles 16(2) (fa) and 17(3) (f): correctness of input parameters, and evidence of support specific data reported?	Yes
Article 17(3): MMP correctly applied?	**Yes, the operator has implemented the MMP as approved by the regulator**
Article 17(3)(a): Data correctly attributed to sub-installation boundaries?	Yes

Finding against the regulator for their non-compliant approval

Finding for the operator for their conformance with the approved MMP

European Commission

Verifier's response to NC corrections?

What type of correction?

- A non-compliance with the rules?
- A non-conformity with the Plan?

Who has proposed the NC correction:

- The operator?
- The competent authority?

What approach should the verifier take?

- Sense check
- Professional scepticism

European Commission

Questions and comments from audience

Short break

11.00 - 11.10

European Commission

Data verification in ALCR verification

11.10 – 11.30 : What checks to carry out to identify errors in the data and how to check conservative estimation in ALCR verification

Lucy Candlin, Sven Starckx

Moderator: Machtelt Oudenes

European Commission

Key data verification activities

- In general not different from data verification AER, but more datapoints additional sources (product/heat/CL status/…)
- Check:
  - All data for emissions, inputs, outputs and energy flow are in line with the boundaries attributed correctly to the SI
  - That the data is complete and whether data gaps or double counting has occurred
  - AL for P-BM are based upon correct application of the product definitions (Annex I FAR)
  - AL for fall-back SI have been correctly attributed according to products produced and in line with the CL-list.

Key data verification activities

- Analytical procedures will be applied: e.g. checks eg trail back aggregated data to source data; fluctuations, check correct use of formulae; check splits between S-Is for reasonableness; calculation factors, recalculation….
- Two key reasonableness checks:
  - Plausibility
  - Conservativeness

Plausibility?

- What is plausibility
  - How likely it is that something is true
  - How believable the data is
  - The quality of seeming reasonable or probable

    Context is key, so data has to be compared to other factors
- What is a plausibility check?
  - Comparison against other factors e.g.:
    - Prior year data, or month on month data
    - Operational, production & other trends & fluctuations
    - Averages, unusual values, gaps and outliers
  - Any other suggested checks – add to chat box or mentimeter please

Conservativeness?

MRR defines as:
'conservative' means that a set of assumptions is defined in order to ensure that no under-estimation of annual emissions or over-estimation of tonne-kilometres occurs

Intent is to ensure emissions are not under reported AND SO surrendered allowances are not insufficient to cover realistic actual emissions

FAR: No definition!

But requires a 'conservative approach to fill data gaps

So…… would expect a consistent rationale!

GD4 states: conservative" means:
a set of assumptions is defined in order to ensure that parameters relevant for allocation of free allowances are assigned values in a way that the resulting allocation is not higher than with application of the true value of that parameter

Intent would be to ensure Activity Level is not over reported AND SO free allocation is given when not appropriate

Also, benchmark data is not distorted compared to reality

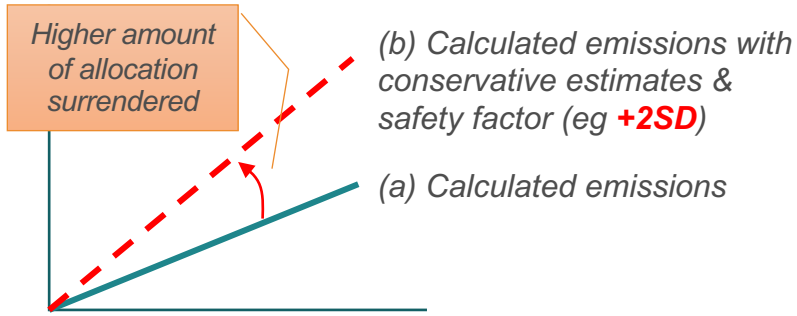
SO……

European Commission

2SD = 2 standard deviations

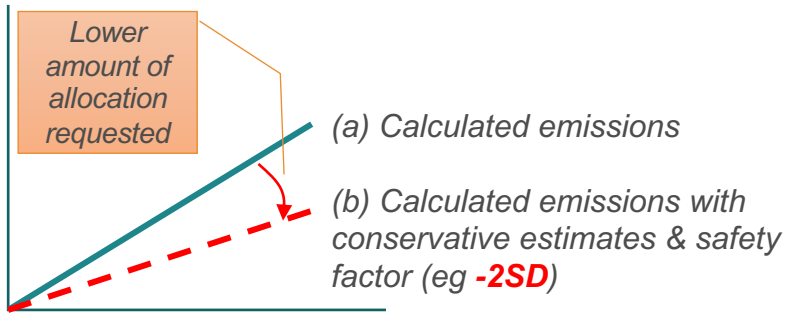
Conservativeness?

