The ECAC Behaviour Detection Study Group (BDSG)

Interview with **Sven Keijsers**
Chair of the ECAC Behaviour Detection Study Group

ECAC established a Behaviour Detection Study Group (BDSG) in 2011 with the aim of facilitating the exchange of information, validation results and best practices among States that have active behaviour detection programmes in place. Appointed in October 2015, BDSG's chair Sven Keijsers presents the main features of behaviour detection in aviation, its objectives and added value within the overall security scheme in aviation.

Q: What are the main objectives of the Behaviour Detection Study Group (BDSG)?

A: Currently, the BDSG is the largest forum in the world to examine this issue, assembling eight States that work together to discuss, promote and share best practices as well as develop guidance material on behaviour detection. The BDSG is uniquely positioned to optimise behaviour detection approaches and advise policymakers on innovative behaviour detection developments with potential application to the wider aviation security environment.

Taking into account the overall industry shift towards a more risk-based approach to screening and other relevant developments, we have recently refocused our strategy in order to maintain its momentum and guide future collaboration.

Q: For those who are not familiar with the subject, behaviour detection sounds mysterious. How would you describe it to non-experts?

A: Basically, behaviour detection offers an additional approach to enhancing security at airports, for example at screening checkpoints or in landside areas. Instead of detecting an object or a prohibited item, behaviour detection focuses on the person and identifies anomalous behaviour by individuals with malicious intent. Whilst further research is needed to fully understand the range of capabilities, this approach may offer a significant advantage over traditional detection techniques as it is threat-agnostic.

Behaviour detection draws on scientific research which indicates that individuals who pose a threat to aviation may exhibit behavioural indicators (for example verbal, non-verbal, physiological) that stem from a fear of discovery.

The behaviour detection techniques can be used as part of an overall approach to aviation security to help mitigate threats before an attack or to provide a deterrent effect. The data we gathered also shows that behaviour detection at airports contributes to improving the overall levels of safety and security by identifying criminals, illegal traffickers and other persons of interest to law enforcement agencies.

Q: How does behaviour detection fit in the current aviation security system?

A: We all know that over the past few years, airports have implemented enhanced security measures to address an increased number of terrorist attacks and related incidents in the aviation sector. These enhanced measures also mean that security procedures are now more time-consuming, costly, complex, and not always as passenger-friendly as they ought to be.

As a result, there are limitations to the continuous increase in security measures. More than ever, there is a need for a system that is robust enough to mitigate current threats, and flexible enough to adjust to future ones.

Current airport security techniques are characterised by a 'one size fits all' approach, which means that in principle all passengers undergo identical screening procedures. Within the current model, resources are often allocated towards individuals who do not pose a risk to aviation security: this is the majority of the travelling public.

A far more efficient approach is to offer varying levels of screening. If passenger risk can be assessed before the actual security screening, the appropriate level of screening can be applied and resources can be focused on those individuals who pose a higher risk. This shift also forms a basis for a new way of thinking about the role behaviour detection can play and the way in which it could be integrated into existing security processes.

We believe that behaviour detection has the potential to contribute to a more effective and efficient security process, targeted to address existing and future threats.

Q: How is the work undertaken by the BDSG helping to achieve the objectives you are referring to?

A: The ECAC Behaviour Detection Model Programme and the relevant research and development initiatives conducted by BDSG members have contributed to a more successful implementation of these techniques at airports around the world.

In addition, the BDSG has produced guidance material on the use of behaviour detection that offers numerous deployment options in a range of locations including landside, airside and checkpoints.

Last but not least, in November last year the Security Programme Management Group adopted the ECAC Strategy on Behaviour Detection developed by the BDSG. This document will lead our actions in the next years. We are committed to achieving the objectives defined by the strategy and some activities are already being implemented. As aviation is international by nature, we also need international solutions, hence the need to strengthen our cooperation in the field of behaviour detection with other States, ICAO, and industry partners like IATA and ACI.

Q: Should a State be interested in developing a behaviour detection programme, what would you recommend?

A: My first advice would be to contact the ECAC Secretariat. It will provide the basic information on behaviour detection so that the State can investigate its real needs and expectations. Then, should a State be committed to implementing a behaviour detection programme and to receiving mentoring from the BDSG, it would be invited to provide more information to the BDSG on its particular needs, the resources available and the level of political commitment towards this project. ■

Sven Keijsers has been working for the Appropriate Authority for civil aviation security of the Netherlands since 2012. His main areas of responsibility are innovation, human factors and new and emerging threats. In his current position he also serves as the national representative in the ECAC Common Evaluation Process Management Group, the ECAC Study Group on Cyber Threats to Civil Aviation, and he chairs the ECAC Behaviour Detection Study Group.