



International Civil Aviation Organization

**MIDANPIRG STEERING GROUP**

**Third Meeting (MSG/3)**  
*(Cairo, Egypt, 17 - 19 June 2013)*

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**Agenda Item 4: Performance Framework for Regional Air Navigation Planning and Implementation**

**ESTIMATING ENVIRONMENTAL BENEFITS**

*(Presented by the Secretariat)*

**SUMMARY**

This paper seeks support to the Air Traffic Management Measurement Task Force (ATMM TF) in order to prepare the regional environmental benefits report based on the estimated fuel savings accrued from the operational improvements.

Action by the meeting is at paragraph 3.

**REFERENCES**

- MIDANPIRG/13 Report

**1. INTRODUCTION**

1.1 The ICAO General Assembly Resolution A37-19 requested ICAO to develop the necessary tools to assess the benefits associated with operational improvements, for example PBN, CDO/CCO, RVSM, FUA, etc, in order to achieve a global annual average fuel efficiency improvement of 2 per cent until 2020.

**2. DISCUSSION**

2.1 The meeting may wish to note that the operational improvements are key strategy that can be applied to deliver tangible reductions in aircraft fuel consumption and the implementation of operational improvements will generally have benefits in areas such as improved airport and airspace capacity, shorter cruise climb and descend times through the use of more optimized routes, and an increase of unimpeded taxi times. These improvements have the potential to reduce fuel burn and lower levels of pollutants.

2.2 The calculation of aviation emissions is dependent on several different factors including the number and type of aircraft operations, the type and efficiency of the aircraft engines, the type of fuel used, the length of flight, the power setting, the time spent at each stage of flight, and the location (altitude) at which exhaust gases are emitted.

2.3 In this respect ICAO developed the ICAO Fuel Savings Estimation Tool – (IFSET), which can be accessed at <http://www.icao.int/environmental-protection>, to estimate and report fuel savings resulting from national or regional operational improvements through the use of a simple tool.

2.4 The meeting may wish to recall that ICAO MID Regional office held the IFSET Workshop in Cairo, 29 January 2012 which provided States knowledge on the use of the IFSET tool. Furthermore, MIDANPIRG/13 meeting agreed to establish an Air Traffic Management Measurement Task Force (ATMM TF) dedicated to the measurement process, and agreed to Conclusion 13/35 below:

***CONCLUSION 13/35: ESTIMATING ENVIRONMENT BENEFITS***

*That, in order to allow the Air Traffic Management Measurement Task Force (ATMM TF) and the CNS/ATM/IC SG to follow-up the implementation of the ATM operational improvements and estimate the fuel savings accrued from the corresponding improvements on regional basis*

- a) States be urged to:
  - i) use IFSET or a more advanced model/measurement capability available to estimate environment benefits accrued from operational improvements;*
  - ii) send the IFSET reports/the accrued environmental benefits to ICAO MID Regional office on a bi-annual basis.**
- b) IATA to:
  - i) encourage users to support the programme; and*
  - ii) consolidate users' inputs and report the accrued environmental benefits to ICAO MID Regional office on a bi-annual basis.**

2.5 Based on the above ICAO MID Regional Office circulated the State Letter Ref.: AN 6/15 – 13/028 dated 20 January 2013 requesting States to provide the IFSET reports and the accrued environmental benefits, on a bi-annual basis along with consolidated report by **10 August 2013** for review and analysis by the first meeting of Air Traffic Management Measurement Task force (ATMM TF/1). It's to be highlighted, in this respect, that no report has been received by the ICAO MID Regional Office, so far.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) urge States to provide the IFSET the accrued environmental benefits; reports before 10 August 2013;
- b) encourage IATA to provide consolidated users' report on the accrued environmental benefits.