



## **Airline Views**

#### January 2018

#### Improving baggage outcomes



IATA Resolution 753 on baggage tracking is aimed at reducing mishandled bags by implementing cross-industry tracking.

In Australia, mishandled international passenger bags cost airlines some \$25 million in 2016–17. Transfer bags represent only about 8% of total bags but account for nearly half of all mishandled bags.

Improved bag tracking will allow the industry to reduce the number of mishandled bags and increase efficiency in baggage operations to the benefit of passengers, airlines and the aviation industry as a whole.

#### CLICK HERE TO READ MORE

#### **3** 2016–17 international airfares



BARA estimates that real international airfares fell by over eight per cent in 2016–17 compared to the previous financial year.

Average real airfares to and from Australia have fallen by over 40% since 2006. Over the same period, total international passenger numbers have increased by 82% to over 38 million in 2016-17.

BARA's member airlines provide 90% of all international passenger flights to and from Australia.

#### 2 International jet fuel use



International flights uplifted just over five billion litres of jet fuel from Australia's international airports in 2016–17.

The efficiency of fuel use continues to improve through advancements in aircraft and engine design and superior flight operations. IATA has set an annual fuel efficiency improvement of at least 1.5% per year.

Total international fuel uplifts, however, are increasing at 3.6% per year. This is due to the sustained growth in traffic volumes of nearly 6% per year.

#### CLICK HERE TO READ MORE

#### Time based separation



Time based separation (TBS) of aircraft landings supports improved on time performance by airlines in windy conditions.

Successfully applied at Heathrow Airport in 2015, TBS has reduced headwind arrival delays by over 60%.

BARA encourages the continued modernisation of Australia's air navigation services that underpin increasingly efficient safe aircraft operations.

#### **CLICK HERE TO READ MORE**



Board of Airline Representatives of Australia Inc

# Improving baggage outcomes

Reducing mishandled bags requires the combined efforts of airlines, ground handlers and airport operators. Better bag tracking will underpin the coordination necessary to deliver improved baggage outcomes.

#### IATA resolution 753

Implementing tracking for every baggage journey is covered under IATA Resolution 753, where member airlines are required to:

- demonstrate delivery of baggage when custody changes
- demonstrate acquisition of baggage when custody changes
- provide an inventory of bags upon departure of a flight
- be capable of exchanging these events with other members or their agents as needed.

This means member airlines need to collect tracking information at the four key tracking points shown in the diagram below, which under the resolution will be mandatory from 1 June 2018.

The four tracking points have been chosen as they cover the entire baggage journey and allow every bag to be recorded as it enters and leaves the airport. Additionally, airlines need to exchange the baggage tracking information with their interline partners involved in the passenger journey, based on their agreements.

Although Resolution 753 places an obligation on member airlines, a coordinated approach to baggage tracking by airlines, ground handlers and airport operators will bring better outcomes.

To support its implementation, the Joint IATA 753/A4A Implementation Sub Working Group has developed the *Baggage Tracking Implementation Guide,* which can be downloaded <u>here</u>

#### **Application in Australia**

Meeting IATA's Resolution 753 in Australia will require international airlines, ground handlers and operators at major international airports to improve and change existing practices.

A key outcome that airlines want is to ensure bags checked in by passengers directly at the international terminal are sent to the correct baggage lateral for loading by ground handlers.

Consistently delivering passengers bags to the correct baggage lateral, as well as accurately tracking bags through the airport's baggage system, are both necessary to reduce the number of mishandled bags from present levels.

Tracking bags at arrival, either through a handheld scanner or fixed belt loader reader, poses challenges to existing operating practices. Current practices focus more on rapidly unloading bags rather than additional tracking.

Transfer bags, however, account for nearly half of mishandled bags even though they only represent only about 8% of total bag numbers. Welldesigned and implemented ways of tracking transfer bags can reduce the high and growing number of mishandled transfer bags.

IATA and BARA will keep looking for ways to apply sound systems and procedures that reduce the number of mishandled bags to the benefit of passengers and industry stakeholders.

#### Mandatory bag tracking points



Source: IATA



Board of Airline Representatives of Australia Inc

### International jet fuel use

The sustained growth of Australia's international aviation requires a reliable and competitive supply of jet fuel. At the same time, as Australia becomes more reliant on imported jet fuel, improved planning and coordination is essential for an efficient supply.

In 2016–17, Australian aviation used nearly 9 billion litres of jet fuel, of which nearly 5 billion litres, or just over half, was used by international flights from Australia.<sup>1</sup>

Australia increasingly relies on imported fuel for its jet fuel supply. In 2010–11, Australia imported just over two billion litres, or just under one-third of its fuel needs. By 2016–17 imports had risen to nearly 6 billion litres or some two-thirds of total jet fuel supply.

