



Mr Stephen Palethorpe
Committee Secretary
Senate Rural and Regional Affairs and
Transport Legislation Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Mr Palethorpe

**INQUIRY INTO THE AVIATION TRANSPORT SECURITY AMENDMENT
(SCREENING) BILL 2012**

The Department of Infrastructure and Transport is pleased to provide the following submission to the Inquiry into the Aviation Transport Security Amendment (Screening) Bill 2012. The Department would like to thank the Committee for making time to attend the body scanner demonstration at Parliament House on 22 March 2012 and hopes that the demonstration will assist the Committee in its inquiry.

Background

Traditionally, most aviation security regimes worldwide have relied on metal detection technology for primary passenger screening, however, the increasing presence of weapons and explosive materials that do not contain metallic components has exposed a vulnerability in these systems. On 25 December 2009, a passenger attempted to detonate an explosive device on North West Airlines Flight 253 (NW 253) en route from Amsterdam to Detroit. The passenger had successfully smuggled a viable improvised explosive device through aviation security screening and onto the aircraft without being detected. The device, which was concealed inside the passenger's underwear, contained no metallic components and was therefore able to be carried through a walk through metal detector without triggering any alarm. Incidents such as this and the 2006 foiled terrorist plot to bomb transatlantic airliners departing the United Kingdom using liquid explosives demonstrate that terrorists have adapted their methods to exploit this vulnerability and reinforces the need for aviation security screening technologies to evolve in order to be able to adequately address current threats to the aviation sector.

Body scanners represent the most advanced passenger screening technology available and are capable of detecting a range of sophisticated threats that current screening technologies are not able to detect. In response to the NW 253 incident, the Government announced the \$200 million Strengthening Aviation Security Initiative on 9 February 2010. The initiative included funding for a range of measures, including body scanners at international departure and transit points at Australia's eight international gateway airports - Adelaide, Brisbane,

Cairns, Darwin, Gold Coast, Melbourne, Sydney and Perth. The Government proposes to introduce body scanners at those airports in the second half of 2012. The body scanners will be installed at every second international screening lane, alternating with the existing walk-through metal detectors. Passengers will be selected to undergo a body scan on a random basis and selection will not be based on profiling (a diagram outlining this process is provided at **Attachment A**). Those not selected for a body scan will be required to pass through a walk-through metal detector.

Body scanners are a proven technology and have been used overseas for aviation security screening purposes since 2007. The Government conducted an Advanced Technology Trial at several Australian international airports in 2008 to determine the merit of a range of new technologies, including body scanners, that were capable of detecting non-metallic items as well as liquid, aerosol and gel (LAGs) products on a person. The trial proved that body scanners were well suited to detecting these items. It is a requirement that all body scanners to be used in Australia must have undergone stringent testing in line with aviation security standards and be approved for use by an overseas regulator that is recognised by the Australian Government, such as the Transportation Security Administration in the United States of America. Ongoing quality assurance testing of this technology will be conducted to ensure its compliance with aviation security requirements.

Policy Settings

The Government's policy settings to support the proposed introduction of body scanners have been informed by an extensive consultation process with other government agencies, community stakeholders and industry. In particular, the consultation aimed to ensure that any health and privacy issues associated with the use of body scanners were fully explored, and that interested groups and organisations had opportunities to participate in the policy dialogue.

In summary, the key policy settings are:

Technology: The Government will mandate that body scanners deployed at Australian airports must meet certain requirements including that they use non-ionising radiofrequency energy in the millimetre-wave spectrum. One scan from a millimetre-wave body scanner emits 10,000 times less radiofrequency energy than an average mobile phone call. This is significantly less than the maximum permissible exposure levels for the public set by the Australian Radiation Protection and Nuclear Safety Authority (ARPANSA). The Government has announced that body scanners using X-ray technology will not be permitted for use in aviation security screening.

Body scanners which use millimetre-wave technology should not be confused with those that use terahertz frequencies. Terahertz frequencies encompass the 300 GHz - 3 THz frequency range, while millimetre-wave frequencies occur between 30 GHz and 300 GHz. The Department is aware of the Los Alamos National Laboratory report titled *DNA Breathing Dynamics in the Presence of a Terahertz Field*. The paper does not specifically mention body scanners, however, some media reports have incorrectly attempted to correlate the findings of the report with the use of active millimetre-wave body scanners. Passive terahertz body scanning systems have been developed and tested around the world for different applications, including aviation security. Instead of transmitting energy, these scanners operate by receiving natural terahertz energy from the person being screened, any objects concealed on their body and the environment immediately surrounding them. The Government is not proposing to introduce these body scanners for aviation security screening in Australia.