Conservative for annual emissions



Could result in a difference between: Annual Emissions declared in the AER and in the ALCR!

Conservative for Activity Level & Allocation



Approach applies to all relevant FAR data points

Challenge to be considered:

How to address an AER conservative adjustment when emissions/energy data is transferred to the ALCR?

Should AER adjustment be redone to apply -2SD to conservative approach before data is used in ALCR?

European Commission

Verification of heat BM data

11.30 – 12.00: What to consider for the verification of heat benchmark data

Sven Starckx

Moderator: Machtelt Oudenes SQ Consult

European Commission

Measurable Heat

Eligible under the heat-BM

Production:

- All heat produced by a physical unit covered by the GHG permit (ETS installation),
- Exothermic heat, heat retrieved from heat pump, heat exchanger
- Heat recovered from an eligible process (covered under a P-PM, H-BM, F-BM or PE-BM

*Heat must **be measurable** = net heat flow through identifiable pipelines or ducts using a heat transfer medium (steam/hot air/water/oil/liquid metals/salts/…) which **can be** measured, even if no measurement in place*

Non-Eligible:

- Heat produced from electricity (or a physical unit that operates on electrity (e.g. electrical boilers, heat recoverd from electricalcompressors,…)
- Nitric Acid and heat consumed within the boundaries of a P-BM
- Heat from non ETS installations
- Heat consuming processes necessary for operating the heat production and distribution, such as deaerators, make-up water preparation, and regular blow offs,

European Commission

Measurable Heat

Eligible under the heat-BM

Consumption:

- Used for the production of products, mechanical energy or (space) heating or cooling

Non-Eligible under the H-BM:

- Preheating of fuels
- Heat for production of electricity
- Heat for waste water treatment
- Heating of offices with at least one P-BM
- Steam for smokeless flaring

- Net heat is considered = deduct the heat content of the condensate or transfer medium returning to the heat supplier *(100% return assumed)*

Reporting Measurable Heat in the ALCR

Report template for allocation to new entrants, allocation level changes and cessations for Phase 4 of the EU ETS

Reporting year: **2021**

CONTENTS

Language version:	English
Reference filename:	ALC P4_COM_en_20210503.xls

Heat output from CHP

Net amount of measurable heat (=heat content flow to user minus heat content return flow !).
Completion follows a step by step approach:
Distinctions ‘eligible and non-eligible heat input and use’

Heat import and export to and from this S-I

Measurable heat produced, net heat imports

European Commission

Measurable Heat

Rules for Determining Net Measurable Heat (FAR, Annex VII section 7)

All specified amounts of measurable heat shall always refer to ***net amount of measurable heat***, determined as the heat content (enthalpy) of the heat flow transmitted to the heat consuming process or external user minus the heat content of the return flow

- Where the operator provides evidence to the satisfaction of the competent authority that condensate remains in the product (e.g. in "**life steam injection**" processes), *the respective amount of condensate enthalpy is not deducted*;

- Where heat transfer medium is known to be lost (e.g. due to leakages, dumping or to sewer), an *estimate for the respective mass flow shall be deducted from the mass flow* of the transmitted heat transfer medium.

In the case of steam or hot water used as a heat transfer medium, where the condensate is **not** returned, or where it is not feasible to estimate the enthalpy of the returned condensate, the operator shall determine h_{return} based on a temperate of 90°C.

European Commission

Data Sources Measurable Heat

Determination Methodologies & Data Sources Repr. Highest Achievable Accuracy Net (FAR, Annex VII section 4)

In quantification of energy flows, most accurate data source for quantification to be applied:

a) Readings of measuring instruments subject to national legal metrological control or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU

b) Readings of measuring instruments under the operator's control

c) Readings of measuring instruments not under the operator's control

d) Readings of measuring instruments for indirect determination of a data set, provided that an appropriate correlation between the measurement and the data set

e) Calculation of a proxy for the determining net amounts of measurable heat in accordance with method 3 of section 7.2;

f) Other methods, in particular for historical data or where no other data source can be identified by the operator as available.

