



नागर विमानन मंत्रालय  
MINISTRY OF  
CIVIL AVIATION

# Media interaction by Hon'ble Minister for Civil Aviation Drones for mass benefit

New Delhi | 16 July 2020



# Overview

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- Drones are the future of aviation
- Mass benefits in agriculture, disaster management, healthcare and law enforcement (ADHL) in India
- Many other innovative applications are emerging
- MoCA is working closely with industry and academia to develop the indigenous drones eco-system

**Drones will play a key role under the Atmanirbhar Bharat Abhiyan**

# Key challenges

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- Drone technology is evolving faster than the policy and regulatory regime
- Significant concerns around national security, criminal acts, safety and privacy violations
- Artificially suppressed demand for drone services in India
- Huge dependence on imported drone components
- Inadequate funding and insurance for startups
- Negligible budget for drone research and development

**The Government is working on each of the above challenges**

# Recent actions by the Government

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- Draft UAS Rules 2020 released for public feedback on 4 Jun 2020
- Draft CAR for drone training released for public feedback on 14 Jun 2020
- Around 20,600 Drone Ackn't Numbers (DAN) issued by 30 Jun 2020
- Request for approvals being fast-tracked by DGCA and MoCA
- Government agencies being encouraged to engage drones
- Drones introduced for COVID-19 and anti-locust ops
- Use of drones approved for powerline and pipeline inspections, aerial land surveys for SVAMITVA etc.
- Discussions on for DISHA Fund for research and development

Cont'd...

# Recent actions by the Government

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- 13 consortia approved for Beyond Visual Line of Sight (BVLOS) experiments
- Efforts on to streamline certification of drones through Quality Council of India (QCI) and renowned Qualification Bodies (QB)
- UAS Traffic Management (UTM) policy being drafted
- Discussions on with security agencies for counter-drone solutions
- Regular interaction carried out with Indian drone entrepreneurs to understand their challenges and to take corrective actions thereof

**Full support for the growth of drone industry**

# Fast-track approval for mass benefit use cases

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- DigitalSky Platform has started issuing online permission artifacts (OPA)
- All Green Zones made live on 4 Jul 2020
- Yellow Zones to be opened up next. Approval by MoD awaited.
- GARUD ('Government Authorisation for Relief Using Drones') portal launched to provide fast track exemptions to government agencies.
- Fast track approvals given to Ministry of Agriculture, Survey of India, Maharashtra Transco, Indian Oil, state govts for drone operations
- More approvals are under consideration

**Focus on transparency and fast-track approvals**

# Drone enlistment made easier



- Many drones owners had missed getting a DAN back in Jan 2020 due to misplaced fears and rumours
- Second round of enlistment started on 9 Jun 2020
- DAN issuance made simpler. Takes 10-12 minutes
- DAN accepted in many Government tenders – widens the choice for the Government
- Over 20,600 DANs issued till 30 Jun 2020
- Over 1 lakh DANs expected by Dec 2020

**Simpler rules leads to better compliance**

# All green zones activated



- Six green zone sites were approved on 3 April 2020.
- The sites were circles with 5 km radius (area 78.5 sq km each) with their centre points at:
  1. 15°30'15.5"N 78°29'29.5"E (Nandyal, Andhra Pradesh)
  2. 13°39'56.1"N 77°20'36.2"E (Tumkur, Karnataka )
  3. 18°18'18.0"N 73°11'19.0"E (Sonsade, Maharashtra)
  4. 27°59'26.8"N 76°23'04.2"E (Neemrana, Rajasthan)
  5. 12°42'55.0"N 79°16'45.9"E (Arani, Tamilnadu )
  6. 22°41'49.5"N 87°35'03.5"E (Kharsa, West Bengal)
- Flights in ALL green areas activated on 4 Jul 2020

**Yellow Zones to be activated once maps are approved by MoD**

# DigitaSky Phase 1 goes live on 2<sup>nd</sup> Oct 2020

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- Modification of DigitalSky Platform as per UAS Rules 2020
- Online integration with other Government entities
- Airspace management workflows
- Flight plan approval
- Post-flight data submission
- Reports and dashboard

**Significant delays due to lockdown but the October deadline stays**

# Anti-locust ops – Quick decision-making

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20 May	Request for aerial spraying received from agriculture ministry
21 May	MoCA provides fast-track approval with due safeguards
27 May	Inter-ministerial Empowered Committee (EC) formed
01 June	EC concludes negotiations with drone companies
03 June	EC submits report to agriculture ministry
06 June	Work orders issued to five drone companies
09 June	Drone warriors reach Rajasthan

**FAO has complimented India for being the first country to use drones for anti-locust operations worldwide**

# Measurable outcomes on the ground...



**Drone crews are battling harsh climate, tough terrain and logistical challenges to serve our farmers**

# SVAMITVA – Aerial mapping of villages



- Survey of India has been given fast-track approval for aerial mapping of villages in India using drones
- SVAMITVA stands for 'Survey of villages and mapping with improvised technology in village areas'
- Focus on accurate land records, dispute-resolution, direct benefit transfers and panchayat level planning.
- Immediate target – map 1 lakh villages by Dec 2020
- Long term target – map India's over 6.6 lakh villages by Dec 2024

**Will create massive requirement for local drones and jobs**

# Power-line inspections in Maharashtra



- Maharashtra Transco is the first power utility to get DGCA approval for powerline inspection using drones
- Drones enhance quality of inspection at a fraction of the cost and human risk
- Other similar utilities are likely to get approvals soon
- Opens up large opportunities for young drone entrepreneurs

**Will create a perpetual line of business for Indian drone companies**

# File pictures of power-line inspections



**High quality pictures at a fraction of the cost and human risk**

# Oil pipeline inspection

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**IndianOil**

- Indian oil is the first oil company to get the DGCA approval for pipeline inspection using drones
- Enhances quality of inspection at a fraction of the cost
- Will help eliminate oil theft worth several hundred crores
- Other oil companies are likely to get approvals soon

**Pipeline survey opens up a round the year opportunity**

# Drone training



- Hitherto only DGCA-approved flying schools were allowed to provide drone training
- Only IGRUA (Amethi, UP) showed interest
- A simplified Draft CAR for drone training was released on 14 Jun 2020 for public feedback
- The right to provide drone schools is proposed to be expanded to thousands of entities such as:
  - a) All government entities and autonomous bodies,
  - b) Government-approved universities,
  - c) DGCA-approved drone manufacturers
  - d) DGCA-approved FTOs, NSOPs, SOPs, domestic entities approved under CAR-147, CAR-145 and CAR 21

# Way forward

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- Continue reforms in drone policies and regulations
- Provide fast-track approvals for mass benefit use cases, especially in infrastructure, agriculture, healthcare, defence and national security
- Build support for the proposed DISHA Fund (DISHA – ‘Drones for infrastructure, security, healthcare and agriculture’)
- Engage closely with academia, young entrepreneurs and industry
- Push relentlessly for ‘Make in India, Make for the World’ under the Atmanirbhar Bharat Abhiyan

**Let's collaborate to make India the drone hub of the world**



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**Thank you!**



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