Global Aviation Dialogues (GLADs)
on Market-Based Measures to address Climate Change

Key Elements of an Aviation MBM

Environment, Air Transport Bureau
International Civil Aviation Organization (ICAO)

Lima, Peru - 9 April 2015

- Key Elements of an Aviation MBM
  - A scope
  - An objective
  - A baseline
  - A common approach for all participants to contribute to the attainment of the objective
  - Monitoring, reporting and verifying emissions
  - Environmental integrity of emissions units
  - Registry
  - Compliance cycle
  - Enforcement mechanism
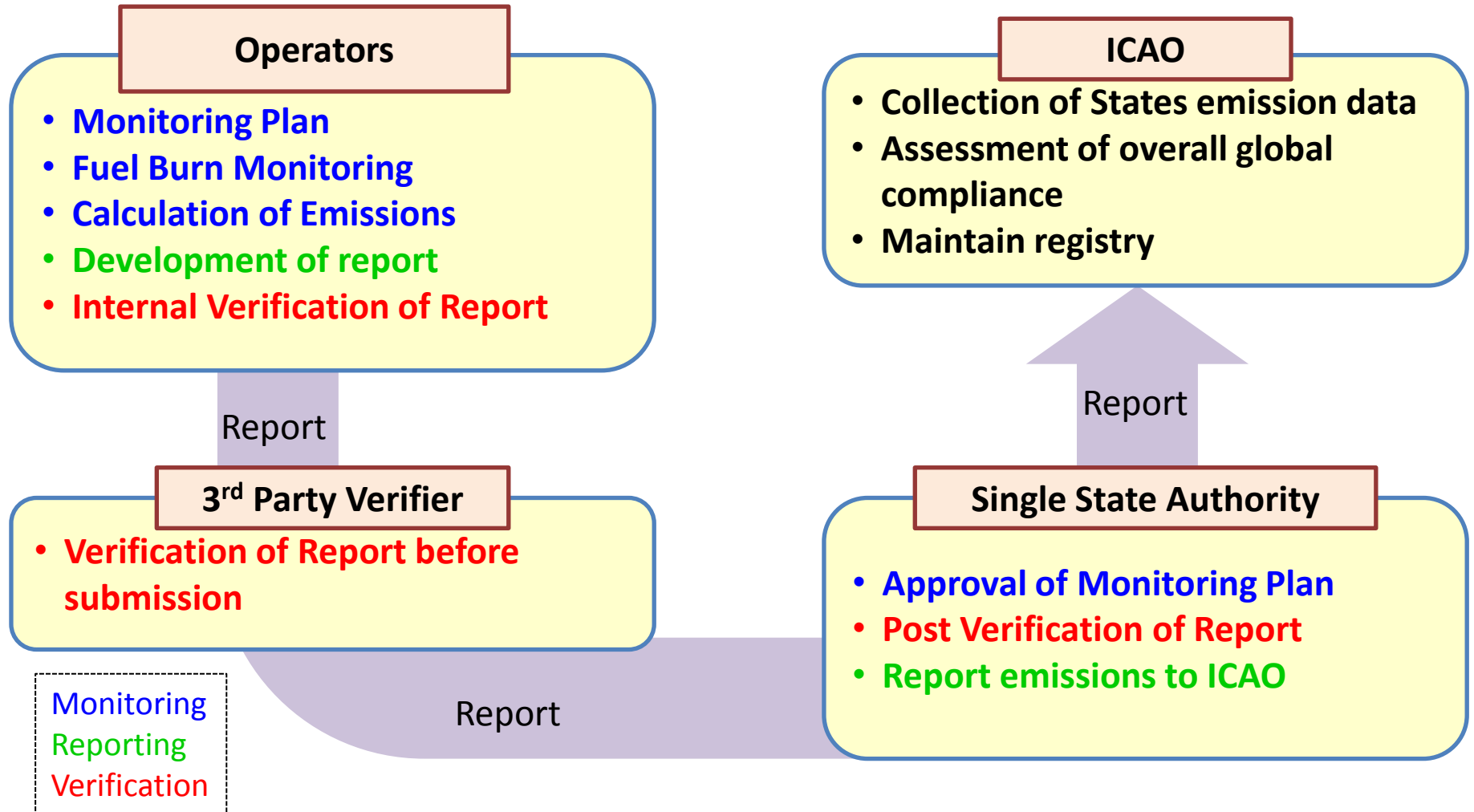- Planning to A39

2

- Scope

  – Type of greenhouse gas emissions

    - CO_2 only

  – Type of flights

    - International flights

  – Attribution of emissions in international airspace

    - Every international flight is only covered once for its full length, to avoid double counting

  – Sustainable alternative fuels

    - Provisions for accounting emissions from flights using sustainable alternative fuels needs to be defined (in the current CAEP Work Programme)

3

- Objective

  – ICAO's aspirational goal is carbon neutral growth from 2020

- Baseline

  – International aviation emissions in 2020

- A common approach for all participants to contribute to the attainment of the objective:

