Technological advances for passenger processing

by Mathew Bannon

Plans to deal with the future needs of increased passenger traffic to Australia are under way with work on technologically advanced passenger clearance systems.

The Passenger Initiatives Section of the Australian Customs Service is examining the feasibility of electronic-visual identification of travellers arriving and departing Australian international airports.

Global advances in the aviation industry continue to put pressure on airport infrastructure, with expectations that the number of air passengers and crew to be processed at Australian international airports will increase from the current 16 million a year to 31 million a year by 2010.

Increases have been foreshadowed by Customs and other local and international air travel agencies and organisations working toward simplifying the travel process. Issues driving the international movement to simplify the travel process include the possibility that aircraft with the capacity to carry up to 600 passengers will be operating within five years.

Organisations such as the International Air Transport Association (IATA) and the International Civil Aviation Organisation (ICAO) are bringing together border agencies, airlines, airport owners and technology companies to develop innovative proposals for integrating and simplifying existing procedures in the travel process.

Both Customs and the Department of Immigration and Multicultural Affairs (DIMA) are members of IATA's Simplified Passenger Travel (SPT) Group. At the heart of the simplified travel movement is the need for all stakeholders to work in partnership – to share information and facilitate the flow of passengers through airports, using new technology where appropriate.

Customs, in consultation with other stakeholders, is exploring the possible application of biometric technology which could be used to validate the identity of passengers. When used in conjunction with the technology already in place, this could mean that some passengers could be processed automatically with minimal human intervention as they arrive and/or depart Australia.

Stakeholders agree that the most promising biometric technology is face-recognition technology. This enables automatic comparison of photographic and/or video images to confirm identity.

Face-recognition technology was trialed by Customs at Brisbane Airport in 1996 in cooperation with DIMA and local technology providers. At that time, the technology was not considered sufficiently user-friendly or reliable for general uptake. Since that time, biometric technology has seen significant progress and there are now several commercial applications available. However, it still needs to be proven that this technology is sufficiently reliable for use in the passenger-processing environment.

Canada, Britain, the US, Israel, Malaysia and Holland are testing, or are about to test, biometric technology.

Customs is working with DIMA and Passports Australia (within the

Department of Foreign Affairs and Trade) on selecting the most effective biometric technology for Australia's needs.

The type of biometric recognition record – face, fingerprint, voice or iris scan – will be one of the issues considered at a forthcoming stakeholder meeting. Discussions will also focus on the biometric technologies available, integrating the new technology with the current systems, such as the APP system, as well as considerations of processing and legal issues.

Stakeholders envisage that the use of biometrics will assist Customs officers in processing passengers and allow for the diversion of additional resources to address and prevent potential threats at the Australian border.

Australia already has a high-level technological infrastructure to assist in processing passengers, including:

- The Passenger Analysis, Clearance and Evaluation System (PACE) that tracks all passenger and crew movements in and out of Australia;
- DIMA's Electronic Travel Authority (ETA) – an electronically stored authority to travel to Australia for a short stay, removing the need for a visa label or stamp in the passport and is used by about 80 per cent of visitors to Australia;
- Advance Passenger Processing (APP) – a system that allows airlines to verify a passenger's travel authority at check-in and send advance passenger information to Australian border agencies using the Electronic Travel Authority (ETA) communication network; and
- Document readers used by primary-line officers to automatically input data from the machine-readable zone of passports to process passengers.

Customs work to implement new clearance systems will continue to keep pace with the ever-increasing number of air passengers arriving in Australia. Work with other relevant agencies will also continue so that the best solutions can be found.