FAR Annex VII, section 7:
Method 1: Using measurements
Method 2:Using documentation (historical data only)
Method 3: Calculation of a proxy based on measured efficiency
Method 4: Calculating a proxy based on the reference efficiency of 70%

- Technically Feasible
- Unreasonable Costs
- Simplified uncertainty assessment when deviating from most accurate data source

European Commission

Measurable Heat

Extra attention during verification:

- Eligible vs Non-Eligible heat (in production and consumption or use)
- Correct determination of net measurable heat (data source, condensate return, enthalpy, (realistic) efficiencies, Heat losses ‘0’…)
- Consistency heat data information in ALCR
- Combination of multiple SI (e.g. PBM and HBM, existence HBM-CL and non-CL)
- Risk of Double counting (transfer between sub-installations)
- In case of a PBM-SI, measurable heat for heating offices and canteens, this heat is included in de boundaries of a PBM.
- Technical connections (import/export) / export ETS installation, non-ETS (Carbon Leakage status !).
- Lack of evidence that heat attributed to DH BM is for domestic use (T>=130°C)
- Production of heat from electricity
- In case of ‘Life Steam Injection’ (evidence of % remaining in product)
- Red flagging at the top of each page

E. Energy flows	Navigation area:	Table of contents	Previous sheet	Next sheet	Summary
	Top of sheet	Attribution of Fuels	Measurable heat	Heat (final result)	Waste gases
	End of sheet	Electricity			

European Commission

Questions and comments from audience

Materiality in ALCR verification

12.00 – 12.25: Applying the concept of materiality in ALCR verification

Lucy Candlin

Moderator: Machtelt Oudenes

European Commission

Materiality for FAR & ALCR

‘material misstatement’ :

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 [……] report by the competent authority.

QUANTITATIVE

QUALITATIVE

‘materiality level’:

the quantitative threshold or cut-off point above which misstatements, individually or when aggregated with other misstatements, are considered material by the verifier

So the verifier has to form a judgement about BOTH when coming to a conclusion

European Commission

Materiality for FAR & ALCR

Qualitative materiality – factors that can influence the user of the data *e.g. in relation to its compliance and reliability*

Quantitative materiality – *are errors > defined threshold?*

AER:
± 2% total declared emissions
(Cat C & AOs >500kt)
± 5% total declared emissions *(others)*

BDR/ALCR:
± 5% of *(each where relevant)*:
(a) installation's **total** emissions
(b) **sum** of imports & production of net measurable heat
(c) **sum** of amounts of waste gases imported & produced
(d) activity level of each individual relevant product BM S-I

Mathematical calculation

Judgements about e.g.:

- *Error/anomaly duration?*
- *Has it happened before?*
- *Intended or not?*
- *How data is affected?*
- *Can they be corrected?*
- *Does the operator refuse to correct?*
- *Will they reoccur?*
- *The strength of control activities?*

Can result from a non-conformity/ non-compliance if that affects the reported data

Verifier's professional judgement call – applies to all aspects of the data set the verifier is checking

S-I = sub-installation

Materiality example

Installation has a total heat value (production + import) of 100TJ across all relevant S-Is

- A material error is ≥5TJ above or below the total heat value (±5% x 100TJ)

1. Installation has 2 Heat S-Is [(A) and (B)] each with 10TJ heat imported. Errors are identified as:

- +2TJ individual overstatement in S-I(A) – this is 20% of the imported heat to the S-I
- +3.5TJ individual overstatement in S-I(B) – this is 35% of the imported heat to the S-I

Sum of the two errors is: +5.5TJ overstatement of imported heat

The overall error is : (+5.5/100)*100 = +5.5% of total heat value for the installation

Result = Entire report cannot be verified as satisfactory

2. Installation has 2 Heat S-Is [(A) and (B)] each with 10TJ heat imported. Errors are identified as:

- +2TJ individual overstatement in S-I(A) – this is 20% of the imported heat to the S-I
- -3.5TJ individual understatement in S-I(B) – this is 35% of the imported heat to the S-I

Sum of the two errors is: (+2)+(-3.5) = -1.5TJ understatement of imported heat

The overall error is : (-1.5/100)*100 = -1.5% of total heat value for the installation

Result = Entire report is verified as satisfactory

Directionality (+ or -) of the error is important

European Commission

Materiality example

3. Installation has 1 Heat S-Is [(B)] with 10TJ heat imported. Errors are identified as:

- 3.5TJ individual overstatement in S-I(B) – this is 35% of the imported heat to the S-I

Total error is: +3.5TJ

The overall error is : (+3.5/100)*100 = +3.5% of total heat value for the installation

Result = Not quantitatively material, BUT……

For both examples (2) and (3) above, if further investigation finds:

- uncorrected non-compliance &/or non-conformance affects the data calculation process; and
- If the verifier considers them significant (ie likely to influence the user of the data)

Result = Quantitatively material = Entire report cannot be verified as satisfactory

Verifiers need to think carefully about qualitative aspects….. They can't be ignored!