  – Distributes obligations among operators

  – Adjustments and/or exemptions might be needed

4

- Monitoring, reporting and verifying emissions
  - Purpose: to collect data on international aviation emissions annually and compare emissions against the baseline
  - Components:
    - Monitoring of fuel use and calculation of CO_2 emissions (1 tonne fuel burn = 3.16 tonnes CO_2 emissions)
    - Reporting of emissions data, a basis to establish annual obligation
    - Verification of reported emissions data to ensure completeness and avoid misstatements
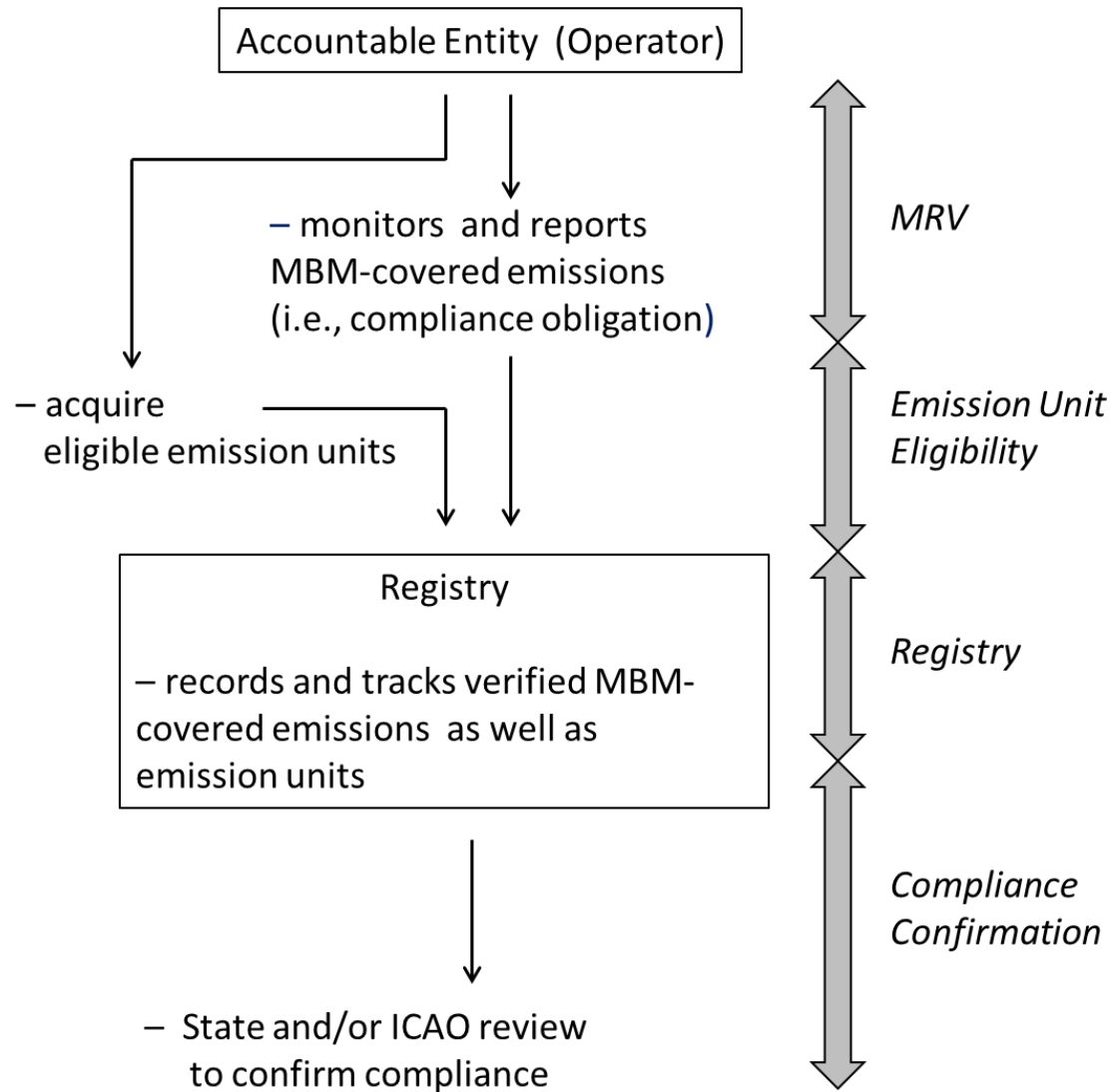
5

Operators

- **Monitoring Plan**
- **Fuel Burn Monitoring**
- **Calculation of Emissions**
- **Development of report**
- **Internal Verification of Report**

ICAO

- **Collection of States emission data**
- **Assessment of overall global compliance**
- **Maintain registry**

Report

3rd Party Verifier

- **Verification of Report before submission**

Monitoring
Reporting
Verification

Report

Report

Single State Authority

- **Approval of Monitoring Plan**
- **Post Verification of Report**
- **Report emissions to ICAO**

