Nuclear and Aviation Security – A Comparative Analysis

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Outline

- Background to the Study
- Project Structure
- Forward Programme
- Conclusions
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Multi-Sector Security Director’s Committee
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In the wake of the terrorist attacks in 2001, a comparison was made between two of the largest and most complex industrial sites in the UK, in order to get new perspectives on security management approaches in the different sectors.
Sellafield Site, Cumbria, England
Heathrow Airport, London, England
About 90% of the security management issues were the same - at that time:

- Security was seen by many as an expensive overhead that got in the way of operations,
- Multi-agency involvement was complicated and regulations were prescriptive,
- Access control to many different restricted areas for thousands of employees and contractors was challenging
How do Security Incidents compare in the two Sectors?
Aircraft Hijackings and Fatalities

Hijackings per year

- Hijackings with Fatalities
- Hijackings

Aviation Safety Network

- 1950
- 1965
- 1980
- 1995
- 2001
- 2010
As of 31 December 2015, the ITDB contained a total of 2889 confirmed incidents reported by participating States. Of these 2889 confirmed incidents, 454 incidents involved unauthorized possession and related criminal activities, 762 incidents involved reported theft or loss and 1622 incidents involved other unauthorized activities and events.
Bombings at Airports

Over 200 Fatalities
Armed Assaults/Bombings at Nuclear Facilities

2 Fatalities. No radiological releases.
Flight Paths on 11th September 2001
Evolution of Aviation and Nuclear Security

• Post 9/11, both ICAO and IAEA increased their activities related to security though neither have the word “security” mentioned in their Statutes,

• There has been a significant increase in security-related activity at international and national level, and increased regulation,

• It seems that the way the two sectors are implementing security is beginning to diverge, but why? What are the key factors?
What are the factors that might influence security?

• Aviation is clearly international – less so for nuclear?
• Does the ownership of the sectors make a difference (National versus private)?
• Nuclear has had a few very big safety-related accidents, but unlike the aviation sector, no recent, significant terrorist attacks; why?
• Do politicians perceive the threats, risks and consequences differently in the two sectors?
• Is the aviation industry better organised than the nuclear industry to contribute to regulations?
• Can the aviation sector measure the cost benefit?
Why conduct the benchmarking study?

No detailed comparative analysis has ever been conducted of the security arrangements in these two sectors despite the similarities:

Cyber-security, insider threats, human reliability, regulation, and the management and governance required to implement efficient and effective security programmes.
Launch of New Study

WINS has launched a new 18-month international study:

Aviation and Nuclear Security – Benchmarking International Policy and Implementation
WINS – Aviation and Nuclear Security Conferences

AVIATION AND NUCLEAR SECURITY WORKSHOP & ROUNDTABLE
13 & 14 September 2017 – Vienna, Austria

Co-hosted by:
World Institute for Nuclear Security
International Airport Review
ICAO Global Aviation Security Symposium

ICAO Global Aviation Security Symposium #AVSEC2017
AVSEC Culture - Beyond the Standards

ICAO Headquarters, Montréal
12 – 14 September 2017
Benchmarking United Nations Agencies to Industry

- Legal and Regulatory Approach
- Industry Engagement and Peer Review
- Best Practices
Comparative Analysis – Project Structure

**International**
- International Policy Development
- Recommendations and Standards
- Oversight and Audit
- Resources: Funding and Budgets
- Engagement with NGOs
- Training and Certification

**National**
- National Security Strategy
- Threat Assessment: DBT and Cyber
- Style and Extent of Regulation
- Regulatory Resources: Funding
- Regulatory Engagement with Industry
- Regulatory Competence

**Industry**
- Industry Governance and Culture
- Security Management Systems
- Command and Control of Incidents
- Costs of Security Programmes
- Industry Peer Review
- Training and Certification
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The First Phase consists of detailed research and structured Interviews with personnel from all relevant organisations to establish both a formal and candid picture of the arrangements in each sector. The response to the study has been very enthusiastic.
Project Milestones

- **Project Launch**
  - September 2017

- **Interviews and Research**
  - First Phase Complete January 2018

- **Report First Draft**
  - April 2018

- **Final Draft**
  - July 2018

- **Publications, Conferences, Outreach**
  - December 2018
Conclusions

• The Comparative Analysis aims to identify transferable best practices for security oversight, regulation and implementation in the aviation and nuclear sectors,

• We want to establish sustainable forums between the two sectors to exchange information and make both sectors more resilient.
Thank you for your attention

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