



RPAS IN BELGIUM

# Brandweer krijgt eindelijk luchtbroek

Wet die zegt dat onbemand vliegtuigje geen foto's mag nemen, wordt aangepast

Binnenlandse Zaken gaat een onbemand vliegtuigje aankopen



REGLEMENTEN VOOR ONBEMANDE VLIEGTUIGEN IN DE PIJPLIJN

# Drones worden aan banden gelegd

publié le 15/12/2009 à 17h27

Après trois années de discussions, le gouvernement a décidé de réglementer l'utilisation des drones.

www.vlucht.be

## Game of drones

maandag 16 september 2013

5.00 reactie



la réalisation de la caméra j'ai investi dans un drone perfectionné désormais disponible dans les magasins de drones du moins quand on est en promenade à Paris. Malheureux, Belgique, la météo

Het is wat met die drones tegenwoordig. Deze zomer is er eentje neergehaald boven het koninklijk domein van Fenffe in de provincie Namen, zo meldde VTM gisteren in het programma 'Royalty'. Het ging om een cameradrone van een fotograaf van de kranten van Sudpresse.

En gisteren stortte een cameradrone neer op twee meter van het podium waar Angela Merkel een toespraak hield.

Zou de wetgever al rekening houden met de beschikbaarheid van telegeleide camera's voor luchtfotografie? Enfin, eigenlijk luidt de vraag: mag ik luchtfoto's maken van mijn zonnende buurvrouw/man?

het nieuws

HOME BINNENLAND BUITENLAND

## POLITIE GENK GEBRUIKT DRONES

BINNENLAND

VRIJDAG 04 MEI 19U42

00:00 / 00:00

## Koen Meuleman (VITO) en Karen Ongena (IP PORTA)

meteen mee

Foto: Wippenraad

aan het type toegevoegd waar er gevlogen zelf zal ook aan vliegen. Maar dit toestel moet stevig en. Met alle wetten en bepalingen die erop van toepassing zijn, moet de drone veilig en betrouwbaar zijn. Het is belangrijk dat de drone veilig en betrouwbaar is. Het is belangrijk dat de drone veilig en betrouwbaar is.

# Drones zitter ook in uw tuin

AS

# INDEX

- The association
- Operations
- Terrains
- Current regulations
- Stakeholders
- Incidents
- Future

# THE ASSOCIATION

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# THE ASSOCIATION

- 4th of July 2012
- Six founding members
- Ten members in total



- To interact with several stakeholders;
- Communication with press, national and regional politics.

# THE ASSOCIATION

- Founding members:



GEO·ID





# THE ASSOCIATION

- 52 members (end 2013)
  - 9 Manufacturers
  - 1 Distributor
  - Service providers:
    - ✓ 27 Flying
    - ✓ 4 Non-flying
  - 1 R&D Institute
  - 1 Insurance agency
  - 1 Administration company
  - 1 Accredited Training Organisation

# THE ASSOCIATION

- 7 lectures in 2013:  
Privacy; Incident reporting; Air Traffic Control; Insurances;...
- Present on fairs & exhibitions





# THE ASSOCIATION

- Several Working Groups:  
WG Legislation; WG Safety; WG Licensing
- 2 General Assemblies a year

