



# Editorial

## Technologies to combat Terrorism

After the terrorist strike in Brussels, as per media worldwide combating terrorist technologically is searched for. There are many suggested devices and arrangements although not fully comprehensive but very quick breakthrough. First of all, they take care as bare scanner for the inflammable materials and through so-called body scanning with harmless recognized their explosives and weapons. Under the dress, sometimes also with shoulder perspiration and creases, erroneous alarm quota becomes very high. It is meaningful to install scanner in front of railway station or football stadium.

Bare numbers speak at present against blanket covering installation. The security controls at the airport continues for 21 seconds per person in section and with this approximately longer than the combination with metal detector and scanner. In front of a bigger federal league stadium therefore dozens of body scanners are required. One piece of this costs between 160000 € and 200000 €, an investment which none will venture to make.

However, the technique has the big potential. The federal police test a new scanner of Rhode and Schwarz. The passenger stand before a wall in which thousands of sensors are fitted. With this it will be possible in future the persons during their transit will be lighted through also from a greater distance.

“The technology is however only as good as the person which at the right time observes the monitors and can introduce measures” observed Thomas Feltes, the professor from Bochum of detective science. Most of the data are stored for a very short time and evaluated depending on occasion. In order to be able to introduce technically matured system, the urge for freedom must be the stronger security. Then the intelligence subordinate to submit to over reconnaissance system could somewhat with the help of model software of the voice of human being, automatically evaluate and also micro threats could be brought more under observation.

Free flow of data: Natural boundaries are able to stop the information flow within the European Union but not the terrorists. The previously identified assailants were known to police. One of them was expelled from Turkey and however became successful to enter into Belgium. Interior minister Thomas de Maiziere then emphasized also that best means against such strike is the exchange of information. It has also achieved big progress in this area within the Schengener information system (SIS).

“Throughout European Union there are instantaneous various data scan, which are, however, not sufficiently linked with one another” – a spokesperson of Federal criminal officer informed. In Germany all police

authorities are through Interpol covered with police network. One such information dial is not in existence in European level format. But where it exists, there it functions rather poorly.

Around with SIS since 2013 there not only searches for criminal can be recorded but also the biometric data are stored. However, many countries among them, Germany have not yet installed the new function as reported in (VDI nachrichten von 26.2.16).

Selection Random Sample Test: Bombs and booby traps apparently harmless explosive device hidden intended to kill anyone touching can be known by two ways – one of these is the chemical analyses in so-called ion mobility spectrometer (IMS). “In the last five years, the human being has been better in knowledge of tenth power” says Gerhard Hoff, the Director of the Institute for Detective Technology (IDT) at the technical college of Bonn-Rhein-Sieg. In case of suspicion the high explosive trace as for example in the suitcase in the range of nanogram amount (10%) can be detected with gas also particles in parts per billion area (10<sup>-9</sup>) detectable.

The second method uses x-rays in order to penetrate through the luggage and to recognize hidden explosives in case of mounting. “Image building, x-ray; evaluation algorithms have been improved, now these are sensitive enough and more specific” says Holl. A blanket reconnaissance as it is with burning sensors however is still far. As regards to costs per IMS is around 40000€. The big covering area input of spectrometer in all the railways and public buildings are very expensive. Favourable instruments would as against that be less exact and less widely detectable. Also the plenty of chemical possibilities for explosives are too big

in order that all these to be detected with a single method. One orients oneself therefore first of all to materials in previously placed booby traps. In time and cost consideration hotspots had to be chosen and specially is controlled there says Holl.

Faithful scenting nose: Her fate shocked the world. Diesel a seven year old shepherd bitch died on the 18th November 2015 in Saint-Denes. A bullet hit her during a police round up at the terrorist strike in Paris. The police bitch Diesel belonged to a special unit of highly explosive dog squad, which is very often placed at dangerous locations.

Their noses never escape observation. The wrinkled plea membrane of the dogs has 220 million of factory cells. Whereas human being has only 5 million. An odorous molecule passes on in order to send to the brain message, which filters out characteristic smell out of scented cocktail. It is not advantageous to wrap up explosives in paper bag or suitcase. Anywhere the residuum is confined, is known to the dog. Nevertheless there is also wrong alarm by the super sniffers. Sometimes the cunning animals tell a lie as they know that they only get delicacies only when they sound alarm.

With the most recent terror strikes the demand of or the explosive-trained dogs increases. However, the reinforcement is limited. The training lasts for months. Only one of 100 dogs brings in all the characteristics with it as also one extra average sense of smell along with an excellent social conduct and stress resistance.

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Source: VDI Nachrichten, 1 April 2016, Nr 13, Seite 10, Technik & Gessellschaft

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