The increased reliance on imported fuel in the last two years reflects the conversion of the Clyde and Kurnell refineries in Sydney to fuel import terminals.

Assuming no increases in domestic production, imported fuel can be expected to account for over three-quarters of total jet fuel needs by the end of the next decade.

#### Supply and competition

An increasing reliance on imported jet fuel creates both challenges and opportunities for a reliable and competitively-priced supply of jet fuel.

Greater imports should open opportunities for new, globally-recognised supply to enter and compete in jet fuel markets at Australia's major international airports. But for this to happen, the infrastructure and commercial arrangements need to encourage 'competition on its merits' between potential suppliers.

<sup>1</sup> Australian Petroleum Statistics, Commonwealth of Australia, 2017.

Recognising these challenges and opportunities, the 2015 Competition Policy Review stated that competition in jet fuel supply should be a focus of further reform efforts in the aviation sector.

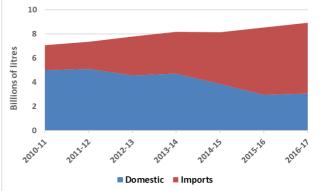
#### Permanent aviation fuel facility

The Permanent Aviation Fuel Facility (PAFF) is a single-purpose aviation fuel storage facility built to serve Hong Kong International Airport. It is a good example of how to encourage a reliable and competitive supply of jet fuel to support future traffic growth at the airport.

Located off the airport, the PAFF includes: a dualberth jetty capable of accommodating oceangoing 'medium' and 'long' range tankers; eight storage tanks with an aggregate capacity of about 264 million litres; and twin pipelines connecting PAFF with the airport.

At Hong Kong International Airport, the fuel storage and distribution network allow for 'open access' to qualified suppliers. This means airlines can choose suppliers based on price and the service they offer. An airline can also be qualified to make 'self-supply' arrangements.

Hong Kong's jet fuel infrastructure and open access arrangements are an excellent example of how to provide a reliable and competitive supply of jet fuel to the benefit of industry, passengers and the economy.



#### Growing demand and imported fuel

Source: Derived from Australian Petroleum Statistics.



Board of Airline Representatives of Australia Inc

## **Time based separation**

Planning for airport capacity and airline schedules assumes suitable weather conditions. But strong headwinds can lower runway acceptance rates for aircraft landing, causing delays and even flight diversions or cancellations. Safe and efficient ways to maintain runway acceptance rates during strong headwinds are needed at Australia's major international airports. One such way is TBS, a European system that reduced headwind-related delays by 62% at Heathrow Airport.

Keeping a safe distance between aircraft to avoid accidents is the core safety function of a country's air navigation system. The quality of air navigation services also underpins the efficiency and predictability of safe aircraft operations.

#### **Distance based separation**

Aircraft are usually separated by prescribed minimum distances (distance based separation or DBS). Airservices Australia applies DBS to landing aircraft at all of Australia's airports.

For aircraft landing into strong headwinds, with DBS runway acceptance rates are lowered because aircraft ground speed is reduced on final approach.

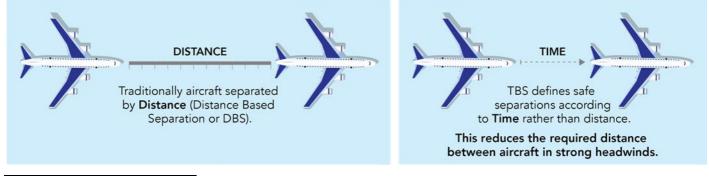
## TBS reduced arrival delays from headwinds at Heathrow

In Europe, the Single European Sky ATM Research (SESAR) project developed time based separation (TBS).<sup>2</sup> TBS is designed to better maintain runway acceptance rates during windy conditions. Air traffic controllers can also take advantage of the faster dispersing 'wake vortex' behind aircraft during windy conditions, allowing air traffic controllers to further reduce safe separation between arriving aircraft.

NATS UK brought in TBS at London Heathrow Airport in 2015. The results include a 62% drop in headwind-related arrival delays, and have provided reliability and efficiency benefits to passengers and airlines.

NATS UK will shortly introduce an enhanced model (eTBS), which will incorporate refined wake vortex categorisations<sup>3</sup> and allow for more planes to land in stronger headwinds using updated information. Other major European airports have planned to fully introduce TBS by no later than 2024.

Europe has done the research and development and proven the concept at one of the world's busiest airports. BARA considers the capacity enhancements TBS and eTBS provide should be an important part of the traffic capacity strategy for Australia's major international airports.



#### TBS – improves landing rates in strong headwinds

<sup>3</sup> https://www.nats.aero/news/enhanced-time-basedseparation-scheduled-arrival-early-2018

<sup>&</sup>lt;sup>2</sup> See http://www.eurocontrol.int/articles/time-based-separation