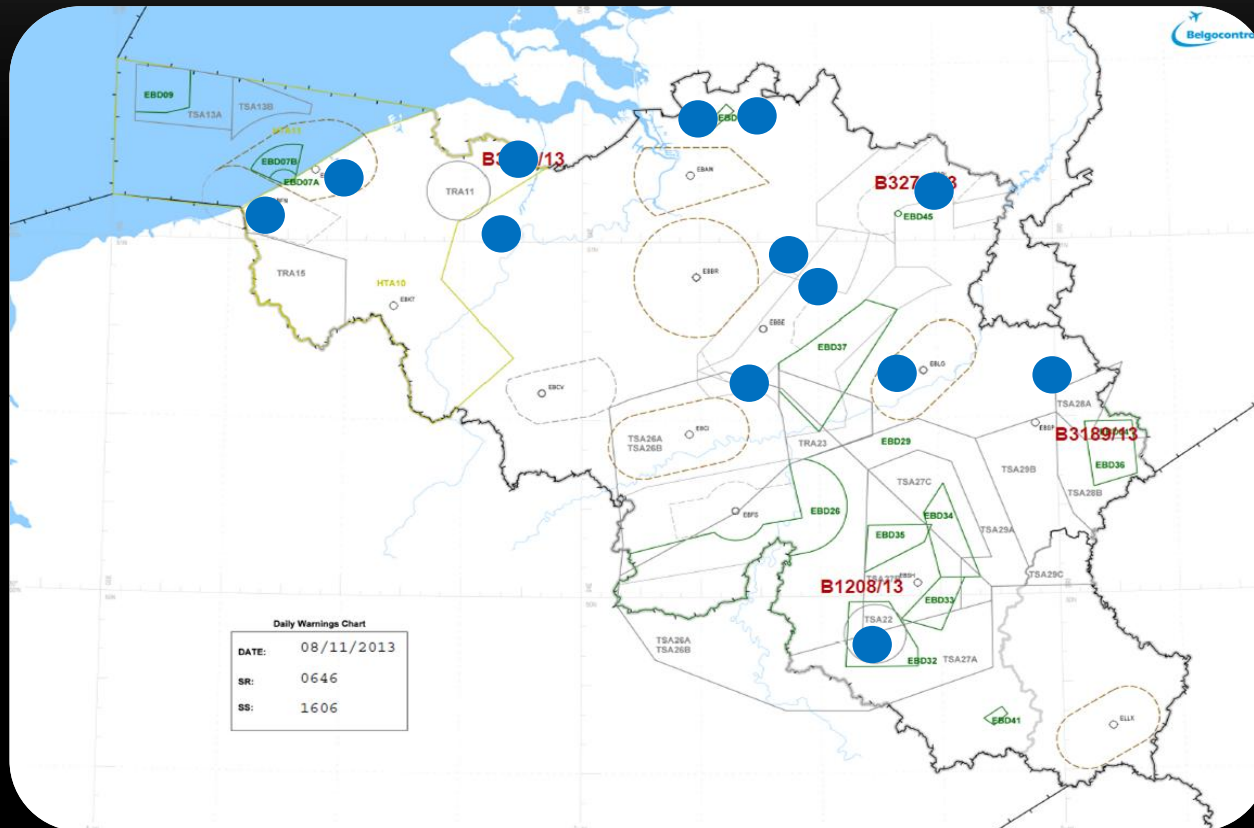


# OPERATIONS

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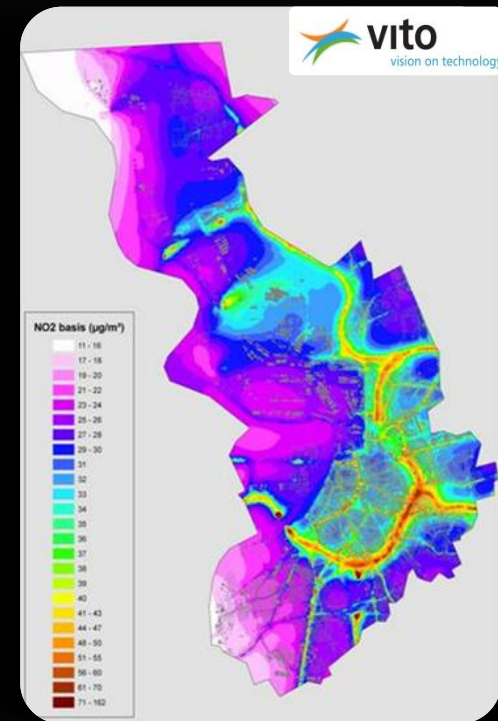
# OPERATIONS



- Brussels FIR B-series NOTAM

# OPERATIONS

- Real-time black carbon measurements with AE-51 Aethalometer



Harbour of Antwerp



# OPERATIONS

- Detection of diseases in Orchards



# OPERATIONS

- Mapping





# OPERATIONS

- Train disaster Wetteren
  - 500m perimeter for toxic acrylonitrile
  - Urgent mapping
  - BLOS
  - Collaboration between several administrations and rescue services



# TERRAINS

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# TERRAINS

- 1 private test terrain (2011)
  - Production – testing
- 2 training terrains
- 2 demonstration terrains  
*(in progress)*
- Use of model aircraft sites



# CURRENT REGULATIONS

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# CURRENT REGULATIONS

- Case-by-case:
  - Research & Development (testing)
  - Training
  - Demonstration
- **Prohibition for commercial work**
  - When performing commercial work = aerial work permission. Current legislation is not fitted for RPAS.

# CURRENT REGULATIONS

- Illegal activities:
  - Unsafe operations
  - No growth of technology
  - Unfair competition
  - No privacy concerns





# CURRENT REGULATIONS

- International Civil Aviation Organisation (ICAO)
  - Annex 2: An operation can take place when?
    - ✓ The RPAS has an Airworthiness Certificate
    - ✓ A licensed pilot will operate
    - ✓ The company has a valid RPAS operator certificate
    - ✓ With the proper authorization
  - But only valid for international flights  
However annexes are taken over for domestic regulations



# CURRENT REGULATIONS

- European Commission
  - EC785/2004: Insurance regulation
    - ✓ Only for commercial operations
  - EC wants single market for RPAS
  
- European Aviation Safety Agency (EASA)
  - NPA for >150kg
  - « 500ft AGL as physical separation »
  - RPAS must adhere to ATM principles and rules

# STAKEHOLDERS

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# STAKEHOLDERS

- Belgian Civil Aviation Authority
  
- RPAS point of view:
  - Safety first! For people in the air and on the ground
  - Correct economic business case
  - Development of technology
  - Coordination with other stakeholders
  - In line with European regulations

