



WESTMINSTER
eFORUM

Next steps for the drone sector - promoting sector growth, achieving public trust, and the draft Drones Bill 25th April 2019

CONDITIONS FOR USE OF TRANSCRIPTS:

This document is intended to provide a timely reference for interested parties who are unable to attend the event to which it refers. Some portions are based on transcripts of proceedings and others consist of text submitted by speakers or authors, and are clearly marked as such. As such, apart from where it is indicated that the text was supplied by the speaker, it has not been possible for the transcript to be checked by speakers and so this portion of the document does not represent a formal record of proceedings. Despite best endeavours by Westminster eForum Projects and its suppliers to ensure accuracy, text based on transcription may contain errors which could alter the intended meaning of any portion of the reported content. Anyone who intends to publicly use or refer to any text based on the transcript should make clear that speakers have not had the opportunity for any corrections, or check first with the speaker in question. If in doubt please contact the forum first.

Contents

<u>About this Publication</u>	3
<u>Agenda</u>	4
<u>Session Chair's opening remarks</u>	
Rt Hon the Lord Wallace of Tankerness , Vice-Chair, All-Party Parliamentary Group on Drones <i>(transcript)</i>	6
<u>Unlocking the potential of commercial drone operations in the UK</u>	
Gordon Baker , Lead Policy Advisor, Robotics and Drones, Department for Business, Energy and Industrial Strategy <i>(transcript)</i>	8
Questions and comments from the floor <i>(transcript)</i>	11
<u>Future international regulation and its implications in the UK</u>	
Anne-Lise Scaillierez , Director, ARPAS-UK and Partner, The Drone Office <i>(transcript)</i>	14
<u>Achieving safe integration of manned and unmanned flight operations in UK airspace</u>	
Jim Cranswick , Head of Drone and UTM Programmes, NATS <i>(transcript)</i>	16
<u>Balancing safety against commercial opportunities - next steps for regulation, enforcement and operational collaboration</u>	
Robert Garbett , Chief Executive, Drone Major Group and Chair, National Committee on Drone Standards, British Standards Institution <i>(transcript)</i>	19
Paul Rigby , Chief Executive Officer, Consortiq <i>(transcript)</i>	21
Questions and comments from the floor with Anne-Lise Scaillierez , Director, ARPAS-UK and Partner, The Drone Office and Jim Cranswick , Head of Drone and UTM Programmes, NATS <i>(transcript)</i>	23
<u>Session Chair's closing remarks</u>	
Rt Hon the Lord Wallace of Tankerness , Vice-Chair, All-Party Parliamentary Group on Drones <i>(transcript)</i>	34
<u>Session Chair's opening remarks</u>	
Baroness Hooper , Deputy Speaker, House of Lords <i>(transcript)</i>	35
<u>The future outlook for the sector - new use cases and achieving fully autonomous operations in dense and complex airspaces</u>	
Professor Robert Richardson , Director, Institute of Design, Robotics and Optimisation and Director, EPSRC National Facility for Innovative Robotic Systems, University of Leeds <i>(transcript)</i>	36
Michael Gadd , Head of International Regulatory Affairs, Altitude Angel <i>(transcript)</i>	39
Jack Wrangham , Founder and Director, Drone AG <i>(transcript)</i>	41
Kathy Nothstine , Lead, Future Cities, Challenge Prize Centre, Nesta <i>(transcript)</i>	43
Rikke Carmichael , Head of Air Operations, Network Rail <i>(transcript)</i>	45
Questions and comments from the floor <i>(transcript)</i>	47
<u>Moving towards new legislation - key themes from the draft Drones Bill</u>	
Dr Eamonn Beirne , Head, Emerging Aviation Technologies, Department for Transport <i>(transcript)</i>	51
Questions and comments from the floor <i>(transcript)</i>	55
<u>Session Chair's and Westminster eForum closing remarks</u>	
Baroness Hooper , Deputy Speaker, House of Lords <i>(transcript)</i>	61
Douglas Henderson , Senior Researcher, Westminster eForum <i>(transcript)</i>	62
<u>List of Delegates Registered for Seminar</u>	63
<u>Contributor Biographies</u>	68
<u>About the Core Sponsors of the Westminster eForum</u>	71

Please be advised that speakers' PowerPoint presentations are included within the transcript itself, just beneath the relevant speaker's text. Please note that not all speakers are able to grant permission for us to include their slides.

About this Publication

This publication reflects proceedings at the Westminster eForum Keynote Seminar: Next steps for the drone sector - promoting sector growth, achieving public trust, and the draft Drones Bill held on 25th April 2019. The views expressed in the articles are those of the named authors, not those of the Forum or the sponsors, apart from their own articles.

Although Westminster eForum is grateful to all sponsors for the funding on which we depend, participation in events and publications is never conditional on being a sponsor. As well as funding ongoing operations, sponsorship enables the Forum to distribute complimentary copies of publications, and offer complimentary tickets for events, to Government ministers, parliamentarians and officials most involved in policy.

This publication is copyright. Its copying, in whole or in part, is not permitted without the prior written consent of the publishers. However, extracts of the text may be reproduced for academic or review purposes, subject to the conditions of use outlined in the previous page, providing they are accurate, are not used in a misleading context and the author, their organisation and the Westminster eForum are acknowledged. We would also appreciate being informed.

Westminster eForum

UK Headquarters
4 Bracknell Beeches
Old Bracknell Lane West
Bracknell
Berkshire RG12 7BW

T: 01344 864796

F: 01344 420121

publications@westminsterforumprojects.co.uk

Directors

Peter van Gelder

Chris Whitehouse