Material issue on qualitative analysis of a finding can over-ride a non-material issue on the quantitive analysis of the finding

European Commission

Questions and comments from audience

Conclusions of the training

12.25 – 12.30

European Commission

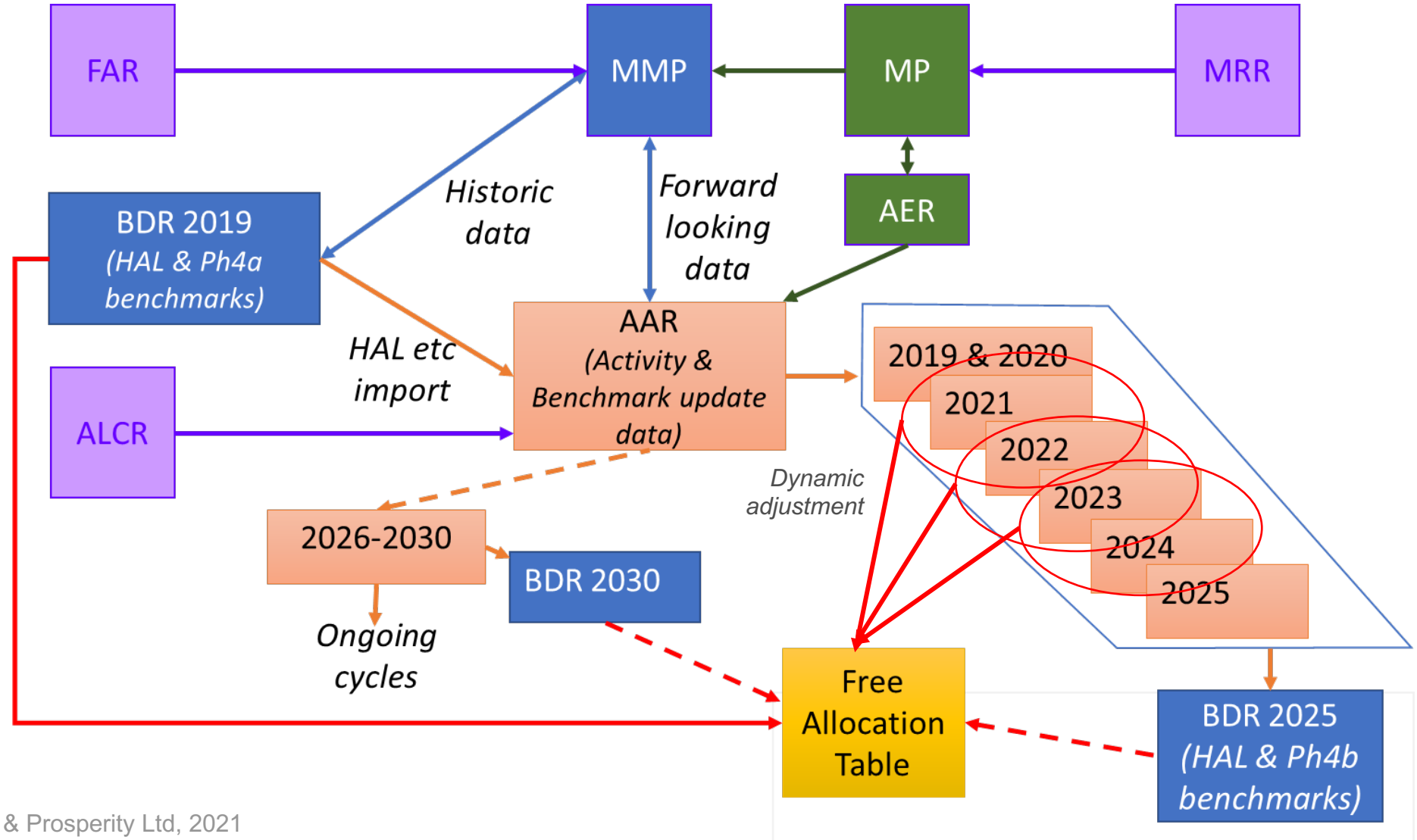
Key Conclusions

- Time allocation depends on the circumstances and concrete factors. Different factors apply for ALCR verification compared to AER verification. There is no common tool which you can use to calculate the time for ALCR but common principles apply as to how you might approach it
- GD4 on verification of allocation data provides more information on factors relevant for time allocation
- Some challenges will be excepted in 2022 as the emission report and annual activity level reports will have to be submitted by the same deadline
- It is therefore important to start the verification early before the end of the reporting year (e.g. checking control activities in 2021)

