



ASSEMBLY — 38TH SESSION

ECONOMIC COMMISSION

Agenda Item 43: Aviation Data – Monitoring and Analysis

**DESIGN AND IMPLEMENTATION OF THE AIR TRANSPORT STATISTICAL
INFORMATION SYSTEM (SIETA)**

(Presented by the Bolivarian Republic of Venezuela)

EXECUTIVE SUMMARY

This information paper reports on the design and implementation of the Air Transport Statistical Information System (SIETA) used to automate the collection of data recorded at the main airports by the air service providers operating in the country.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective C – <i>Environmental Protection and Sustainable Development of Air Transport..</i>
<i>Financial implications:</i>	No financial implications.
<i>References:</i>	Integrated Statistics Database (ISDB) ICAO Statistical Programme

¹ Spanish language version provided by Venezuela.

1. INTRODUCTION

1.1 The National Civil Aviation Institute (INAC) of Venezuela, an ICAO Contracting State, has signalled the need to design and implement an air transport statistical information system as a support tool for the work of the Statistical Analysis Section of the Department of Air Transport. The system will be used for the migration from the legacy format to the automated digital aviation information model, the purpose being to extract data from the operation records of air service providers at airports across the country.

1.2 The Chicago Convention mentions the importance of the commercial development of international civil aviation. Article 44 of the Convention calls for the safe and orderly development of international civil aviation throughout the world, and Article 67 establishes the obligation to submit information to the International Civil Aviation Organization.

1.3 This tool arises from the need to optimize the processes for the collection of data on operations by air service providers, which, to date, have been executed on a monthly basis.

1.4 A diagnostic analysis showed that it was necessary to take a different policy approach to capture, validate and control air transport information, in light of the following deficiencies:

- a) inadequate capture of data on air service provider operations;
- b) inconsistent recording of the data;
- c) variables not standardized or statistically validated; and
- d) variables not controlled or monitored.

1.5 With the introduction of the air transport statistical information system (SIETA), daily monitoring has been improved with the following beneficial results:

- a) data are recorded in a standardized format for all users;
- b) the Early Warning System generates statistical graphs and reports (INAC internal data system);
- c) air operation reports can be submitted online from any computer with Internet access, making the instrument user-friendly;
- d) each air service provider can consult its own data in SIETA directly; and
- e) statistical data becomes more available.

2. PRESENT SITUATION

2.1 With SIETA, it is now possible to monitor the performance of air operations in real time, with data reported by the dispatchers of each air service provider and compiled in a central database.

2.2 The system thus provides the necessary operational indicators for decision-making such as passenger movement, operations completed, seats assigned, load factor, punctuality and efficiency in a timely and reliable fashion.

3. **SIETA USERS**

3.1 SIETA has been taken up by all air service providers operating at national airports, which is where the main users supply data to the system. At this time, the main users are:

- a) the statistics coordinators of air service providers;
- b) the flight dispatchers of air service providers;
- c) INAC regional coordinators assigned to airports; and
- d) airport directors.

3.2 The system is also used by the People's Minister for Air and Water Transport, the President of INAC and the staff of the Department of Air Transport, who control, validate, filter and update all information recorded in SIETA.

4. **SCOPE OF COVERAGE**

4.1 Vertical: SIETA is integrated into the Early Warning System as well as INAC internal databases such as Aviation Registry, Aviation Licenses, Domestic Operations and International Operations.

4.2 Horizontal: SIETA is in place at all airports in the country where air service providers conduct operations.

5. **RECOMMENDATIONS**

5.1 Participating States are invited to take note of this information paper and recognize the value of statistical information systems in terms of controlling and monitoring the aviation sector, reducing statistical inconsistencies, producing more timely sector indicators and enhancing the reliability of those indicators.

5.2 ICAO Member States should be aware of the important advances in statistical information systems achieved with the automation of operational processes relating to air traffic flows.

5.3 ICAO Member States should promote and use information technologies to automate air traffic processes for consolidation in the ISDB.