



Session #3:
CORSIA MRV System:
Reporting and verification of CO₂ emissions

**Experiences from the Small Scale Implementation project
on reporting and verification of CO₂ emissions**

Part 1: Emissions Monitoring Plan (yesterday)

- Project insights
- Generic feedback
- Specific feedback

Part 2: Emissions Report (today)

- Project insights
- Generic feedback
- Specific feedback

Phase 2 (Dec 2017 to Mar 2018): Emissions Reporting and Verification

Dec 2017 / Jan 2018:

Trainings of States and operators on emissions reporting and verification

5 Feb 2018:

Submission of Emissions Report by operators

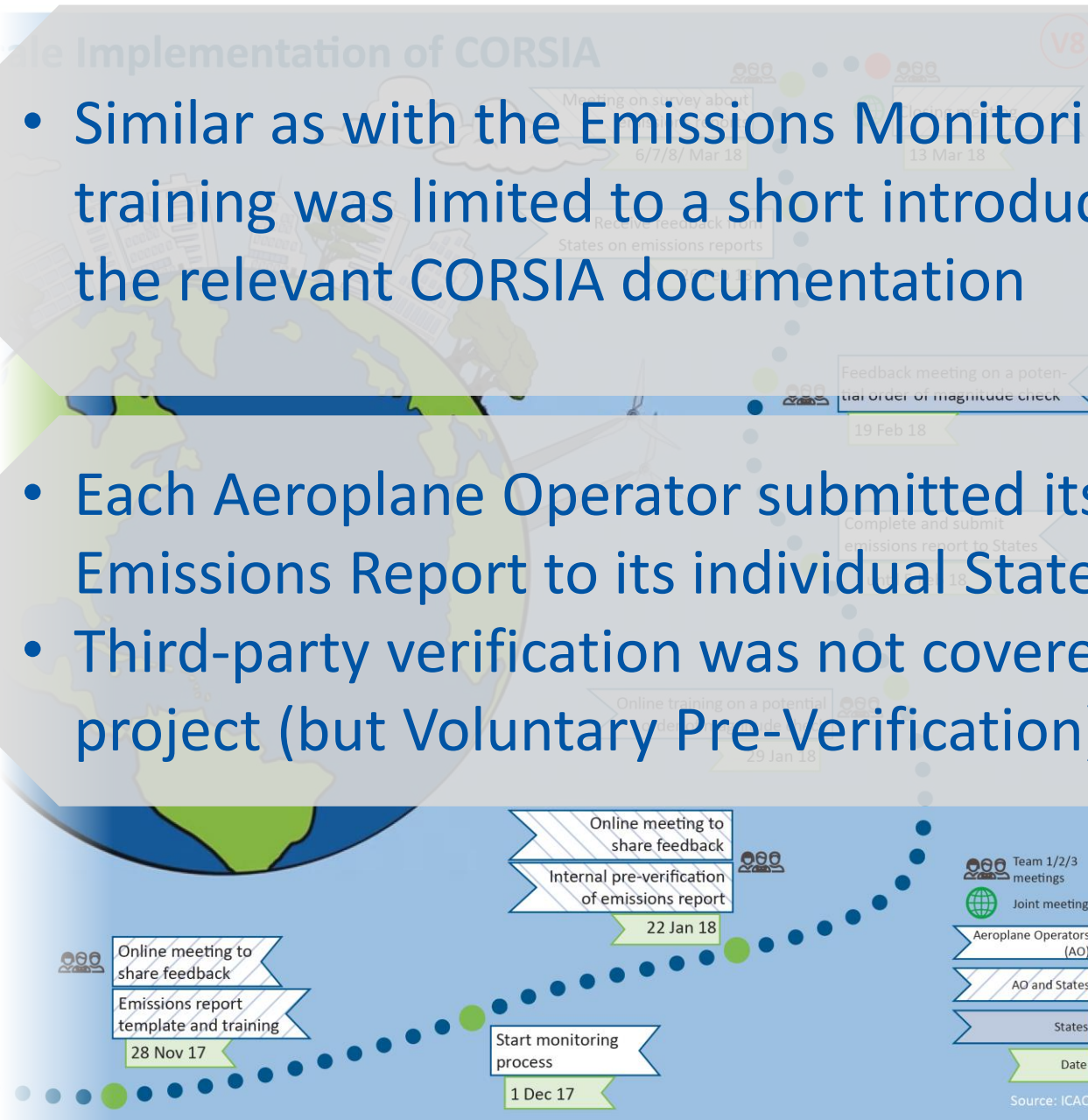
26 Feb 2018:

Verification (Order of Magnitude Check) of Emissions Report by States

13 Mar 2018:

Closing meeting

- Similar as with the Emissions Monitoring Plan, training was limited to a short introduction of the relevant CORSIA documentation
- Each Aeroplane Operator submitted its Emissions Report to its individual State
- Third-party verification was not covered in the project (but Voluntary Pre-Verification)



Phase 2 (Dec 2017 to Mar 2018): Emissions Reporting and Verification

Dec 2017 / Jan 2018:

Trainings of States and operators on emissions reporting and verification

5 Feb 2018:

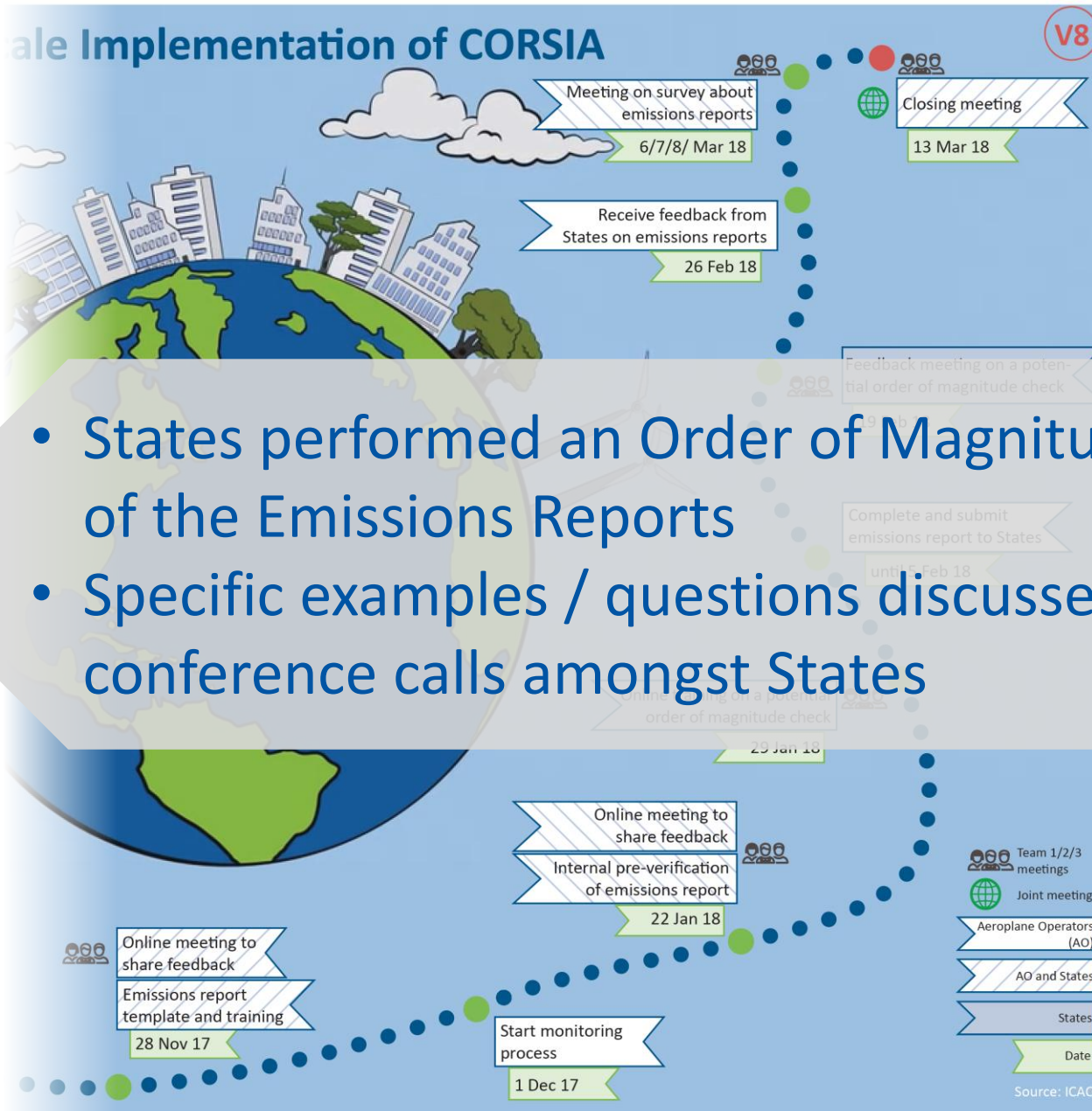
Submission of Emissions Report by operators