6

- Environmental integrity of emissions units

  – Quality: emissions units must correspond to actual emission reductions (e.g.: real, permanent, additional, verified)

  – Quantity: emissions units must not be counted for more than one purpose in this MBM and/or other MBMs (no double counting)

  – Compliance: need to cancel an adequate amount of emissions units to offset emissions above the baseline

- Registry

  – Track compliance of participants of the MBM

  – Avoid double counting by recording all transactions centrally

  – Help assess progress towards the goal

  – Maintains transparency for participants and stakeholders

7

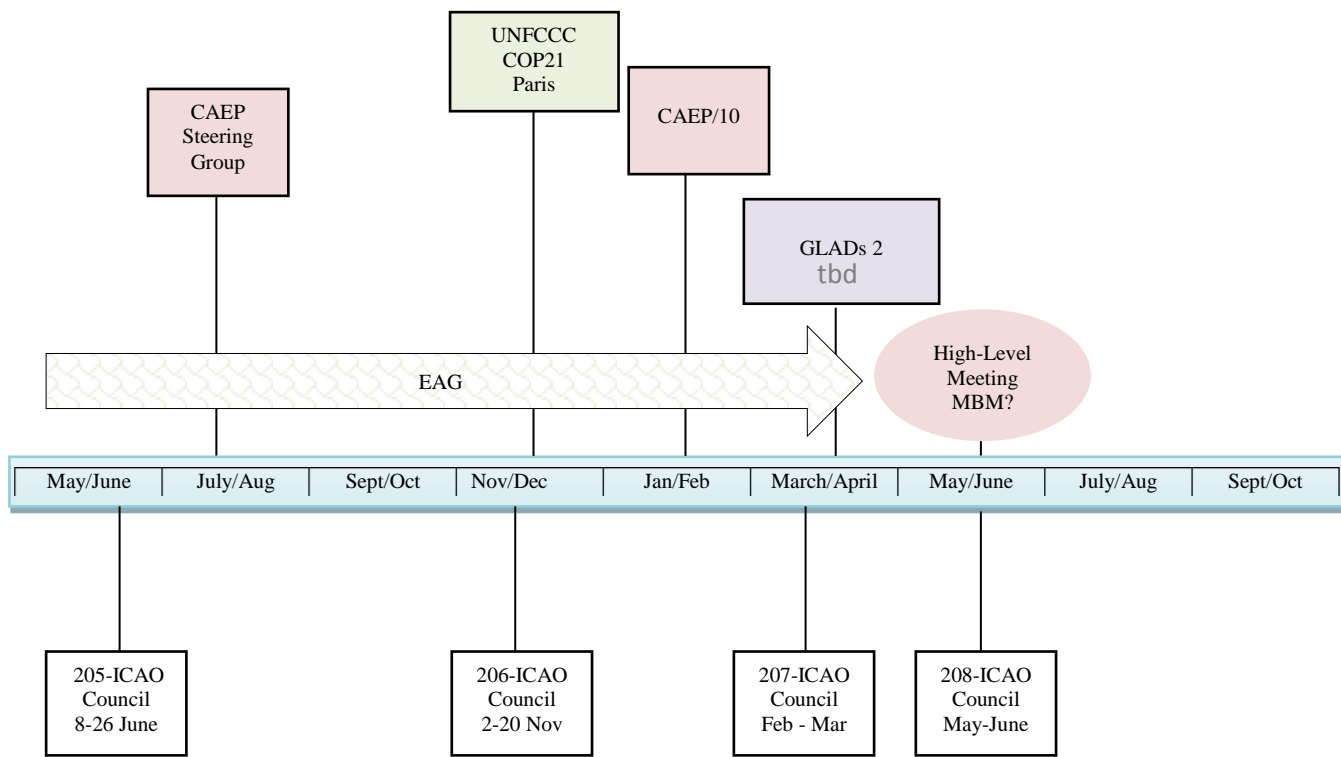# There are two main types of emissions units, and a variety of issuers worldwide

Type of unit	Definition	Examples of issuers
"Allowance"	Units issued by an ETS Correspond to the emissions cap established by the ETS	National/subnational governments
"Credit"	Units issued by a crediting programme Correspond to emissions reductions that have been monitored, reported and verified	UNFCCC (CDM) National/subnational governments Third parties/Voluntary Markets

8

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Accountable Entity (Operator)

– monitors and reports
MBM-covered emissions
(i.e., compliance obligation)

– acquire
   eligible emission units

Registry

– records and tracks verified MBM-
covered emissions as well as
emission units

– State and/or ICAO review
   to confirm compliance

MRV

*Emission Unit
Eligibility*

Registry

*Compliance
Confirmation*

9

- Compliance cycle
  - Monitoring of emissions
  - Reporting of emissions
  - Verification of emissions
  - Cancellation of emissions units (compliance)

- Enforcement mechanism
  - States agree to relevant Assembly Resolution and potential ICAO standards
  - It is expected that States will then adopt provisions to implement and enforce the scheme for covered operators

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