# **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)

Preliminary Version - 19 March 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



- Scope
  - Type of greenhouse gas emissions
    - CO<sub>2</sub> 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)

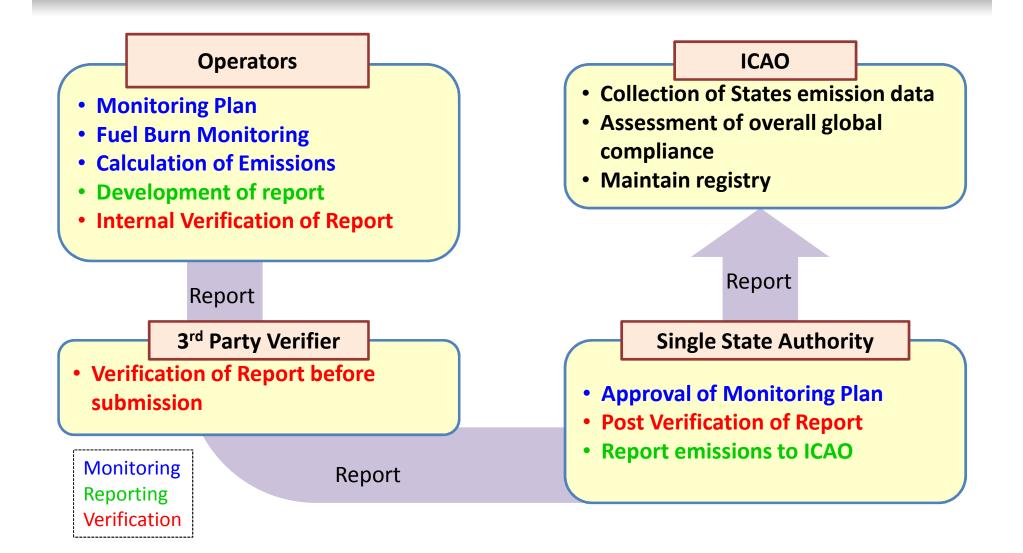


- Objective
  - ICAO's aspirational goal is carbon neutral growth from 2020
- Baseline
  - International aviation emissions in 2020
- A common approach for all participants to contribute to the attainment of the objective:
  - Distributes obligations among operators
  - Adjustments and/or exemptions might be needed



- 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<sub>2</sub> emissions (1 tonne fuel burn = 3.16 tonnes CO<sub>2</sub> emissions)
    - Reporting of emissions data, a basis to establish annual obligation
    - Verification of reported emissions data to ensure completeness and avoid misstatements







- 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

ICAO ENVIRONMENT Example - Emissions Units

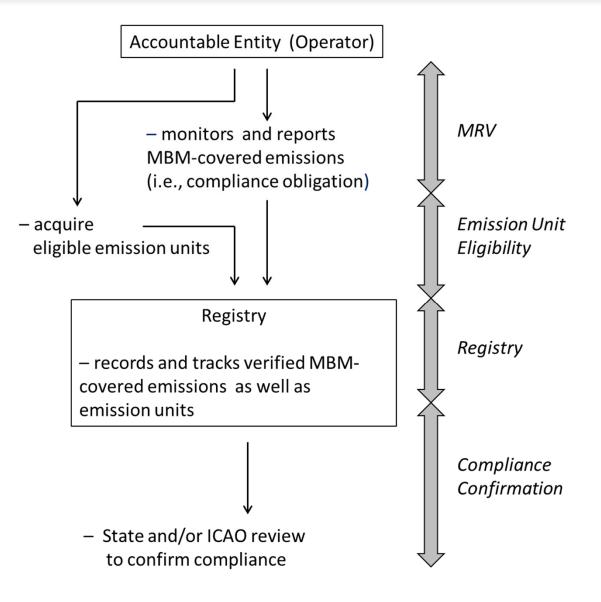
# There are two main types of emissions units, and a variety of issuers worldwide

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	UNFCCC (CDM) National/subnational governments
	reductions that have been monitored, reported and verified	Third parties/Voluntary Markets

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- 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

## ICAO ENVIRONMENT Planning to A39 - 2016