# STAKEHOLDERS

- Belgian's Air Navigation Service Provider for civil aviation
  
- RPAS Point of view:
  - They do not allow aircraft in their controlled airspace without being seen / without special needs:
    - ✓ Detect and avoid capability
    - ✓ Radiotelephony capability
    - ✓ Assured Airmanship

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# STAKEHOLDERS

- Belgian Defence – Air Component
  - Belgian's Military Aviation Authority
  - Military Air Navigation Service provider
  
- RPAS point of view:
  - Safety first!
  - Military aviation has priority in military airspace
  - Permission or coordination prior flight



# STAKEHOLDERS

- Royal Belgian Aeroclub (VML)
  - Association of all Aeroclubs, recreational flights, model aircraft, ...
- RPAS point of view:
  - Safety first!
  - RPAS regulations should not interfere with model aircraft regulations. However there must be a basis for model aircraft and RPAS.
  - Radio regulations



# STAKEHOLDERS

- Federal Police - Air Support Unit
- RPAS Point of view:
  - Safety first!
  - RPAS visible for police helicopters at very low altitude
  - Operational air traffic
  - No time to check NOTAMs when scrambled



# STAKEHOLDERS

- City associations
  - Represent cities to other authorities
  - Support cities in administration
- RPAS point of view:
  - Local authorities must be informed about public flights
  - Privacy concerns



# STAKEHOLDERS

- Belgian Institute for Post and Telecommunication
- RPAS point of view:
  - Waiting for ITU for new and approved RPAS frequencies (2015!)
  - Waiting for EU for new and approved RPAS frequencies
  - Collaborating on a case-by-case basis



# INCIDENTS

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# INCIDENTS

- Near miss Antwerp International
  - Final approach
  - Few meters between aircraft & RPAS
  - Judicial research



FUTURE

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# FUTURE

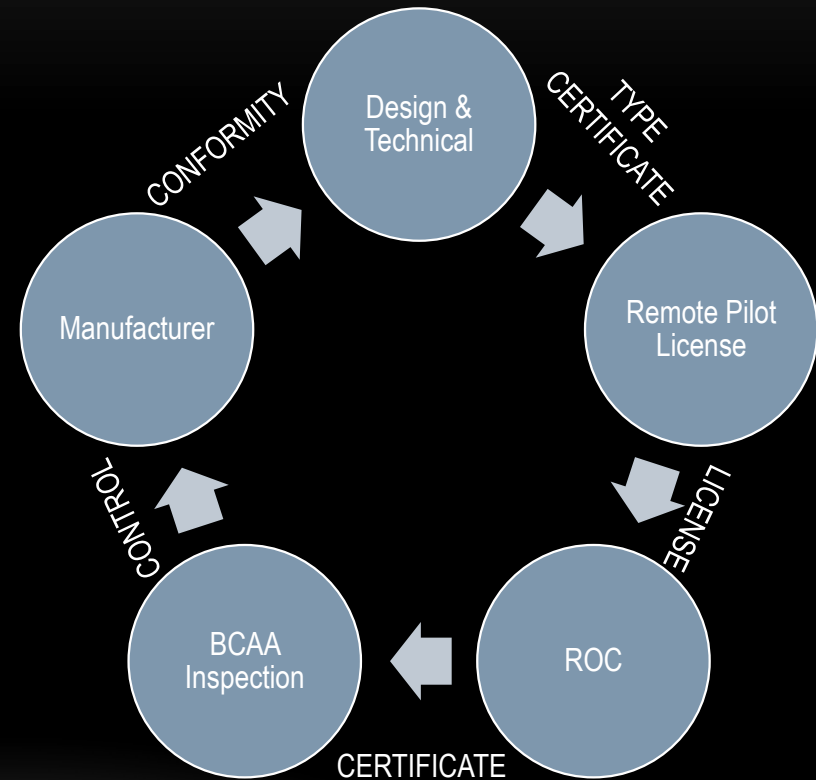
- Legislation must cover all types of UAS:
  - Rotary / Multicopter
  - Fixed wing
  - Lighter-than-air
  - Light
  - Heavy
  - Open/closed source autopilots/payload

# FUTURE

- Mutual recognition of BCAA permissions and procedures:
  - Enables companies to go abroad
  - Enables BCAA to recognize foreign certificates  
= decrease of expenses
  - But requires a similar level of regulation as EU-countries
- Fast deployment possibilities:
  - Not only for emergency services

# FUTURE

- Airworthiness standards are not available:
  - Safety must be built on several pillars



# FUTURE

- Charges:
  - Acceptable for the industry (small/medium/large)
  - In proportion to manned aviation
  - Allow growth for unmanned business





# FUTURE

- Registered RPAS
- Law and regulations in effect
- Visual Line Of Sight (VLOS) & Beyond Line Of Sight (BLOS)
- RPAS License:
  - Via an Accredited Training Organisation
  - Manufacturer
- Medical License Class 3
- Logbook

# SAFETY FIRST!

- THANK YOU FOR YOUR ATTENTION -  
? QUESTIONS ?

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www.beuas.be

