FEATURE

By Stephen Cooper OBE,
Chief Operating Officer,
Apstec Systems.

Embracing the latest passenger screening technology: contributing to customs operations and digitising the border at airports

According to the World Customs Organisation (WCO) there were 765 cases of narcotics traffickers being detected on arrival or in transit at Western European airports in 2020. In total, these detections resulted in the seizure of 6.9 tonnes of illicit drugs. Whilst the largest percentage was trafficked in bags or inside the body, a not insignificant 15 percent was concealed on the body under or in clothing. This is a substantial figure, especially when you consider that, unlike hold luggage and cabin bags that are routinely screened by x-ray and other means, passengers rarely undergo screening at the departure airport using equipment that will detect narcotics concealed on the body. If the truth be known, nobody really knows how much narcotics is trafficked on the body through airports of entry. All we know is how much is detected but we do not know how much is not detected; assumptions regarding the percentage of narcotics that are being detected are not high. This situation is no reflection on the customs authorities or operations but rather a symptom of the fact that detecting narcotics concealed on the body is very challenging. Technology has struggled to deliver effective solutions and large-scale manual operations are intrusive, costly and generally impractical; there's a capability gap and a need to do something about it.

This need is widely recognised and the EU Horizon project has been calling for proposals to meet a range of closely related requirements for some years. Calls have included: unobtrusive technologies for secure and seamless border crossings; improving the border crossing screening experience for passengers; and improving the detection of concealed objects on or in the body. These calls haven't gone unanswered and there is an increasing response from industry to meet these needs. However, as the EU calls for proposals above illustrate, it's not just about being able to detect items of interest being concealed on the person but also of doing this in a way that is safe, unobtrusive and a better experience for the passenger, whilst respecting their right to privacy. It's also about adding value in a way that makes the customs officer's life easier by introducing technology that can fit seamlessly into operations with the minimum of fuss and at a justifiable cost. With the advent of new screening equipment specifically designed to detect items of customs interest, this is a good time to consider what the latest technological advances can offer.

It's fair to say that most 'people screening' equipment started life in a counter terrorist role but it's become clear that the approach and technologies that were used for this application have much to offer the customs world. Increasingly, equipment is being designed with customs applications in mind. Full height screening, the ability to discriminate between items of interest and benign items, the ability to detect thin material concealed anywhere on the body and the ability to deploy equipment rapidly to enhance operational flexibility, are the hallmarks of the

latest equipment. The technology underpinning this capability may be based on the entirely safe emission of low power radio waves (millimetre wave) or passive scanning technology (teraherz). Whilst detecting concealments internal to the body is not possible with these low power or passive systems, they are particularly well suited to detecting concealments on the body and this is what they do best. A variety of equipment exists under the banner of these technologies. It varies size and complexity, offers widely different throughputs from a few hundred people to thousands an hour and, of course, varies widely in price. Where things get exciting is where material discrimination, operational mobility and agility, high throughput and cost effectiveness align.

FIG 1. APSTEC'S HSS FALCON – THE LATEST EQUIPMENT DESIGNED FOR CUSTOMS APPLICATIONS

Whilst we've focussed on detecting narcotics, today's equipment is equally adept at detecting large quantities of currency being carried on the body. Although this feature may not generate the same degree of excitement as detecting narcotics, money laundering is a massive global issue and one that contributes to the financing of terrorism and wider organised crime. Beyond illicit drugs and currency, detecting firearms and other weapons is part of the functionality of this equipment. At land borders there's a strong case for delivering the capability to detect weapons, as well as narcotics and currency, particularly as there won't have been any pre-screening before arrival at the border. However, given the pre-flight screening that takes place for aircraft it's probably a complicating factor to include metal detection at airports of entry. Either way, the option exists to integrate weapons detection into the equation, if necessary.

Traditional problems with the size and weight of the screening equipment, its lack of mobility and high cost have been overcome; this allows for the development of very responsive operational concepts. Whether screening passengers at the airbridge, in transit or in green channels, modern equipment enables a wide range of responses to suit many different scenarios. Responding to risk profiling and intelligence led operations in a timely manner happens by design. Whilst this article has focussed on passengers, there's an opportunity to introduce this type of technology into staff screening when moving from land to air side and vice versa, and some of this equipment allows people to be scanned in both directions, making for efficient operations with the minimum of

management of movement. There's also the opportunity to screen passengers prior to embarkation and this may be particularly relevant to the movement of currency and money laundering.

None of this needs to wait for the arrival of passengers into the airport of entry. Given the success of the Joint Airport Interdiction Task Forces (JAITFs), passenger screening for narcotics as part of an integrated operation would offer the possibility to contribute to operational success before traffickers even managed to board the aircraft. At last, there's a real opportunity to deploy technology in a way that is non disruptive to the customs authorities and passengers alike. None of this is intended to replace the customs officer. Rather, it should be seen as a tool that can be targeted at specific high-risk situations or simply used as a means of generating more information to aid decision making; it's affordable, simple to deploy and to operate. As borders become increasingly digitised and passenger travel less disruptive and more seamless, it seems the right time to seriously consider the benefits that technology can bring to customs and border operations. With air passenger numbers set to continue to rise for the foreseeable future and with increasing pressure being brought to bear on limited human resources, there's a real opportunity here to deliver a step change in capability without negatively impacting on passengers and staff, and without breaking the bank.

Stephen is the operational advisor to Apstec Systems. Having spent 6 years as Head of Security for the Olympic Delivery Authority and as security director for the Olympic Park and Village during the London 2012 Games, he was engaged as the senior advisor to the British Government on joint security programmes with international partner governments. Prior to this, Stephen enjoyed a successful military career, in which he was ultimately responsible for delivering the UK counter terrorist bomb disposal capability to Worldwide operations. He's worked with Apstec since 2017.