26 Feb 2018:

Verification (Order of Magnitude Check) of Emissions Report by States

13 Mar 2018:

Closing meeting



- States performed an Order of Magnitude Check of the Emissions Reports
- Specific examples / questions discussed during conference calls amongst States

Part 1: Emissions Monitoring Plan (yesterday)

- Project insights
- Generic feedback
- Specific feedback

Part 2: Emissions Report (today)

- Project insights
- **Generic feedback**
- Specific feedback

Question

Completing

(Aeroplane Operator) /

Approving

(State)

***the Emissions Report
was...***

- simple*
- manageable*
- challenging*

Key take away

- All State participants and >85% of Aeroplane Operator participants assessed the Emissions Report approving/completing as **simple** and/or **manageable**

Note

- Individual needs and therefore effective support of States and Aeroplane Operators can be different
- Coaching, capacity building and working together is important

Question (State)

To what extent was the provided guidance on the Order of Magnitude Check helpful?

1 2 3 4 5

1 = insufficient

to

5 = very helpful

Key take away

- All States assessed the provided guidance material as **very good** or **good**

Note

- Priority setting important
- Each State is free to set its own emphasizes within the Order of Magnitude Check

Question
(Aeroplane Operators)
***Time required for
Voluntary
Pre-Verification***

5-15 *hours*

Key take away

- For nearly all of the participating Aeroplane Operators, Voluntary Pre-Verification took **5 to 15 hours**

Note

- Time requirements depending on size and complexity of the operations
- Examples for main drivers: chosen monitoring approach, size of fleet and operation

Question
(Aeroplane Operators)

To what extent could you agree to the following statements?

1 2 3 4 5

1 = disagree

to

5 = totally agree

We believe that the Voluntary Pre-Verification will help us to **reduce costs** of external verification

The approach of a Voluntary Pre-Verification **supported us** in **improving the quality** of our reported **data**

Question

(Aeroplane Operators)

To what extent could you agree to the following statements?

1 2 3 4 5

1 = disagree

to

5 = totally agree

Key take away

- Concept of a Pre-Verification is being welcomed by Aeroplane Operators

Note

- Actual design of the Voluntary Pre-Verification depends on internal factors at the Aeroplane Operator (e.g. QA department, internal training and the level of IT integration)

Question

Time required for completing (Aeroplane Operator) / approving (State) the Emissions Report...

2-8

hours

Key take away

- For most operators, completing the ER took **2 to 8 hours**
- For all States, approving the ER took **2 to 4 hours**

Note

- Time requirements depending on size and complexity of the operations
- Examples for main drivers: size of fleet and operation (no. of flights, aerodrome pairs)

Question (State)

Availability of emissions data on an Aerodrome Pair Level is a core driver for an efficient OoM Check?

1 2 3 4 5

1 = irrelevant

to

5 = very important

Key take away

- Most States indicated that a reporting on an aerodrome pair level is important to improve the effectiveness and efficiency of the Order of Magnitude Check

Question

(Aeroplane operator)

Which of the options to report emissions is less error prone?

