

Hogan
Lovells



Legal and Policy Challenges in the Age of Drone Fever

Technology Law Conference

Presented by Lisa Ellman, Partner and Chair,
Hogan Lovells Global UAS Practice

25 May 2018



Topics To Be Covered

- Drone Basics
- Small UAS Rule (Part 107 Summary)
- Part 107 Waivers: Progress Made To-Date
- Making Your Waiver Safety Case
- Trump Administration UAS Integration Pilot Program
- What's Coming Next
- 2017: The Year UAS Revolutionized Disaster Response and Recovery Efforts
- Questions?



Commercial Drone Applications and Industries

- Delivery
- Energy/Oil and Gas
- Insurance
- Construction
- Mining
- Newsgathering
- Research
- Inspection
- CounterDrone
- Real Estate
- Infrastructure
- Mapping
- Humanitarian Aid
- Film-making
- Railroad Monitoring
- Surveying
- Entertainment
- Agriculture
- Monitoring
- Aerial Photography
- Public Safety
- Sports
- Telecommunications
- Research and Development
- Advertising
- Education
- Detection
- Environment
- Security
- Transportation

Hogan Lovells | 3

Why Use a Drone?

- Deliver medical supplies and medicines to assist with catastrophe response
- Assess crop health, detect variations and map terrain
- Provide a birds eye view via topographical map of land, water, fields to reveal slopes, structures, terrain
- Provide high-res digital elevation models of construction sites, mines, structures
- Safely survey cell towers, pipelines, flare stacks, electrical wires, bridges
- Rapid deployment for search and rescue efforts
- Protect critical infrastructure and provide perimeter security for facilities

**ALL ABOUT THE
DATA, NOT ABOUT
THE DRONE**

State of the Industry

Key Findings

- Goldman Sachs forecasts a **\$100 billion market opportunity** between 2016-2021
 - Consumer + Commercial/Civil = **\$30 billion**
- PricewaterhouseCoopers estimates global market value of UAS-powered solutions at over **\$127 billion**
- Skylark Drone Research reports nearly **1 million drones registered** with the FAA compared to **320,000** registered manned aircraft
 - **~100,000** registered for commercial use
 - FAA estimated **11M** commercial UAS will have been sold in US by 2020
- As of May 9, 2018, there were over **90,000 pilots certified** for commercial drone operations
 - According to FAA, demand for drone pilots could increase to **1.6M** by 2021

8773643

Hogan Lovells | 5

Drone Security

- “Known” Drone Numbers as of December 31, 2017
 - Over 1.1 million hobbyist drones
 - Double to 2.4 million hobbyist drones over the next 5 years
 - 110,000 commercial drones registered
- National security agencies raised drone security as an important policy issue:
 - Remote ID: Whose drone is that?
 - How to distinguish between legitimate and illegitimate use?
 - How to mitigate potential drone threats?
- June/November 2017: Domestic Drone Security Summits between industry and government
- October 2017: UAS Tracking and ID ARC presented recommendations to FAA; published December 2017
- May 2018: ANPRM under review at OIRA/WH

Policymakers worried about:

- *Careless*
- *Clueless*
- *Criminal*



| 6

Find the full text of this and thousands of other resources from leading experts in over 30 legal practice areas in the [UT Law CLE eLibrary \(utcle.org/eLibrary\)](https://utcle.org/eLibrary)

Title search: Legal and Policy Challenges in the Age of Drone Fever

First appeared as part of the conference materials for the 31st Annual Technology Law Conference session "Legal and Policy Challenges in the Age of Drone Fever"