ICAO Aviation Data and Analysis Seminar

10-13 December 2019, Bangkok, Thailand

Objectives

The Seminar will provide an opportunity to foster the dialogue between the States, international organizations and aviation stakeholders on the use of aviation data and analysis to facilitate datadriven decision making.

The Seminar will also provide participants with an opportunity to learn about the new ICAO solutions with respect to the data and analysis available to help States to optimize the social and economic benefits of air transport in the region.

Day 1 – 10 Dec	cember 2019
08:00-08:30	Registration of Delegates
08:30-09:00	Welcome remarks by ICAO
09:00-09:15	Tea/Coffee Break
09:15-09:30	Group photo
09:30-10:30	State of Air Transport in 2018 and The Role of Air Transport Connectivity Presented by ICAO
10:30-11:30	 Presentation and hands-on training on ICAO Applications Traffic forecasting application Fleet and aviation personnel forecasting application Cost-benefit analysis application Aero-Tariffs (airport and air navigation services charges) Global Air Transport Optimisation Automatic Dependent Surveillance – Broadcast (ADS-B) application ICAOdata+
11:30-12:30	Lunch

12:30-13:30	 Presentation and hands-on training on ICAO Applications Traffic forecasting application Fleet and aviation personnel forecasting application Cost-benefit analysis application Aero-Tariffs (airport and air navigation services charges) Global Air Transport Optimisation Automatic Dependent Surveillance – Broadcast (ADS-B) application ICAOdata+ Presented by ICAO
13:30-14:00	Tea/Coffee Break
14:00–14:30	Industry solution (open)
14:30-15:00	The International Transport Forum (ITF) non-urban passenger model: structure and forecasts The ITF non-urban passenger model is one of ITF's global models that is used to understand and forecast transport activity in the world. It deals with all passenger activity that happens outside urban areas, including inter-city travel. It estimates and forecasts road, rail, and air passenger movements on a city to city basis to 2050. The model is used to underpin ITF's flagship publication, the Transport Outlook. This presentation will outline the methodology behind the model and highlight key messages from the 2019 Transport Outlook, which focused on transport disruptions. Presented by Jagoda Egeland and Dimitrios Papaioannou, the International Transport Forum (ITF) at the Organisation for Economic Co-operation and Development (OECD)

Day 2 – 11 December 2019

Economics of Airports

09:00-10:00	Airports are complex businesses that operate in unique and evolving physical, financial and regulatory environments. This session will provide a data-driven summary of the main economic characteristics of the airport industry drawing on <u>ACI's battery of Airport Key Performance Indicators</u> . In addition to the latest trends in air transport demand across the world's airports, benchmarking, service quality indexes, aeronautical and non-aeronautical revenues will be explored. Other topics include the economic dynamics of airport throughput and economies of scale as well as an analysis of financial indicators that paint a picture of an airport's bottom line.
	Presented by Ilia Lioutov, Manager, Economic Policy, Airports Council International

10:00-10:30	Tea/Coffee Break
10.00-10.50	
10:30-11:30	 Forecasting and Cost-Benefit Analysis for Air Transport Planning Presentation of the latest ICAO traffic forecasts and cost-benefit analysis applications. Presented by ICAO
11:30-12:30	Lunch
12:30-13:30	Industry solution (open)
13:30-14:30	Economics of Airlines IATA will discuss the changing economics of travel and cargo markets, how market structures and distribution/product characteristics are influencing the economics of airline financial performance and competition issues, and how network connectivity delivers wider economic benefits. Presented by Jesper Venema, Senior Statistician, IATA
14:30-15:30	Air Connectivity and Competition - Finding Airport and Airline synergies using visual Big Data analytics" This session will showcase the work between ICAO and ICM in the last 5 years on a joint Global Air Transport Optimization (GATO) project which resulted in the development of its first 5 analytical components (Airline, Airport, Country, Route & Freedom of the Air). The project outcome is based on 8 years Big Data Air Traffic repository. The presentation includes 3 different air traffic synergies case studies dedicated to the following topics: -strategic airport pair connectivity -validations of airline merge consequences -opening of airline non-stop route impact The presentation will demonstrate the value of visual analytics as a mechanism of fast results interpretation, crucial for aviation planners and managers.
	Presented by Dr Jan Malawko, Associate Professor, Interdisciplinary Centre for Mathematical and Computational Modelling, University of Warsaw

Day 3 – 12 December 2019	
09:00-10:00	Use of Big Data, Artificial Intelligence, Machine Learning and visualization for Safety and Air Navigation Presented by ICAO
10:00-10:30	Tea/Coffee Break
10:30-11:30	Aviation Satellite Account ICAO will provide an update on the current work being carried out with States on the Aviation Satellite Account: there is an acute shortage of information on the increasingly important role of aviation in national economies worldwide. The need for reliable data using standardized concepts, definitions and methodologies to measure the economic impact of aviation is increasingly needed by governments, policy makers and industry. Recognizing this need, ICAO has initiated a strategic project called the Aviation Satellite Account (ASA). Presented by ICAO
11:30-12:30	Lunch
12:30-13:30	Analysis and monitoring of airline forward schedule: why do we do it, what does it tell us and what are some of the "features"? Presented by Andrew Chuang, Business Development and Market Analysis, Boeing Commercial Airplanes
13:30-15:30	States' corner States of the APAC region are invited to share their experience of using data and analysis for informed policy making to sustain the growth of air transport

Day 4 – 13 December 2019

09:00-10:00	States' corner States of the APAC region are invited to share their experience of using data and analysis for informed policy making to sustain the growth of air transport
10:00-10:30	Tea/Coffee Break
10:30-11:30	Regional perspective Presented by ICAO /APAC
11:30-12:00	Industry solution (open)
12:00-12:30	Wrap-up and closing remarks
12:30-13:30	Lunch

*Tentative programme: themes, speakers, dates, and times may be changed.