Airlines Complete Move to Bar Coded Boarding Passes

Geneva - The International Air Transport Association (IATA) announced a historic milestone in passenger travel with the 100% worldwide implementation of 2D bar coded boarding passes (BCBP). BCBP replaces the previous generation of more expensive and less efficient magnetic stripe boarding passes.

“The magnetic stripe boarding passes are on their way to a history museum next to the paper ticket. After electronic ticketing in 2008, the conversion to BCBP is the next important step to provide passengers with more convenience and choice. Completing many tasks during the journey will now take seconds with the swipe of a bar code,” said Giovanni Bisignani, IATA’s Director General and CEO.

The completion of the industry project gives passengers greater choice in checking-in at home, at a kiosk, on a mobile device or at an airport check-in counter. BCBP also allows airlines to issue a single, printed boarding pass for multiple flights, simplifying the journey for passengers with flight connections or those traveling on different airlines. Moreover, BCBP opens the door for automated access to premium services. For example, with a scan of a BCBP, eligible passengers can access fast-track security lanes or lounges.

“Airlines issue over 2 billion boarding passes every year. The conversion to printed 2D BCBP has been a five-year project and will save the industry up to $1.5 billion every year. With more and more airlines offering the possibility to receive the bar code via a mobile device, we are well on the way to truly paperless travel,” said Bisignani.

History of the Transition

Magnetic stripe boarding passes, which have been used since 1983, have several limitations for airlines and passengers that the bar code overcomes. Magnetic stripe
boarding passes require expensive printers located in the airport, at a check-in desk or inside a kiosk, limiting where passengers can get their boarding passes. The magnetic stripe boarding passes also require expensive and unique paper stock.

In the 1990s, some carriers transitioned to one-dimensional (1D) bar codes, which have a series of parallel vertical lines and look similar to UPC codes used to identify store products. These 1D codes were first used in the rail industry in the 1960s and are only able to carry a limited amount of data.

The IATA industry standard established in 2005 for airlines is a two dimensional (2D) code known as PDF417. This holds more information by using patterns of squares, dots and other geometric patterns. This code allows flexibility in the size, readability of codes and is supported by many different types of scanners and printers. The printed 2D code also allows for many security and encryption features.

The industry in 2008 agreed on a bar code standard for paperless, mobile passes. The data in the printed and mobile boarding passes are the same but the look of the code on mobile devices is slightly different. Mobile 2D passes can use the Aztec, Datamatrix or QR codes. Nearly 30 airlines now offer mobile BCBP and use is expected to grow significantly in the short-term.

Reaching the 100% BCBP goal was a joint effort of airlines, airports, service providers and IATA. Getting over 2,000 airports on board and coordinating implementation was done through the StB Matchmaker. A secure web portal, StB Matchmaker allows airlines and airports to exchange, prioritize and coordinate implementation requests in order to efficiently plan the rollout of the global standard. The tool provides information on 3,000 airport terminals and over 200 airlines, creating a worldwide database of over 10,000 records. The StB Matchmaker system will be expanded next year to facilitate the IATA e-services and Fast Travel projects.

- IATA -