



# IATA DRONES INNOVATION WEEKEND

CHALLENGE #2



## Challenge #2

### Impact of Automation on Human Role

Skills of the Future Workforce	Challenge
<p>There are several discussions about the evolving role of humans with the increased use of robotics, automation, and artificial intelligence. Yet the aviation industry is still looking to the future with a mindset that the functions that exist today will remain unchanged in the future. There is a much-needed analysis of the impact on automation on aviation jobs and functions and how that translates into a skill gap identification. Only by doing such an impact assessment would we be able to effectively recruit and retain the talent of the future.</p> <p style="text-align: center;"><b>Considerations</b></p> <ul style="list-style-type: none"><li>■ Air traffic controllers vs. airspace managers</li><li>■ Dispatchers vs. network managers</li><li>■ Serious gaming, virtual reality, and augmented reality to train and qualify future recruits</li><li>■ Autonomous air operation and impact on the role of human during flight</li></ul>	<p>Your project is to conduct a preliminary assessment of the impact of automation, digitization, and the exponential growth of use of UAS and robotics in air transport on the role of human in the equation. Your preliminary impact assessment should answer the following questions:</p> <ol style="list-style-type: none"><li>1. Would a human be able to continue to deconflict traffic with the anticipated growth in commercial aviation traffic, UAM, drones for delivery, and space operations?</li><li>2. Are there concrete plans to move into single pilot aircraft operations and fully autonomous operations? What is the impact of such concepts and future operations on required skills and aviation workforce?</li><li>3. What would be the impact of increased use of automation, digitization, UAS and robotics on the role of traffic controllers?</li><li>4. What would be the future aptitudes and skills required for future airspace managers?</li><li>5. What new training modes should be explored to ensure that we prepare for the future?</li><li>6. How can communication about the new and changing functionalities of an air traffic controller attract young talent to the industry?</li></ol>