Privacy: To protect the privacy of the travelling public, only body scanners equipped with automated threat recognition technology may be used. This technology eliminates the need for a screening officer to review raw or 'naked' images of the person being scanned. Instead, when a scan is conducted, the body scanner automatically analyses the data received from the scan and uses a generic human outline, which does not display gender, size, shape or any distinguishing features, to highlight any area on the body that may require further examination. This privacy requirement is protected by item 4 of the proposed bill which requires images generated to be gender neutral, with no identifying features. In addition, individual scans are not able to be stored or transferred to other devices.

No invasive frisk searches: The only alternative method of screening that would provide a similar level of assurance to that of a body scanner is an enhanced full body frisk search. The Government has considered overseas practice in conducting these types of searches and does not propose introducing invasive body searches as part of Australia's airport security arrangements. For this reason, passengers selected for body scanner screening will not be able to choose inferior or significantly intrusive alternatives. Consequently, if a person refuses to undergo a body scan, they will be refused clearance and not allowed to pass through the screening point.

Alternative special circumstances screening will be put in place for those people who have a physical or medical condition that prevents them from being screened by a body scanner. Regulation 4.17 of the Aviation Transport Security Regulations 2005 allows for the methods, techniques and equipment to be used for screening to be specified in a notice. This notice outlines screening requirements for a range of special circumstances passengers, such as passengers with visual impairments, passengers who are unable to walk or stand, and passengers accompanied by a carer or an assistance animal. The protocols for screening passengers with special circumstances will not change significantly with the introduction of body scanners. Where alternative screening is required, those alternatives will consist of technology and procedures already used for screening passengers with disabilities and special circumstances. Special circumstances screening involves the use of screening methods such as hand-held metal detectors, frisk searches or another screening method appropriate to the passenger's circumstances. The Department is confident that the measures currently in place adequately protect special circumstances passengers, whilst providing the flexibility needed to refine processes as required.

Consultation

The Department engaged the Office of the Australian Information Commissioner (OAIC) to provide advice on the introduction of body scanners and to assist the Department engage interested stakeholder groups. On 22 September 2010, the OAIC facilitated a privacy roundtable with the Department and invited stakeholders to consider privacy issues arising from the Government's decision to introduce body scanners for aviation security screening. Stakeholders included representatives from privacy, disability, religious and civil liberties organisations. A second privacy stakeholder roundtable discussion was held on 21 September 2011 to provide a further opportunity for discussion.

The Department has developed a privacy impact assessment for the introduction of body scanners in consultation with the Office of the Australian Information Commissioner (OAIC). A consultation draft of this assessment was released for public comment on 3 August 2011. The Department accepted submissions until 30 September 2011 and received three responses: from the OAIC, the Australian Privacy Foundation and Vision Australia. The comments contained in these responses have been incorporated into the final version of the document, which is included at Attachment B. The final privacy impact assessment was released in

February 2012 and is available on the Department's TravelSECURE website at:
<www.travelsecure.infrastructure.gov.au>.

The Department has consulted extensively with other government agencies, including ARPANSA, the Department of Health and Ageing, the Therapeutic Goods Administration and state and territory radiation regulators. The Department has also liaised extensively with partner agencies overseas to remain informed of technology developments to ensure that the technology used in Australia is safe and follows international best practice. A Health and Safety Information Sheet on millimetre-wave body scanners has been released publicly by the Department following this consultation and is included in Attachment C of this submission.

Voluntary Trial

The Department conducted a voluntary trial of body scanning and carry-on baggage screening equipment, at Sydney International Airport from 2 – 19 August and Melbourne International Airport from 5 – 30 September 2011. The main objectives of the trial were to measure the impact that the introduction of body scanners and multi-view X-ray equipment might have on passenger facilitation and to assist the eight international gateway airports prepare for their introduction. The trial also provided the travelling public with the opportunity to familiarise themselves with the new technology.

Privacy stakeholders were provided with the opportunity to view a demonstration of the body scanner during the trial. Stakeholders viewed the body scanner in operation and engaged with security personnel and Departmental officers during the process. Following consultation with industry, the Department has produced the Optimal Technologies Proof of Concept Trial Report, which is included at Attachment D. This report is available on the TravelSECURE website.

The Department would welcome the opportunity to discuss the submission in more detail or to provide any other information that might be required.

Yours sincerely

Paul Retter, AM
Executive Director

28 March 2012

Attachment A – Body Scanner Process
Attachment B – Privacy Impact Assessment
Attachment C – Health and Safety Information Sheet
Attachment D – Optimal Technologies Proof of Concept Trial Report