- State Pair level*
- Aerodrome pair level*
- Does not make a difference*

Key take away

- Slight tendency for aerodrome pair reporting

Note

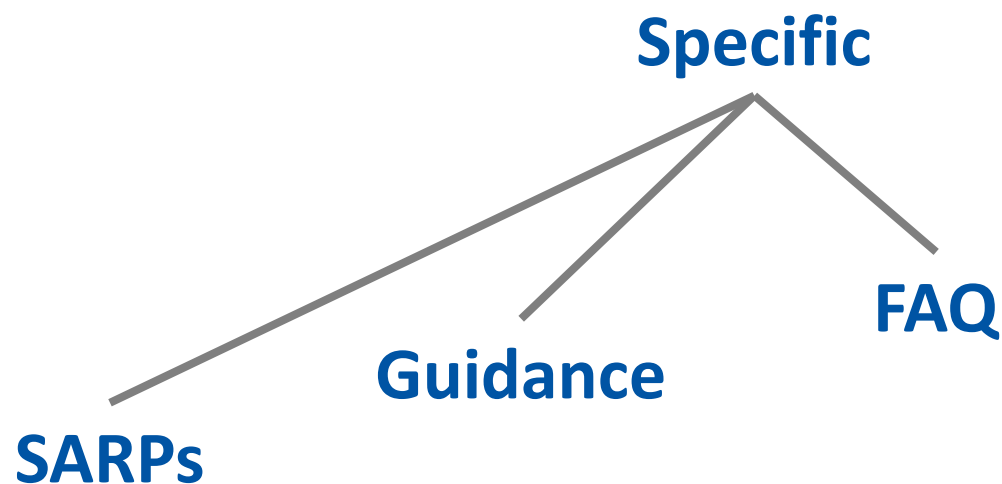
- Individual situation of operator (complexity and size of operation) might have an influence

Part 1: Emissions Monitoring Plan (yesterday)

- Project insights
- Generic feedback
- Specific feedback

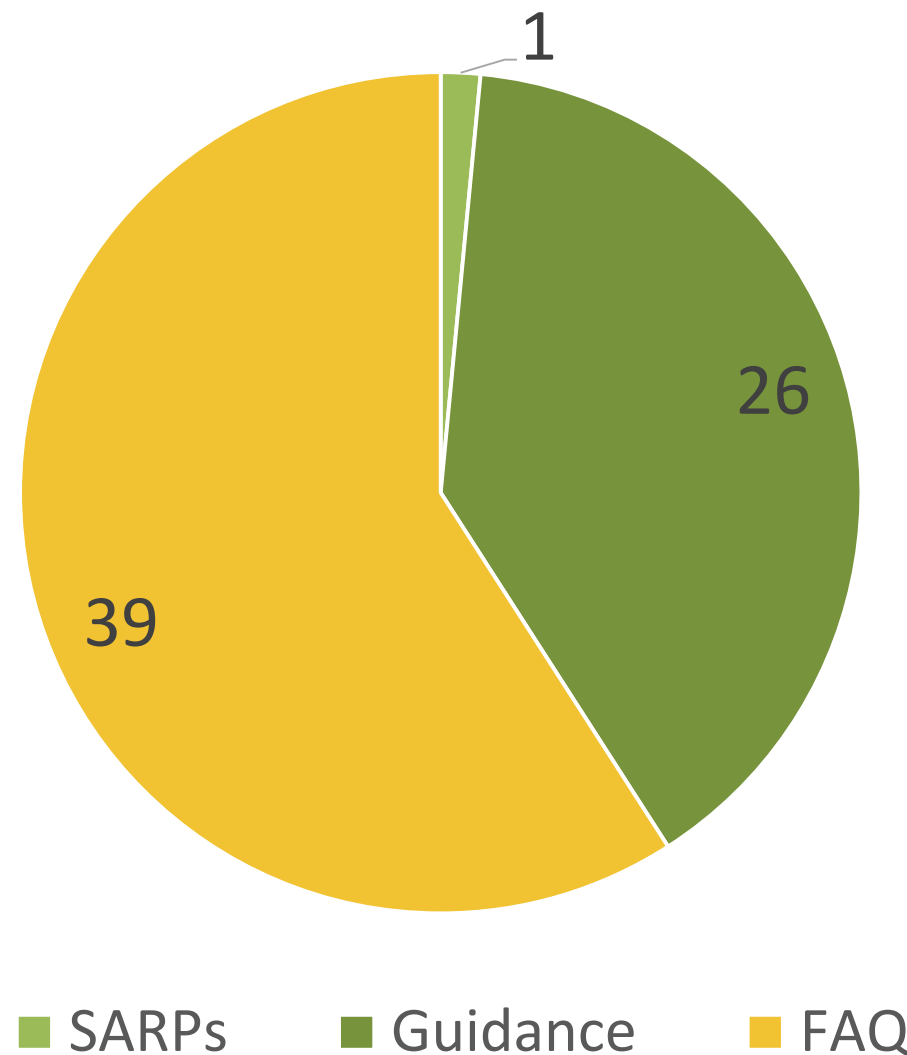
Part 2: Emissions Report (today)

- Project insights
- Generic feedback
- Specific feedback



Approach for this presentation

- Most often very specific feedback
- Examples for each of the three categories



Feedback (MRV provisions)

States Order of Magnitude

Check: For States that are administrating only very few operators, the effort of administration seems to be rather high, as the knowledge and training of staff needs to be the same as for States administrating a higher number of operators.

Key take away

- Concerns have to be taken into account (see note below)
- For the MRV provisions in the SARPs **no critical finding** could be identified
- **Suitable and practical to implement**

Note

- SARPs allow for Administrative Partnerships between States to share the administrative burden, to increase the efficiency and to decrease costs

Feedback (future guidance)

How to quantify the percentage of data gaps and assess whether it exceeds the threshold is somewhat confusing.

Easy to populate the data fields. However, we were not able to include any remarks in the template as most of the fields were unalterable.

Key take away

- Excellent input to produce future guidance on CORSIA
- Some editorial changes to improve understanding in provided material

Note

- The vast majority of issues can be resolved on a short term basis

Feedback (FAQ)

Does the Voluntary Pre-Verification **substitute** the **3rd party verification**?

Is an **individual approach** concerning estimation/closing of data gaps also possible?

Is it possible to **change the Fuel Use Monitoring Method** (different method for reporting than described in monitoring plan)?

The Voluntary Pre-Verification is a recommended tool to prepare for the mandatory 3rd party verification.

CORSIA Implementation Elements include an estimation tool called CERT (ICAO CORSIA CO₂ Estimation and Reporting Tool). There is no individual approach allowed.

Feedback (FAQ)

Does the Voluntary Pre-Verification **substitute** the **3rd party verification**?

Is an **individual approach** concerning estimation/closing of data gaps also possible?

Is it possible to **change the Fuel Use Monitoring Method** (different method for reporting than described in monitoring plan)?

In principal, the Fuel Use Monitoring Method approved in the Emissions Monitoring Plan has to be used for monitoring and reporting. A change in the monitoring method would require an updated Emissions Monitoring Plan (material change, new approval necessary).

Feedback (FAQ)

Does the Voluntary Pre-Verification **substitute** the **3rd party verification**?

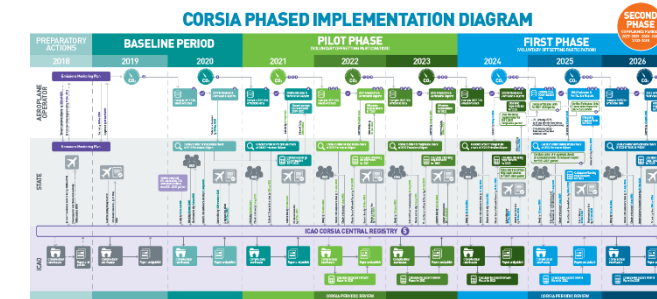
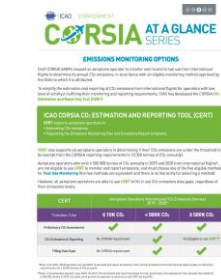
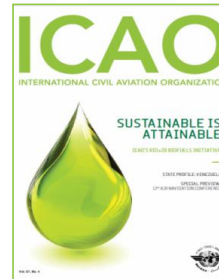
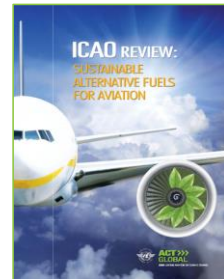
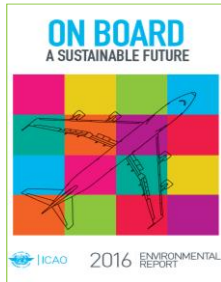
Is an **individual approach** concerning estimation/closing of data gaps also possible?

Is it possible to **change the Fuel Use Monitoring Method** (different method for reporting than described in monitoring plan)?

Key take away

- Input for the preparation and refinement of FAQs on CORSIA to clarify main questions

- **No significant findings** which would prevent the implementation of MRV provisions regarding the Emissions Report (according to the current draft SARPs)
- Lessons learned during the project will be used to create and refine FAQs and future guidance material to support the implementation of CORSIA.
- Communication and sharing of experiences will be key during implementation.
- **CORSIA MRV is feasible for implementation!**



For more information, please visit our website: <http://www.icao.int/env>