



Agenda Item 2:

Report of activities of the GESEA and Subgroups

AIRPORT EFFICIENCY PROGRAM

(Prepared by IATA)

SUMMARY

This working paper presents a proposal to insert a new item in the GESEA/SG1 and SG3 working program related to the implementation of an Airport Efficiency Program with aim to enhance the application of new airspace concepts.

References:

- Doc. 4444 – PANS-ATM
- Global Air Navigation Plan

1. Background

1.1 There is a close relationship between runway operations efficiency, aircraft separation applied by TWR/Approach Control and Airspace Design. An optimization of runway occupancy time, the application of the High Intensity Runway Operations (HIRO) and departures from RWY/TWY intersections are examples of preconditions to the optimization of separation standards between arrivals, departures, and arrivals/departures. This enhanced separation standards will allow an optimum airport acceptance rate and, in consequence, a reduction of airborne/ground holdings, decrease of radar vectors and better flight profile. In this sense the application of Airport Efficiency Program could be considered as a previous requirement for a successful implementation of a new airspace concept.

2. Analysis

2.1 There are several concepts/tools that can be applied separately or in sets to achieve the optimization of Runway Operations:

- a) Runway Occupancy Time Reduction Program;
- b) High Intensity Runway Operations;
- c) Reduced Runway Separation Minima (RRSM);
- d) Take-off from intersections;
- e) Preferential Runway Concept;
- f) Use of OMINIDIRECTIONAL Departures;
- g) Reduction of separation on final approach with take-off between two arrivals (single or mixed runways); Reduction of separation on final approach between successive approaches (runways used just for arrivals).
- h) Independent Parallel Operations (Approaches and Departures) under VMC

2.2 All these procedures have the objective of reducing the runway occupancy time, to allow a reduction of separation between arrivals, between departure and between arrivals/departures, increasing runway capacity and efficiency, as well reducing ground and airborne holdings.

2.3 It is important to note the importance of optimizing the use of the airport infrastructure, via the application of different separation standards/procedures under different meteorological conditions (VFR, Marginal VFR and IFR) and the application of a robust ATFM Plan.

2.4 There are already examples in the Region, which could be used as benchmarking for other States, such as:

- a) High Intensity Runway Operations (HIRO) in Porto Alegre International Airport (SBPA) – AIC A 11/22.
- b) Independent Approaches under VMC in SCEL - AIP-CHILE VOLUMEN I /AD 2.9-8 - 22 APR 2021.

3. **Suggested actions**

3.1 The Meeting is invited to include the Airport Efficiency Program under the work program of the GESEA/SG1 and SG3, as part of a holistic Airspace Concept Implementation Model.