EMERGING NEW AVIATION CHALLENGES – THE NEED OF SPECIALIZED TRAINING

Luc Tytgat

CHALLENGES FACED BY AVIATION INDUSTRY

- Environmental concerns

- Digitalization

- Shortage of professional personel

- New airspace users

- Higher Airspace Operations (HAO)

- Cyberattacks and security

ENVIRONMENTAL CONCERNS

- Aviation is being heavily accused of having a significant environmental impact

- The industry is already developing alternate power plants, fuels, sources of energy and other solutions that intend to help reduce adverse footprint

- The need for the above is growing faster with increasing environmental concerns and the growth of the aviation industry itself
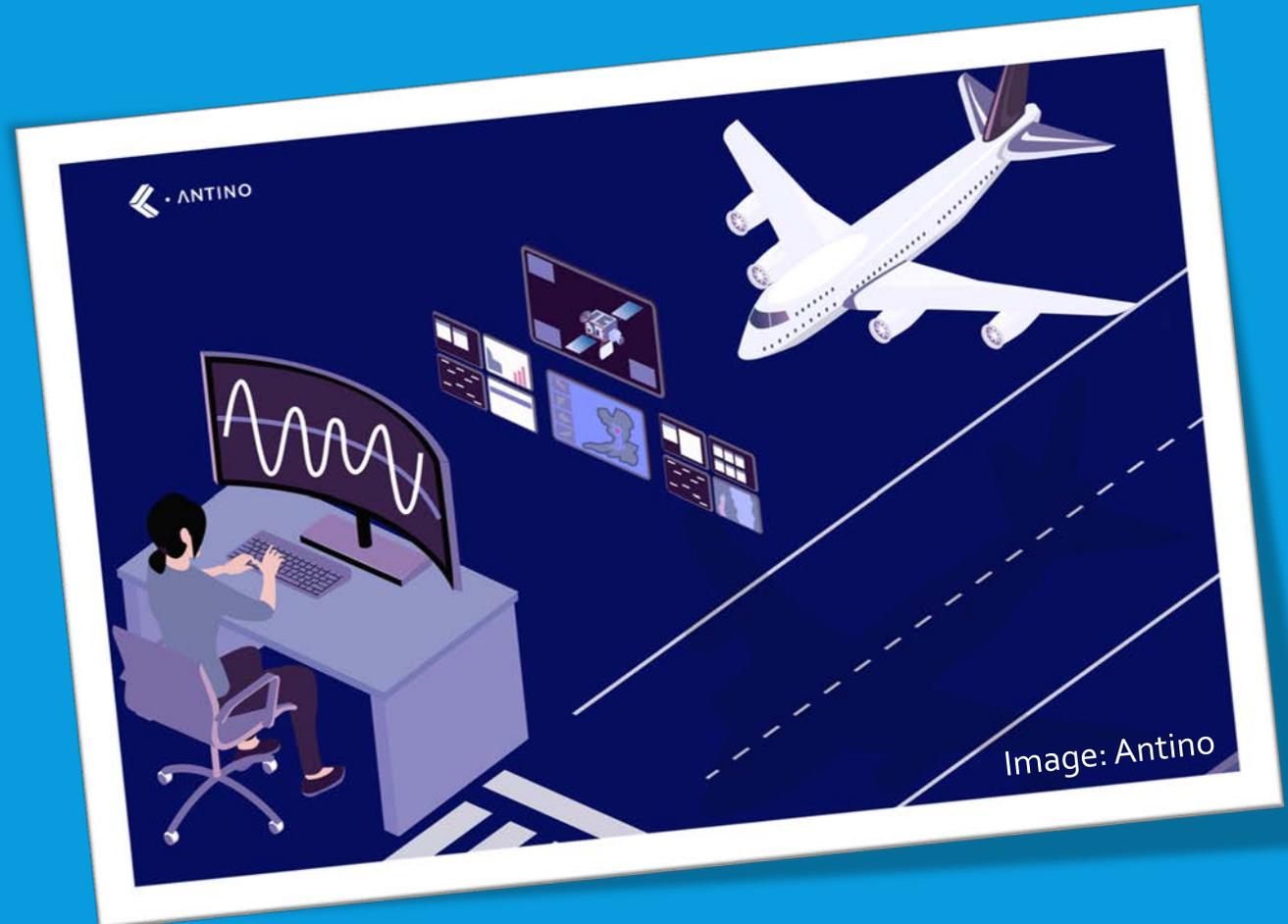
Image: Deloitte

DIGITALIZATION

- Introduction of digital management and digital solutions to aviation industry

- Need to develop new technologies, software and hardware

- Need to train specialists in both aviation management and new technologies

Image: Antino

NEW AIRSPACE USERS

- The airspace users grow in numbers and evolve

- The airspace will host new types of aircraft, such as drones and VTOLs/eVTOLs

- There's a closing prospect of a need to manage both conventional and new types of aircraft sharing the same airspace – establishing regulations, infrastructure, training for professionals etc.

Image: ICAO

SHORTAGE OF PROFESSIONALS

- As a fast-growing industry, the demand for qualified personel keeps growing

- The demand affects all the professions, including pilots, air traffic controllers, mechanics, dispatchers, ground personel, instructors, managers, IT specislists, designers, researchers, and much more

- Experts are needed to oversee all branches of the sector, and it's extremely difficult to obtain such experts without drawing them away from other, more critical functions
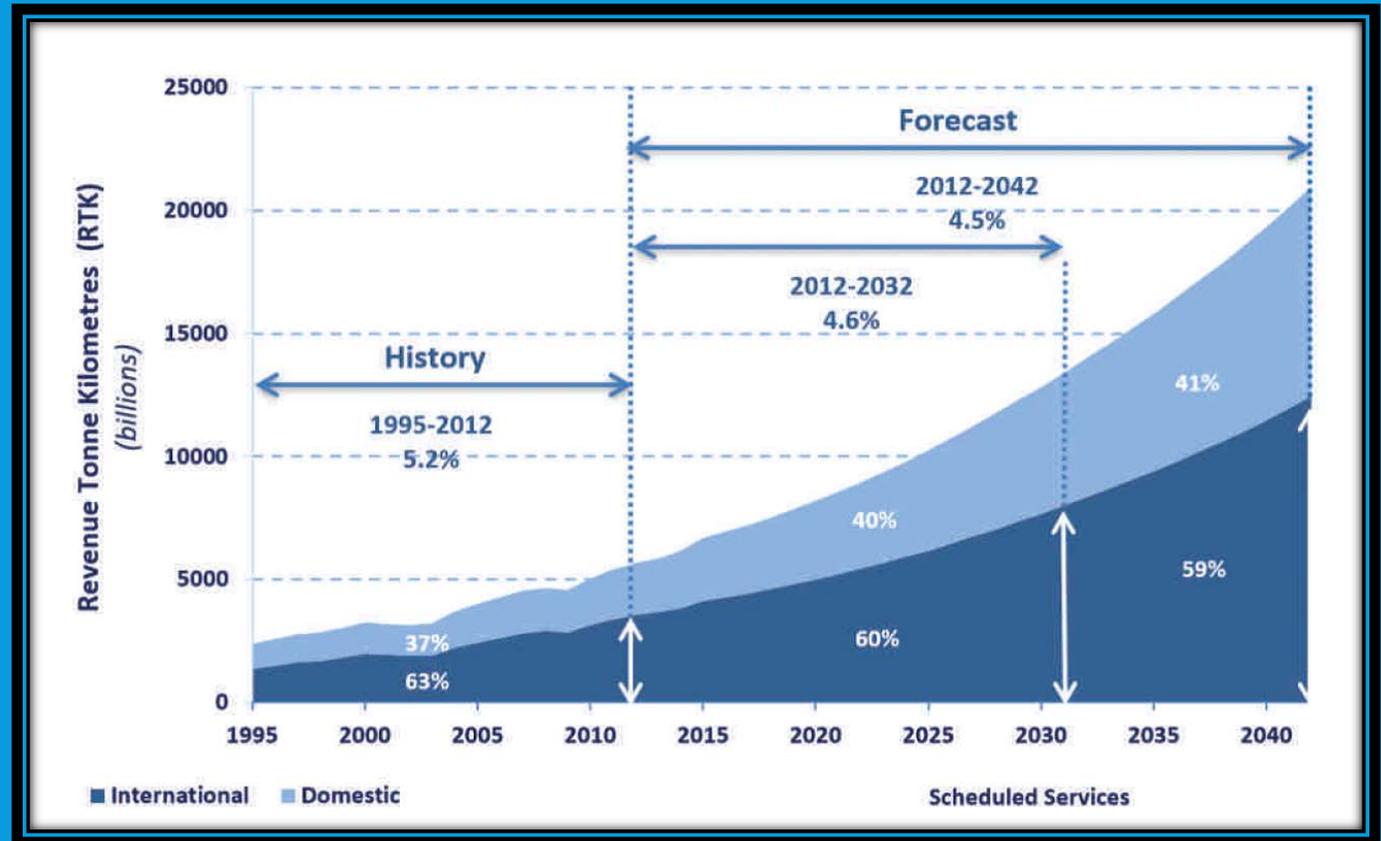