Key Conclusions

- Verifier and CA roles in identifying & reporting non-compliance need to be clear
  - MMP is the starting point but the verifier will also have to do cross checks against FAR
  - Any identified non-compliance must be reported in verification report, even if issue is approved in MMP
  - Verifiers have to maintain professional scepticism and be alert to potential issues
- Heat Benchmark data verification is complex and requires specific checks – additional guidance and training would be welcomed
- Some elements are the same for ALCR and AER verification, other elements are different because of specific characteristics in the data and BM concepts
  - Tailored plausiblity checks needed to spot errors in data sets and ALCR reports
  - Same materiality principles apply but the data to which materiality level relates differ and the impact of the factors in the qualitative assessment of materiality can differ

Relationship between parts of the ETS



European Commission

Lunch 12.30 – 14.00

European Commission

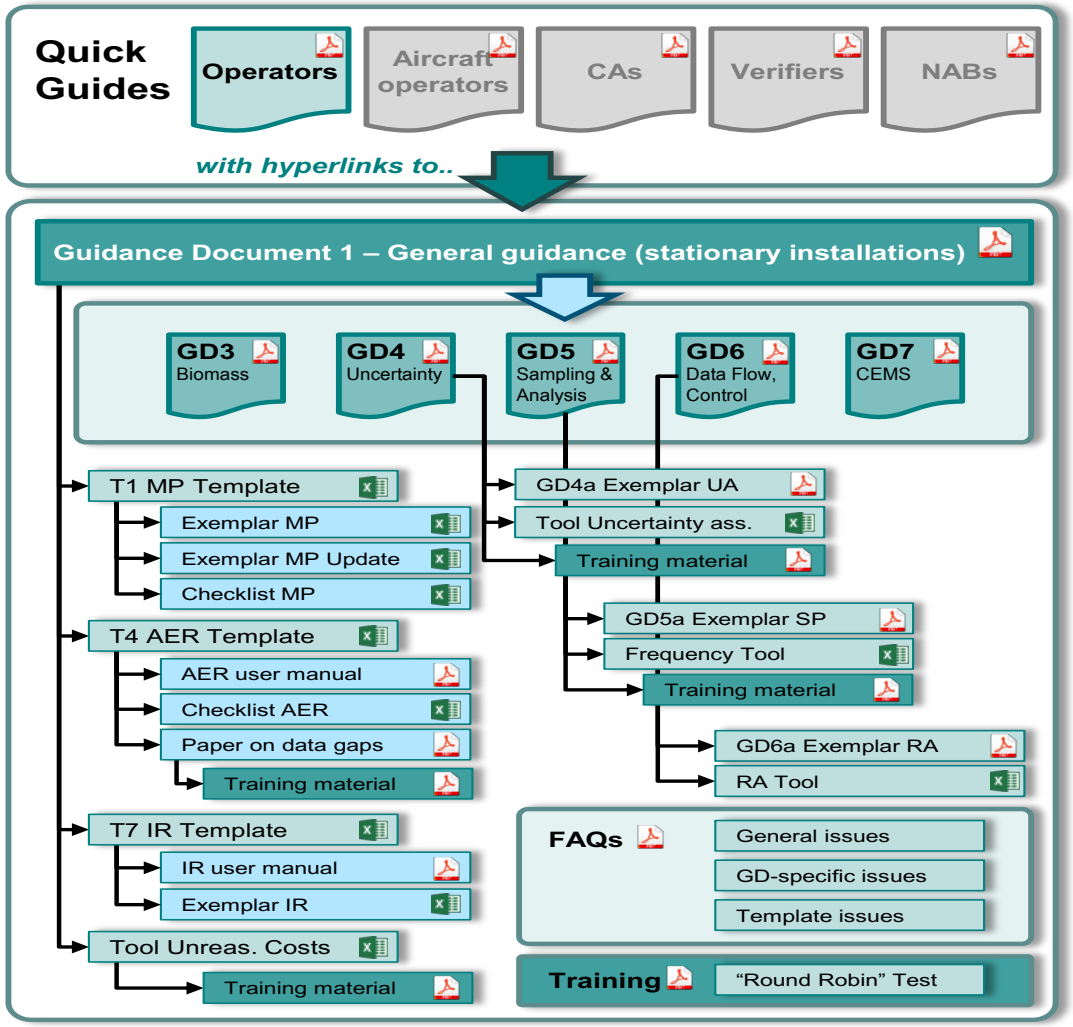
AV training event

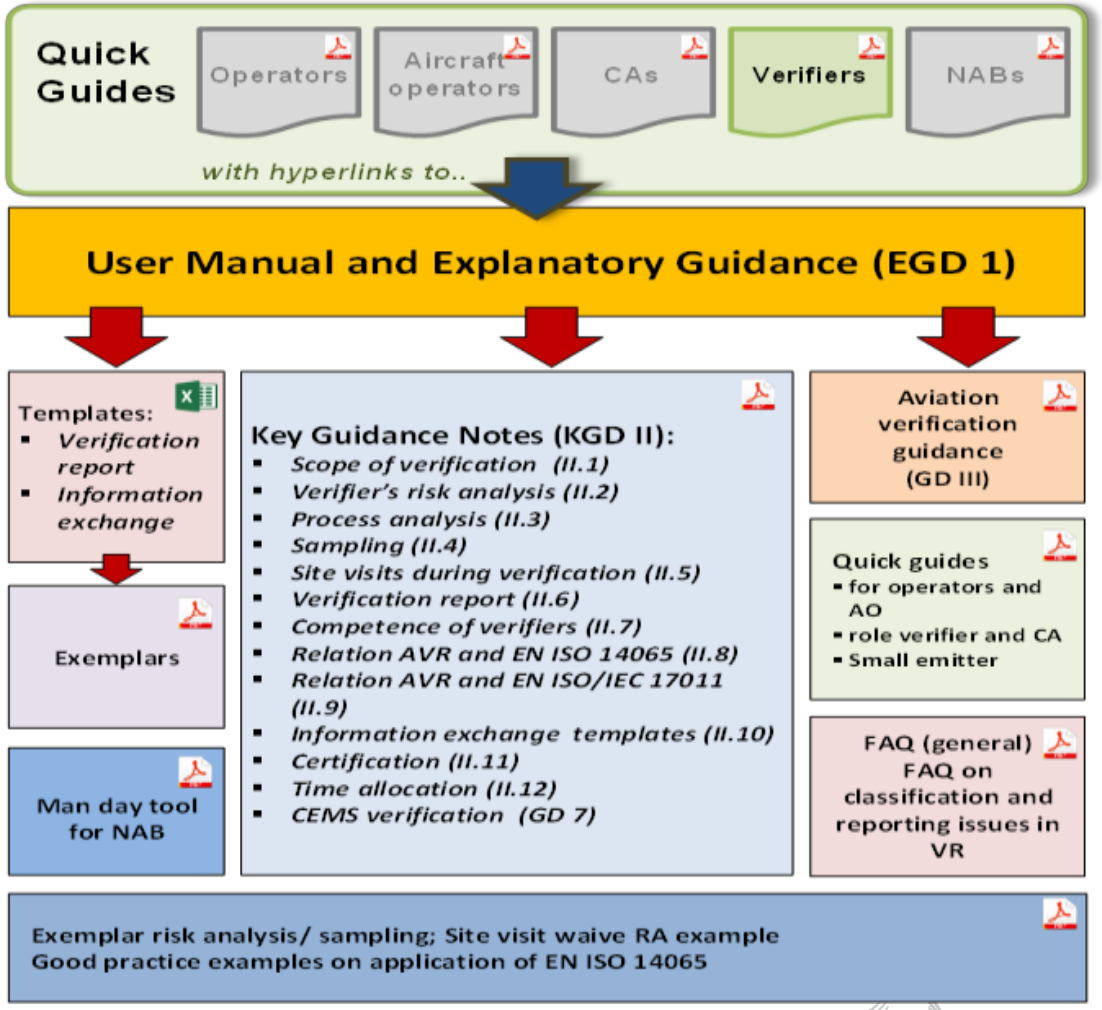
UPDATE OF GUIDANCE MATERIAL

Machtelt Oudenes SQ Consult

AV training event
16 September 2021

Existing MRVA Guidance material





European Commission

Why updating guidance material?

