ANTICIPATING THE DRONES PROGRESSION THROUGH EFFECTIVE POLICY-MAKING
Today and in the Future
A Growing Industry

/ Exponential growth

/ More than the number of traditional AOC in several other countries

/ Various purposes
Hobby

/ Recreational, photography, sport
/ Typically small drone
/ Widespread use, non-commercial
Agriculture

/ Spraying, mapping, crop monitoring
/ Low-level operation
/ Non-commercial
Patrol

/ SAR, shark spotting
/ Use of AI
/ Non-commercial
Transport
/ Able to transport packages, foods, or other goods
/ Intended to transport passenger in the future
/ Commercial use
Further Impacts

/ Changes in the near future; advanced types of drone
/ More people will buy and use it, more complex operations
/ Unsafe conduct
Beyond Expectation, Beyond Regulation
Incremental Expansion on Regulatory Framework

where are we know?

/ Small UAS and Restricted RPAS
/ Limited operations
/ 0 certified operator,
  compared to other countries:
  // FAA
    119,837 remote pilot certificates
  // CASA
    10,999 remote pilot licenses
    1,504 remote operator certificates
The Challenges

/ To implement full risk-based and effective regulatory framework
  // integrated but not all-inclusive regulatory solution
/ Allows for flexibility in innovation in drone industry
  // partnering with industry
Layer 1: Core

- Drone registration
- Pilot licence
- Operator certificate
- Use of airspace
- Operation permission and procedures
- Surveillance
- Business plan
- Non-airline operator
- Fleet size
- Security check
- Equipment and personnel
- Airport facilities
- Outside airport area
Layer 2: Opportunity Created

Layer 1

Pilot Hiring
- Remote pilot training centre
- Rating procedures

Tech Industry
- Drone production
- Maintenance works
Layer 3: Public Interest

Layer 1

Layer 2

Social
/ Privacy protection

Environment
/ Noise

Economy
/ Competition; new versus traditional
/ Viability, scalability
Worldwide Progression
Steps that are being Carried out

/ Collaboration efforts
/ UAS traffic management
/ Involvement of local governments

/ Geofencing
/ Mobile app
/ Safety promotion and education
Drone that Succeed

“Wing, an initiative of Google’s parent company Alphabet, has received Air Carrier Certification from the Federal Aviation Administration”

/ Wing Aviation LLC, its company name, wins approval both from FAA and CASA
/ Extensive testing from 18 months trial with more than 70,000 test flights and 3,000 deliveries in Australia
/ Serve as commercial delivery drone from local business to households, operate over North Canberra (Aus) and Blacksburg and Christiansburg of Virginia (USA)
We can Do it Better when We Know it Better