

## Megatrends and air transport: Legal, ethical and economic issues

*By Ruwantissa Abeyrante*  
**Review DOI**  
**10.1108/FS-06-2018-097**

**T**he book sets out to provide an overview of megatrends and their impact on legal, ethical and economic issues in air and space transport. The first chapter presents an introduction to the future of aerospace transport and regulating laws. The airspace is becoming ever more crowded, especially through drones of all sizes, space tourism and futuristic ideas of colonising Mars. All these developments require closer cooperation among countries. Although air traffic has exploded over the past few years, a single international legislative framework under the aegis of international organisations is still missing. The chapter gives detailed insights into the United Nations initiatives and the International Civil Aviation Organization. The second chapter discusses current international affairs and their impact on air traffic. Among these developments, Brexit and the changing relations between the UK and European countries rank prominently. The author suggests that the UK should choose one of three options: remain part of the Common Aviation Area (ECAA), negotiate a separate “open skies” agreement with the EU or negotiate separate bilateral air services agreements with each country in and outside the EU. Most importantly, the UK airlines should prioritise change management procedures to be prepared for any system changes. The third chapter examines the impact of e-trends on air transportation. Some of these emerging technologies will have a significant impact on air transportation and will ultimately make air traffic safer. Before investing in any such new technologies, a methodological procedure should be adopted to assess properly the true impact of these technologies both on safety and

economic concerns. The chapter then continues with a discussion of the impact of these megatrends on airports. The fourth chapter discusses the impact of bad weather conditions and technological failures. The fast-changing technological environment would force a pro-active approach from airports, such as corporate foresight activities and to be in close contact with airlines and authorities. The role of artificial intelligence (AI) in aviation transportation and the resultant technical, ethical and legislative issues are the subject of the fifth chapter. The algorithms in use, as per the author, are still imperfect, and final decision-making still rests with the aircrew. In future, though, AI will become more prominent and will raise both ethical and legislative issues. As this development is fast gaining momentum, it is now time to discuss the most important issues. The author raises inconvenient questions such as Who should receive priority in emergency situations if the aircraft is operated by AI – the aircrew, passengers or people on the ground? Such questions need to form the basis for new legislation which should be carefully developed. The sixth chapter discusses the impact that millennials (digital natives) will have on air transport. In the coming years, millennials will become the most economically active segment of the world’s population, and this will impact most economic activities. Millennials have advanced digital skills, but also a high appreciation of a work–life balance. As customers, this group is interested in minimising travel time while reducing their carbon footprint. This will require new concepts regarding airports near cities, airlines and aircraft manufacturers. The seventh chapter is devoted to the Internet of Everything as one of the megatrends of the future. Together with AI, these technologies should be seamlessly integrated into air

transportation to improve the comfort of passengers, the quality of service and safety of air transportation.

The book provides a general overview of megatrends and discusses how these trends will affect the aviation industry in the future. The target readership of the book is mainly legal professionals and regulators, and the text is written to accommodate their information

needs. The great strength of the book lies in the numerous case studies which assist with a better understanding of the topic.

***Vagan Manvelyan***

*Vagan Manvelyan is based at Higher School of Economics, Institute for Statistical Studies and Economics of Knowledge Moscow Russian Federation.*