



ADVANCING TECHNOLOGY TO PROTECT OUR BORDERS

Customs is a world leader in the use of technology for border protection activities and uses new technologies to counter threats to Australia's border security.

The use of technology, when combined with advanced cargo and passenger screening procedures, gives Customs an advantage over those seeking to circumvent border controls.

Customs border protection technologies can detect and identify a wide range of threats from weapons and narcotics, to explosives, chemical and radioactive substances.

X-RAY TECHNOLOGIES

Customs uses x-ray technology to examine passenger luggage, postal articles, and air and sea cargo containers.

Depending on the cargo type to be screened, Customs can employ any combination of its container, cabinet, pallet, mobile van or trailer-mounted systems to provide an unobtrusive examination to high volumes of cargo.

CLOSED CIRCUIT TELEVISION MONITORING

Customs national closed circuit television (CCTV) network combines modern video and communication technology to provide efficient and effective coverage of waterfront and airport activities around Australia, 24 hours a day, 365 days of the year.

The waterfront network of CCTV cameras is monitored at offices throughout Australia and remotely at regional monitoring centres. The National Monitoring Centre in Melbourne also monitors the Customs CCTV system.

Customs also operates a CCTV network at Australia's eight international airports.

The CCTV cameras are controlled and monitored locally via control rooms and are supported through the Airports National Monitoring & Analysis Centre located in Melbourne.

RADIO TECHNOLOGY

Customs has a High Frequency (HF) radio network and encrypted digital Ultra High Frequency (UHF) radio networks operating throughout the country, including in the Torres Straits.

The radio communications network provides a vital communication link for Customs officers when working at sea, on Coastwatch aircraft, while travelling in Customs vehicles and working in Customs network of regional and district offices.

Customs is currently developing and deploying several different satellite systems to enhance its long range communications capabilities.

TRACE PARTICLE DETECTION OF NARCOTICS AND EXPLOSIVES

Trace particle detection technology allows Customs officers to find the slightest trace (measured in nanograms, or billionths of a gram) of a target substance on passenger baggage, mail and cargo items.

Customs uses trace particle detection technology to detect traces of narcotics and explosives.

Positive results provide presumptive indications that the article being examined may contain or has been in contact with a target substance.

Customs uses a number of different trace particle detection machines. These are used in a number of environments including airports, seaports, cargo and postal facilities around Australia. The machines are used in conjunction with other Customs technologies including x-ray and detector dogs.

BULK SUBSTANCE DETECTION OF ILLICIT SUBSTANCES

Customs uses substance identification technology when a suspect visible (bulk) amount of a substance has been located in either passenger baggage or cargo. Bulk substances can include pills, powders, tablets, pastes and liquids. Each of these forms of substances requires their own particular sampling and handling method.

Bulk substance identifier technologies are deployed at a range of airports, seaports, cargo and postal facilities across Australia. A small amount of the substance (up to the size of a grain of rice) is analysed either by a laser or by the colour reaction of various reagent chemicals.

A positive response provides a presumptive indication of an illicit substance.

EQUIPMENT TO DETECT AND IDENTIFY SOURCES OF RADIATION

Customs uses equipment to indicate the presence of radiation. The equipment alarms to small changes in the level of background radiation and can identify the particular source isotope.

COMPUTER FORENSICS

To deal with the growing use of electronic media, Customs has created a national computer forensics capability to acquire, analyse and reconstruct evidence in a manner admissible in a court of law.

AUTOMATED BORDER PROCESSING – SMARTGATE

SmartGate gives some travellers arriving into Australia's international airports the option to self-process through passport control.

The two step process uses the electronic information in the ePassport and face recognition technology to perform the customs and immigration checks usually conducted by a Customs officer.

At the SmartGate kiosk travellers insert their ePassport to determine if they are able to self-process. Eligible travellers proceed to the gate which performs an identity check using face recognition technology.

To use SmartGate, travellers must hold an Australian or New Zealand ePassport and be aged 18 years or over. SmartGate will be gradually opened to other nationalities that have International Civil Aviation Organisation (ICAO) compliant ePassports.

FOR MORE INFORMATION

For information on any other Customs matter, contact the Customs Information and Support Centre on 1300 363 263 or email information@customs.gov.au or browse the website www.customs.gov.au