

BRIEF

MARCH 2017

CIVILIAN DRONES AND INDIA'S REGULATORY RESPONSE

ANANTH PADMANABHAN

Unmanned aerial vehicles, also known as UAVs or drones, have decentralized airspace access, allowing agriculturists, construction workers, and other civilian users to integrate aerial monitoring into their daily work. This technological revolution comes with a set of concerns, impinging as it does upon the proprietary, reputational, and security interests of individuals. An appropriate regulatory response and new policy recommendations must go beyond the current regulatory intervention in India.

Key Insights on Civilian Drones

- Advancements in fields such as automation, robotics, miniaturization, materials science, spectral and thermal imaging, and light detection and ranging have resulted in drone-enabled solutions in areas as diverse as the agriculture, power, infrastructure, and telecom sectors, as well as crowd and disaster management.
- UAV activity will impact proprietary interests because common law has not clearly demarcated the commons from owned airspaces. It will also raise huge

- privacy concerns, considering the potential deployment of drones for massive data capture and analytics.
- No clear guidance exists on the liability standards for midair collisions and injury to property or persons in the event of untoward incidents.
- In the absence of clear common law rules, Indian states could well step in to regulate UAV activity through a patchwork of rules, resulting in a version of drone federalism as already witnessed in the United States.

Policy Interventions for a Growing Drone Industry

- Despite the promise of UAV technology, Indian regulators have not come up with a framework that unequivocally supports the deployment of drone-enabled solutions. The Directorate General of Civil Aviation (DGCA), which is India's civil aviation regulator, should not be the sole voice on framing such regulations unless it builds sufficient competence internally to appreciate the paradigm shift in aviation brought on by unmanned aircraft.
- Though the present draft guidelines issued by DGCA purportedly safeguard citizen interests, several conflict points have gone unidentified or have been cursorily touched upon by these guidelines. A deeper examination of UAV activity, its real world impacts, and its qualitative difference from manned passenger aircraft operations is immediately required to identify the real loopholes and impingement of proprietary, reputational, and safety interests by such activity. It is not advisable to leave these concerns to courts to adjudicate on a case-by-case basis as regulatory ambiguity can disincentivize innovators.
- India could witness a situation where multiple states regulate UAV activity through a patchwork
 of rules. To avoid this, the central government must immediately review possible aspects of drone
 activity that invite inconsistent rule-making and stipulate a consistent policy in line with the
 interests of innovators.

ABOUT THE AUTHOR

Ananth Padmanabhan is a fellow at Carnegie India, based in New Delhi.

CONTACT

Shivnath Thukral Managing Director sthukral@ceip.org

CarnegieIndia.org



 $@{\bf Carnegie India}\\$



facebook.com/ Carnegie-India

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

The Carnegie Endowment for International Peace is a unique global network of policy research centers in Russia, China, Europe, the Middle East, India, and the United States. Our mission, dating back more than a century, is to advance the cause of peace through analysis and development of fresh policy ideas and direct engagement and collaboration with decisionmakers in government, business, and civil society. Working together, our centers bring the inestimable benefit of multiple national viewpoints to bilateral, regional, and global issues.

© 2017 Carnegie Endowment for International Peace. All rights reserved.

The Carnegie Endowment does not take institutional positions on public policy issues; the views represented here are the author's own and do not necessarily reflect the views of Carnegie, its staff, or its trustees.