Cyber Security in the aviation Industry

Cyber Security – With the increasing use of Internet-enabled devices, cyber culture is growing more rapidly than cyber security.

- **Who is a threat?** Insiders threats, outsiders, hacktivists.
- **What tactics might they use?** Social engineering, Malware, Phishing.
- **Why would Airlines be targeted?** Financial gain, competitive advantage, intellectual property.
- **What are the key business risks we need to mitigate?** Data theft, Business disruption, Financial losses.

The aviation industry is more than just air transportation. The airline business encompasses multiple divisions.

- ✓ Passenger transportation
- ✓ Cargo / freight
- ✓ eCommerce
- ✓ Operations
- ✓ POS

- ✓ In-flight entertainment
- ✓ Frequent Flyer program
- ✓ Travel Agency
- ✓ Mobile & online services

Therefore, cyber security threats, specific to each one of these divisions may impact the aviation industry.

Cybersecurity: Current challenges in aviation industry.

Aviation is a complex business

- With systems that are equally complex.

Legacy systems

- That have not benefited from the security-by-design principle.

Considerable increase in scope over the last decade

- Innovative ways to reach out to the customers.

Rise in the number of outsourced services

- Who needs access to what data, on which systems and when.

Increase use of IT Systems

- Resulting in an increase in the threat landscape.

How to address these issues

Collaboration

- It is going to take a common approach across the globe to protect all airports and airlines from cyber threats.

- It is imperative that the different business units collaborate and cooperate with each other in order to mitigate the risks related to Cyber Security.

- This is not purely a technical issue; these are governance and strategy issues that are more important than the technology. The technology is only part of the equation.

Continued high visibility for Cyber Security

- More and more airlines now place the oversight of cybersecurity at the board level rather than within IT departments. Cyber Security is viewed more as a business risk rather than just an IT risk.

- Awareness of the threat and the potential repercussions has reached the boardroom, with cyber risk and risk to critical infrastructure featuring in the top concerns of the board.