



#### Dr. David Naveh

WP Leader "Behavioural Analysis and Risk Based Security"

#### **FlySec Final Event Info Day**

Thursday, June 28th 2018, 09:00 - 17:00 Hotel Marivaux, Alfred Hitchcock Auditorium Boulevard Adolphe Maxlaan 98 B-1000 Brussels, Belgium



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### Risk-based screening - why?

FLYSEC research aligns with ACI/IATA's Smart Security recommendations (formerly IATA Checkpoint of the Future).

Risk based screening is based on the following premises:



- The majority of airline passengers present a low risk to aviation
- Some assessment may be made using travel and personal data as well as information provided by passengers.
- Behavior detection and interviewing techniques can be also employed to assess risk



#### Is he a suspect?





### Risk-based screening — advantages

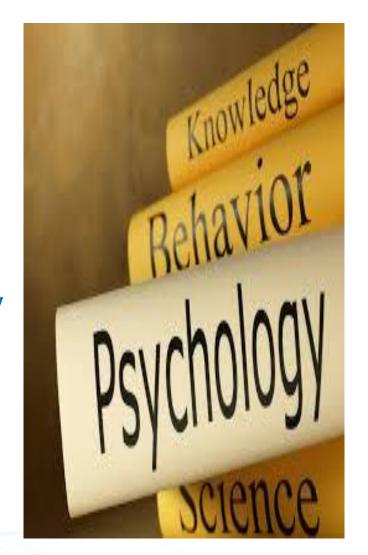


- Checks should focus on persons that present more of a risk. Not everybody poses the same risk.
- The idea is to make the process more efficient and more passenger- friendly.
- Also, passengers should have more time to relax and shop at the airport (businesssfriendly airport).



# Profiling – a dirty word?

- From the early days of airport security, profiling has been an important part of the screening process.
- The FBI first developed the profiling technique as a method to identify offenders based on psychological and sociological characteristics.
- The profilers use scientific methodology and technologies to explain past behavior and predict future actions.
- This approach, according to some observers, got polluted over the years and became synonymous with discrimination and prejudice.





# Racial profiling is illegal in the EU

- All EU member states have accepted the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD).
- They are therefore obliged to prevent, prohibit and eradicate all forms of racial discrimination and incitement to racial hatred.
- The EU has passed detailed legislation that addresses discrimination in various areas of life.





#### From ethnic profiling to behavioral screening



- There is a difference between ethnic profiling and behavioral profiling. The latter is based on past and present behavior of the passenger requiring a more thorough check.
- Behavioral profiling has a high efficiency rate. Evidence shows that it is not even necessary to combine ethnic profiling with behavioral profiling, but use behavioral profiling alone.
- For example, In 1999, when the US
  Customs Service abandoned ethnic
  profiling and instead focused on behavior,
  its productivity and efficiency soared.



## Behavioral screening

- All passengers will need to be screened, as a minimum, to an acceptable baseline level, regardless of risk categorization.
- Observing the behavior of passengers at the terminal using technological and agent observation is used to generate risk factors.
- Other information of past behavior may be added to the process of risk-assessment.
- The end result for the majority of those scoring on the risk factor scale is in-depth security check.







#### Risk assessment factors

Risk assessment is a continuous process from reservation to boarding:

- Traveler type (such as crew, staff, military personnel)
- Passenger data
  - Passport and ticket check in information (optional: PNR)
  - Analysis of reservations and check-in data
- Presence on Interpol database
- Checks against other Government databases
- Association with passengers on the same flight
- Behavior analysis (automatic and human observation)
- Alternative measures such as random selection for enhanced screening, trace detection and explosive detection dogs



#### Key questions of behavioral analysis

- What are the behavioral manners that can be defined as indicators of danger?
- Are there physical signs that amount to dangerous behavior (stress, sweating, nervous movements, etc.) ?
- Can we detect such behaviors by smart technological means such as cameras and sensors?
- Is personal interview essential?
- We have answers but they are classified.



# Behavior Analysis

- Behavior in space:
  - Loitering
  - Communication with others
  - Irregularities while in line
- Personal conduct
  - **Nervousness**
  - Sweating
  - Eye contact
  - Interview



# Verification and validation



#### **Contact Points**





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