- Revisions of MRR and AVR for the fourth trading period
- Better alignment with other legislation such as FAR and ALCR
- Improving consistency with regulations and between guidance documents
- Clarification of issues that caused interpretation problems
- New developments such as CORSIA and Swiss Linking
- Update links and references, correction of typos

Impact on EGD I and GD III

Common revisions to align with MRR and AVR

- Section on how new rules impact guidance
- Clarification of how to deal with non-compliance & follow-up on issues reported by verifier
- Update of information to include in internal verification documentation
- Editorial changes & new references/links

Specific updates in EGD I

- Ch. 5 on impartiality
- Section 5.3 on rotation of lead auditor
- Ch. 10 on revised information exchange rules

Specific updates in GD III

- Clarification on impact of CORSIA implementation
- Clarification on impact of Swiss Linking
- Clarification of interpretation of site
- Align Ch. 5 with MRR & AVR (e.g. biofuels, fuel density, uncertainty, how to verify CORSIA & EU ETS)
- Ch. 6 on small emitters to align with ETS Directive and AVR
- Ch. 8 on rotation of lead auditors

Update KGN II.1 - KGN II.4

- Editorial updates in KGN II.1 on scope and KGN II.2 on risk analysis
- KGN II.3 on process analysis
  - ✓ Role of the verifier in checking biomass rules under new MRR and RED II Directive
    - Compliance with sustainability/GHG savings criteria if biomass is zero rated
    - Completeness checks on biomass and other aspects related to biomass
  - ✓ Section 4.4 has become redundant because of ALCR verification
  - ✓ Overall update of examples to new MRR requirements
- Align KGN II.4 on verification sampling with AVR

Impact on KGN II.5 - KGN II.6

- KGN II.5 on site visit
  - ✓ New section on virtual site visits:
    - Clarification on conditions for carrying out Article 34A virtual site visits
    - Approval by CA and information to provide to CA
    - When to allow authorisation without approval and what conditions apply
    - Role of the NAB
  - ✓ Clarification of criteria for waiving site visits under Article 32
  - ✓ GD4 on verification of allocation data provides guidance on site visits for ~~in~~ ALCR verification
- Align KGN II.6 and verification report with AVR & latest developments
  - ✓ Additional items to report because of new rules/ Swiss Linking

Impact on KGN II.7 – KGN II.10

- KGN II.7 on competence criteria
  - ✓ Alignment with CORSIA SARPs → clarification of competence criteria
  - ✓ GD4 on verification of allocation data provides guidance on competence criteria for verification of baseline data reports and ALC reports
- KGN II.8 and KGN II.9
  - ✓ Updated because of revisions to ISO 14065 & ISO 17011, and new standard ISO 17029
- KGN II.10 on information exchange requirements and templates
  - ✓ Updated for new AVR rules (e.g. updated work programme & additional information in Management Report)
  - ✓ Clarification on the detail to be included in templates
  - ✓ Extended scope of templates to include verification of allocation data

Impact on KGN II.12, FAQ & other material

- KGN II.12 on time allocation
  - ✓ Updated certain time allocation factors in line with new MRR and AVR
  - ✓ Time allocation for BDR & ALCR verification in GD4 on verification of allocation data
- Updated other material to align with new AVR
  - ✓ Frequently Asked Questions
  - ✓ Good practices on impartiality and application of ISO 14065
  - ✓ Site visit waiver tool and man day table
  - ✓ Exemplars

Questions and comments from audience

Presentation

14.30 – 14.45 : NAB’s experiences

Peter Hissnauer, EU ETS Network Group European Cooperation for Accreditation

European Commission

TRAINING WEBINAR ACCREDITATION & VERIFICATION
16 SEPTEMBER 2021 – EC DG CLIMATE ACTION

NAB's experiences:
Virtual Site Visits
Verification of Annual Activity Level Data

Peter Hissnauer
EU-ETS Network Group in the Certification Committee of EA
European Cooperation for Accreditation

EUROPEAN ACCREDITATION

EXPERIENCES ON VIRTUAL SITE VISITS

Verification period AER 2019:

During first Covid-19-Wave the use of Virtual-Site-Visits (VSV) was limited since most onsite verifications have been completed by March 2020. Guidance for Remote Auditing was available from International Accreditation Forum Network IAF:

- **IAF ID3:2011** Informative Document on Management of Extraordinary Events or Circumstances Affecting Abs, CABs and Certified Organisations.
- **IAF MD 4:2018** Mandatory Document for the Use of Information and Communication Technology (ICT) for Auditing / Assessment Purposes.

VBs were requested to update procedures and competencies on VSV-processes/ Remote Auditing including extended risk analysis, applicable IT-solutions, data security and protection, etc. (see KGN II.5).

Experiences on VSV/Remote Audits have been made in other Verification schemes (MRV-Maritime-Scheme, CORSIA, etc.).

