

ENVIRONMENTAL PROTECTION

Introduction

Environmental Protection, to minimize the adverse environmental effects of civil aviation activities, is one of the five strategic objectives of ICAO. With a view to minimizing the adverse effects of international civil aviation on the environment, ICAO formulates policies, develops and updates Standards and Recommended Practices (SARPs) on aircraft noise and aircraft engine emissions, and conducts outreach activities. Information related to the ICAO activities on environmental protection is available on the ICAO website at: <https://www.icao.int/environmental-protection/Pages/default.aspx>

This section presents an estimation of environmental benefits, in terms of fuel saving/CO2 emissions reduction, accrued from the implementation of some ASBU elements in the MID Region.

Estimation of the Environmental Benefits accrued from implementation of ASBU Elements

CAEP/10 conducted an assessment of the potential environmental benefits (fuel savings / CO2) for the period between the start of implementation of ASBU Block 0 modules in 2013 and the planned implementation of such modules in 2018 (end of Block 0). In order to accomplish this task, CAEP developed sets of Rules-of-Thumb for each studied module with the overall intent to provide a conservative estimate of ASBU Block 0 fuel saving benefits. Rules-of-Thumb were developed using existing, publically available data, literature, and assumptions, together with the professional judgment of the analysts. A total of twenty-three (23) rules of thumb have been developed for thirteen (13) ASBU Block 0 Modules.

A Methodology for the Estimation of environmental benefits accrued from the implementation of APTA Thread has been developed, based on the Rules of Thumb and the available traffic data.

The estimation has shown a **total of 46207.2 Mt to 96319.2 Mt** of fuel saving in the MID Region, as a result of the implementation of the APTA Thread, as shown below:

