



Agenda Item 4A: Human resources

**NEW TRENDS IN HUMAN RESOURCES FOR AVIATION
THE ROLE OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCES MANAGEMENT**

(Presented by EASA)

This paper has the aim to highlight the potential benefits when using the new technologies, namely AI- based systems in human resources management. Benefits and risks of such technologies are an important part of the equation when choosing the best tools to recruit, maintain and develop aviation professionals. Ethical questions are also highlighted.

**ICAO Strategic
Objectives:**

A: Safety

B: Air navigation capacity and efficiency

C: Aviation security and facilitation

1. INTRODUCTION

1.1 Artificial intelligence emerges as a new paradigm, is disruptive and it applies to all economic sectors, aviation is not an exception. If on one hand these technologies take efficiency at a higher level, when introduced in contexts directly linked to human resources an extra care should be taking into consideration.

1.2 The aim of this paper is to highlight the benefits and the risks when using AI-based systems to Human resources management in particular in a high-risk safety sector like aviation.

1.3 We are of the opinion that it would be useful for the National Aviation Authorities to gain knowledge about the state of the art of AI-based tools applied to HRM, what are the results in today's practice and what are the next steps when introducing such systems.

1.4 As these AI-based systems are directly applied to human resources, ethical concerns are of most importance, ethical tools and implementation practices should be assured and warranted.

1.5 The importance of keeping human in the loop, controlling and having the capability of overwriting the systems are also highlighted, questions on privacy, personal intrusion and psychological discomfort is also of importance to be discussed.

2. DISCUSSION

2.1 On the base on Article 2 of the Treaty on European Union, and the Charter of EU fundamental rights, when dealing with human resources we must consider: dignity, freedoms, equality, solidarity, citizen's rights and, justice. More recently to these values were added the so called, third generation of fundamental rights, containing: data protection, guarantees on bioethics and transparent administration.

2.2 Moreover the very recent European Union Artificial Intelligence Act (2024/1689) emerges as the first comprehensive AI law, where contents are driven by a risk assessment logic, and as such considers aviation as a high-risk activity. So, we are facing two sensitive dimensions: aviation safety and human resources management.

2.3 The European Union Aviation Safety Agency (EASA) put together a Roadmap since 2018 to open the path to safe introduction of AI in the Aviation sector. “As concerns the aviation sector, AI not only affects the products and services provided by the industry; it also triggers the rise of new business models. (...) Beyond this, the liability, ethical, social and societal dimension of AI should also be considered.” (EASA, 2023).

2.4 EASA developed an AI Concept Paper (Issue 2.0) where an Ethics Based Assessment Chapter can be found totally in line with the 7 key ethical pillars for trustworthy AI: Human agency and oversight; Technical robustness and safety; Privacy and data governance; Transparency; Diversity; Non-discrimination and fairness; Societal an environmental well-being; Accountability.

2.5 In order for the national civil aviation authorities to effectively and competently deliver their obligations to meet the ICAO Standard and Recommended Practices, it is crucial to have a sound management system which includes a process to ensure a sound good human resources management, including continuing updating the right professionals with the rights competences when dealing with aviation sector.

2.6 We are of the opinion that the national aviation authorities in particular the responsible focal points for human resource management will gain in having more information on how human resources can be supported by AI-based systems in the different disciplines namely recruitment, selection, training and competency development, performance evaluation and career development.

2.7 On the other hand and based on EASA’s project “Ethics in AI for Aviation”, (within the EASA AI Programme), applying AI-based systems to aviation lift concerns in terms of comfort, trust and acceptance. In particular, when facing non-acceptance it was found three different motives: AI based systems characteristics, Human impacts, Data management, and Safety implications. It will be of outmost importance for human resources managers to understand and anticipate how AI-based systems can be implemented without jeopardizing professional and personal comfort.

3. **CONCLUSION**

3.1 Considering the above EASA suggest and is available to contribute to organise a workshop on AI for Human Resources in Aviation, for the National Aviation Authorities in particular for the Human Resources Managers and senior experts.

4. **SUGGESTED ACTIONS BY THE MEETING**

4.1 The Conference is invited to:

- a) take note of the information contained in this Document.
- b) Express interest in the proposed activity