



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

- 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

- 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

- 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

- 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

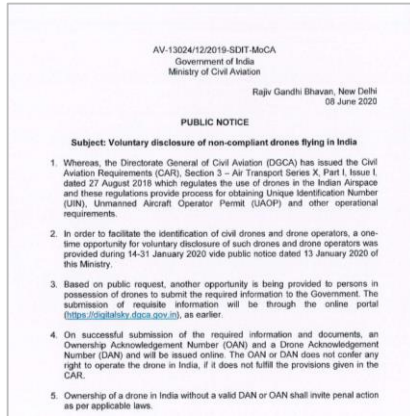
Full support for the growth of drone industry

Fast-track approval for mass benefit use cases

- 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



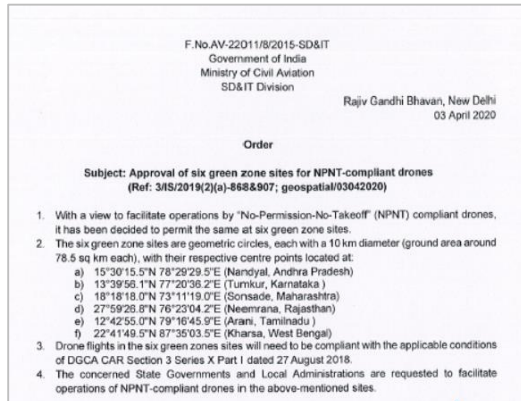
- Many drone owners had missed getting a DAN back in Jan 2020 due to misplaced fears and rumours
- Second round of enlistment started on 9 Jun 2020
- DAN issuance made simpler. Takes 10-12 minutes
- DAN accepted in many Government tenders – widens the choice for the Government
- Over 20,600 DANs issued 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 2nd Oct 2020

- 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

| | |
|---------|--|
| 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

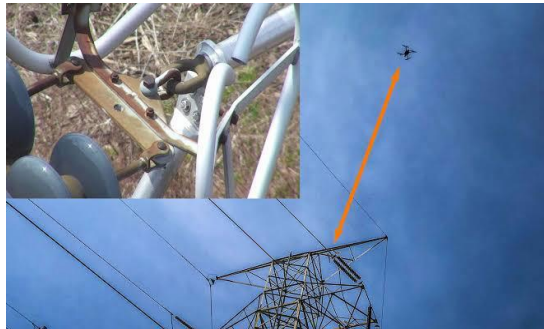
SVAMITVA – Aerial mapping of villages



- 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



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

- 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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