Technology, Innovation and Human Factor

Session 2 – Technologies and Innovations to Counter Aviation Security Threats
Technology & Innovation – key points*

- Research and development of new security equipment;
- Processes and procedures to better achieve civil aviation security objectives;
- Implementation of innovative processes and procedures; and
- Screening *versus* security controls.

*ICAO Annex 17
Technology & Innovation – key points

Detect  Mitigate  Prevent  THREAT
Technology & Innovation – key points

Risk mitigation

Vulnerabilities mitigation

Security system resilience
Technology & Innovation – key points

- **Research and development of new security equipment:**
  - Emerging threats;
  - Mitigation of human error;
  - Increase of efficiency;
  - Better experience for the passenger;
  - Impact on passengers flow;
  - Impact on security training;
  - Security staff have to acquire new competencies;
  - Impact on direct supervision;
  - Impact on quality control policy; and
  - Impact on the organization of the screening point.

Efficiency?
Which kind of impact?
Human factor?
Technology & Innovation – key points

• Processes and procedures to better achieve civil aviation security objectives:
  • Adapted to new equipment implementation;
  • Adapted to the associated challenges of the equipment CONOPS;
  • Security staff need to have a clear understanding of processes and procedures;
  • Direct supervision and quality control policy have to take into consideration these processes and procedures;
  • Importance of feedback from security staff; and
  • Impact on the organization of the screening point.
Technology & Innovation – key points

• Implementation of innovative processes and procedures:

- Efficiency
- Added security value
- Resilience
- Security staff performance
Technology & Innovation – key points

• Screening *versus* security controls:
Human Factor – key points

Abilities          Capabilities          Knowledge
Decision-taking    Weaknesses           Experience
Human Factor – key points

Policy and strategy
Responsibility
Values
Decisions
Human Factor – key points

- Persons feedback
- Procedures and responsibilities
- Decisions
- Policy and strategy
Technology, Innovation and Human Factor

The GASeP five key priority outcomes:

- Enhance risk awareness and response.
- Develop security culture and human capability.
- Improve technological resources and foster innovation.
- Improve oversight and quality assurance.
- Increase cooperation and support.
Thank you!

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