Image: ICAO

HIGHER AIRSPACE OPERATIONS (HAO)

- The higher airspace is the volume of airspace above altitudes where the majority of air services are provided today (i.e. above around FL550,or 17 km altitude) (EASA)

- HAO are intended to hold both air transport and space operations, creating a need to provide management in a safe and efficient manner

- ICAO and other international aviation authorities, such as EASA, are already developing the guidelines and concepts for managing HAO

EASA
European Union Aviation Safety Agency

Proposal for a Roadmap on
Higher Airspace Operations

Image: EASA

CYBERATTACKS AND SECURITY

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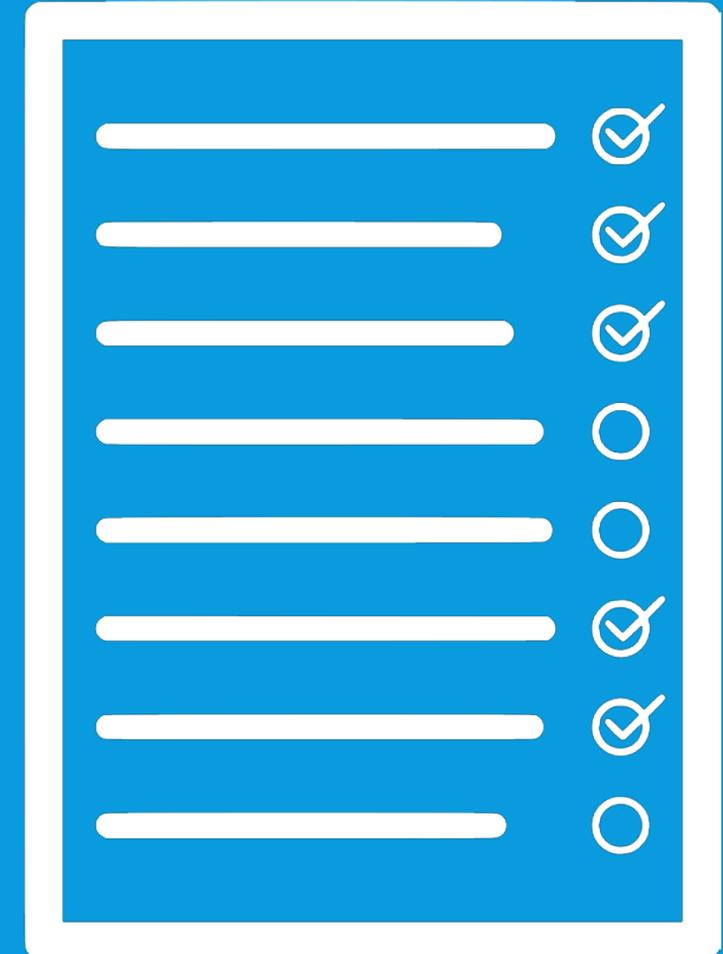

Image: Avionics International

PROPOSAL FOR RECOMMENDATIONS

- *Partnership between training organizations – mainly to provide incstructors and other trainers who there is currently shortage of*

- *Connect with EASA network of universities – it can help to share experiences and design the best response to industry needs*

- *Keep the scope of studies as close as possible to the existing and forecasted aviation challenges*

- *Create new university programs, educating professionals in the futuristic fields*

- *Keep the study programs affordable to facilitate the entry to the industry for larger number of students*

- *Liaise with TRAINAIR PLUS to avoid countries left behind*

THANK YOU FOR YOUR ATTENTION!