Jesper Rasmussen: Keynote speech (Session 4th March, 10:30 – 11:30)

Keynote on the importance of a coordinated approach to cybersecurity in aviation both at State and European level and among organisations

Dear all,

We live in a changing world where:

- **Aviation has become a complex "System of Systems":**
  - It covers **all aviation domains**
  - **Products, services and organisations are increasingly complex and interconnected at a global scale**
- **Malicious actors are increasingly seeing cyberattacks as a way to achieve their objectives**, Examples:
  - **NotPetya cyber-attack:** Maersk had around 300 million US Dollars lost.
  - **WannaCry ransomware global attack**: around 200.000 computers afffected in 150 countries.

This has resulted in a situation where cybersecurity risks are an increasingly global challenge.

In order to tackle this issue, **EASA, as directed by the European Commission, started working in 2015 on a comprehensive EU cybersecurity strategy for aviation**, in coordination with EU Institutions and Agencies, States and Stakeholders.

And one of the key elements of this strategy is the development of a robust and flexible regulatory system,

- For aircraft design and production (certification)
- For the management of cybersecurity risks by organisations in all aviation domains.

Obviously, there are a number of important challenges that we face in this journey:

- **<u>CHALLENGE 1:</u> Coexistence of 2 main communities: the one dealing with security and the one dealing with safety.**
    - **Security:**
        - **Focused** on reducing the manifestations of threats from intentional acts.
        - **Not focused** on their effect on safety.
    - **Safety:** Reduce the effects of the residual threats (those not being stopped) on passengers, crew and people on ground.

  Their different perspectives need to be understood, so the knowledge of each party enters into the decision making of the other party.

- **<u>CHALLENGE 2:</u> Enable the sharing of information between all the affected parties,** by creating a trustworthy environment based also on appropriate information control and confidentiality.
    - And here, it is worth to mention **the role to be played by the European Centre for Cybersecurity in Aviation (ECCSA):**
        - Currently having 26 members from Industry and Authorities.
        - Open for new members.
        - Including a partnership between EASA and CERT-EU, to provide the infrastructure needed to share information and to provide intelligence services.

- **<u>CHALLENGE 3:</u> <u>It is essential to ensure consistency of regulatory requirements between the different frameworks</u> (NIS Directive, Regulation 2015/1998 and the future EASA rules), <u>as well as adequate oversight coordination between the different authorities</u> (European, NAAs, security authorities, etc).**

  These regulatory frameworks may have different objectives, such as:
    - Preventing disruption of essential services to society, or
    - addressing aviation security issues, or
    - addressing the impact on safety

  And they may not cover the same scope of organizations.

But all of them are important and needed in order to comprehensively address in a consistent and standardized manner the security and safety of the aviation system.

To this end, EASA is already working with the relevant services of the European Commission and ENISA, in order to ensure that all the necessary coordination initiatives are in place, both for regulatory and oversight coordination.

And this conference is one of these initiatives.

- **CHALLENGE 4: It is essential that organizations identify their interfaces with other organizations and take into account the shared risks.** To this end:
    - **Work is being done in the ESCP** (European Strategic Coordination Platform) **to develop adequate guidance material and industry standards.**
    - **A Table-Top exercise is going to be performed here in Madrid after this conference, with around 25 participants for Industry, States and EASA, to test such material.**

I am convinced that with the cooperation of all the involved parties, we will overcome these challenges and we will achieve a trustworthy and dependable environment, leading to an Aviation system-of-systems capable to adapt and withstand new threats without significant disruptions.