EXPERIENCES ON VIRTUAL SITE VISITS

Verification period AER 2020 & AALD 2019/2020:

Verifications using VSV from 1st Jan. 2021 onwards have to consider new Art. 34a of AVR 2018/2067 and KGN II.5:

"By way of derogation from Article 21(1), where serious, extraordinary and unforeseeable circumstances, outside the control of the operator or aircraft operator, prevent the verifier from carrying out physical site visits and where these circumstances cannot, after using all reasonable efforts, be overcome, the verifier may decide, subject to approval of the competent authority in accordance with paragraph 3 of this Article, to carry out a virtual site visit. …"

The use of VSV was lower than expected:

- (parts of) site visits have already been carried out during Oct.-Dec. 2020
- Verifiers prefer to conduct site visits – or combination of VSV + site visits

EUROPEAN ACCREDITATION

EXPERIENCES ON VIRTUAL SITES VISITS

Results from NAB-witnessing of VSV:

Overall performance of VSV has been improved in verification period 2021 based on experience and training efforts made in 2020.

To reduce the verification risk to an acceptable level (reasonable level of assurance that the emission report is free from material misstatements) the VSV has to be included in the risk analysis (examples): access to evidences on primary data, activity data, availability of operators staff, IT-tools for remote access, camera tools for onsite inspection, documentation of evidences (see KGN II.5).

Notification templates AVR Art. 77 were used to identify verifications using VSV.

VSV were overstrained when applied to (examples) complex installations with various cross-installation material-& heat flows or when complex data interfaces e.g. from the central process control system or from central installation control room.

Advantage of VSV: observers / trainees can be included easily.

EXPERIENCES ON VERIFICATION AALD

Preparation for verification AALD 2019/2020 started in 2020 requesting the VBs to conduct training of verifiers & reviewers (regulation, guidances) and extension/completion of VB-process (pre-contractual obligations, time allocation, risk analysis, verification, independent review, separate documentation of AALD-verification).

The MS-deadlines for submission of verified AALD-reports differ between End of February – June 2021.

If possible verification of AALD 2019/2020 has been combined with verification AER 2020 – however, not all operators have completed AALD-reports at audit date and post-verifications have to be scheduled within remaining period.

The use VSV at in post-verifications was common.

VB have been requested to update the notification templates AVR Art. 77 on verifications AALD 2019/2020 for sampling purposes (NAB-witnessing, reviews).

EUROPEAN ACCREDITATION

EXPERIENCES ON VERIFICATION AALD

Findings from Witnessing AALD-verifications (examples):

Verification time was not sufficient to allow the necessary sampling on activity rates of the allocation elements and the heat / power consumption of the allocation element with product emission value and the corresponding measuring equipment (NC on AVR Art. 9 + 13 as verification plan could not completed).

Verifier has not identified that amount of heat used for the manufacturing of the product in the AALD-report was not calculated correctly and the method for calculation the quantity was not included in the AALD-report and in the approved methodology plan.

See other findings as discussed in the morning training session.

The findings and feedback from CA (according to AVR Art. 73) will be used in trainings of NABs and VBs to get prepared for Verification period 2022.

EUROPEAN ACCREDITATION

THANK YOU FOR ATTENTION - QUESTIONS?

Peter Hissnauer
EU-ETS Network Group in the Certification Committee of EA
European Cooperation for Accreditation

Peter.hissnauer@dakks.de

Questions and comments from audience

Discussion

14.45 – 15.50: Verification topics

Moderator: Machtelt Oudenes SQ Consult

European Commission

Discussion in the afternoon

The discussion in the afternoon focussed on the following topics:

- Experiences with virtual site visits
- Verifier capacity
- Questions from the audience on verification of annual activity level data

Key conclusions discussion

- In 2021 there were in principle no real problems encountered with virtual site visits
  - Virtual site visits have limitations so these should not become the common standard.
  - Article 21 AVR requires physical site visits and virtual ones are only allowed under the conditions of Article 34a of the AVR in the case of force majeure.
  - Some participants mentioned that hybrid site visits could be an option in future, in particular for small and simple installations and when there is familiarity with the site
- It is important to train:
  - New auditors and lead auditors to increase capacity and competence
  - Operators to increase quality of monitoring and procedures
  - NAB assessors to properly assess competence of auditors

Thank you for your attention

Consultant core team contacts:

M.Oudenes@SQConsult.com; L.Candlin@sqconsult.com; sven.starckx@carbonci.com

M.Voogt@SQConsult.com (project lead)

Christian.Heller@Umweltbundesamt.at

Hubert.Fallmann@Umweltbundesamt.at

Commission contact:

CLIMA-MRVA@ec.europa.eu

European Commission