

# IWAUC

## INSPECTION WITH AUTOMATED UAV'S USING COMPUTER VISION



Wind: Europe's future energy supply

# Introduction

Mr. Ron van Helvoirt (1964)

Dipl. Executive coach, Strategic advisor and Interim Manager

IWAUC project: Project Director a.i.

A high-angle, slightly blurred photograph of a large, busy exhibition hall or trade show. Numerous people are seen walking, talking, and interacting at various booths and displays. The lighting is bright, and the overall atmosphere is one of a professional event.

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# Facts and numbers

type	Public-Private cooperation
subsidy provider	RVO <i>rijksdienst voor ondernemend Nederland</i>
partners	Dutch Drone Company <i>drone operator</i> Droneview <i>drone operator</i> epoMAT <i>rotorblade and composites expert</i> SCART <i>rope access</i> NHL-Stenden <i>university of applied sciences</i>
lectorate	Compter Vision
duration	1 oct. 2015 until 1 sept. 2019
euro	1 million

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# Goal

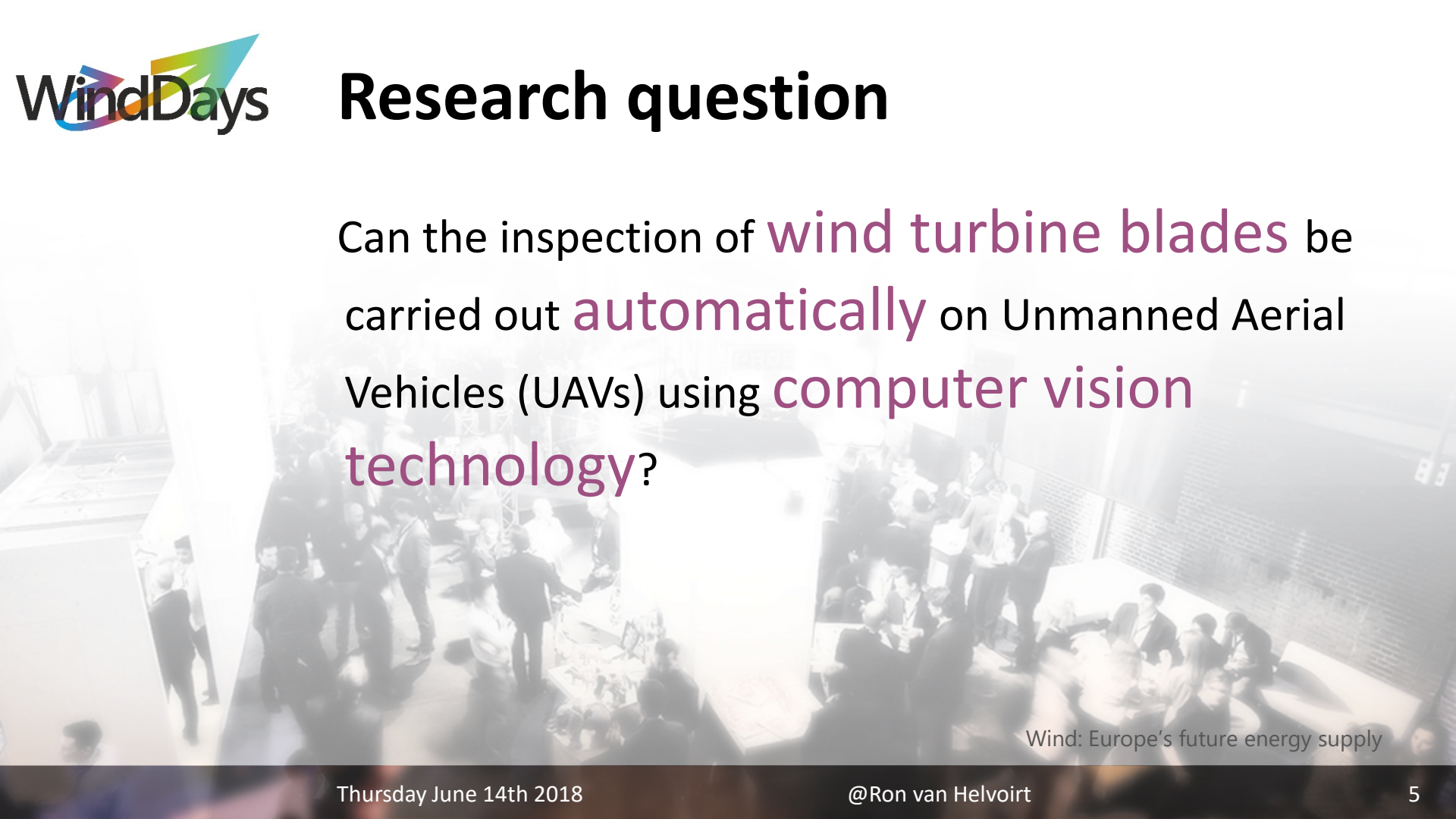
The focus in this project is on **adding added** value through automated, where necessary onboard, intelligent use of **computer vision technology** on **Unmanned Aerial Vehicles (UAVs)** for the inspection of wind turbine blades.

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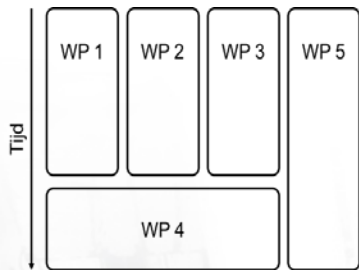
# Research question

Can the inspection of **wind turbine blades** be carried out **automatically** on Unmanned Aerial Vehicles (UAVs) using **computer vision technology**?

A blurred, high-angle photograph of a busy exhibition hall or trade show. Numerous people are seen walking, talking, and interacting at various booths. The lighting is bright, and the overall atmosphere is one of a large-scale event.

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# Project TEWZ115010



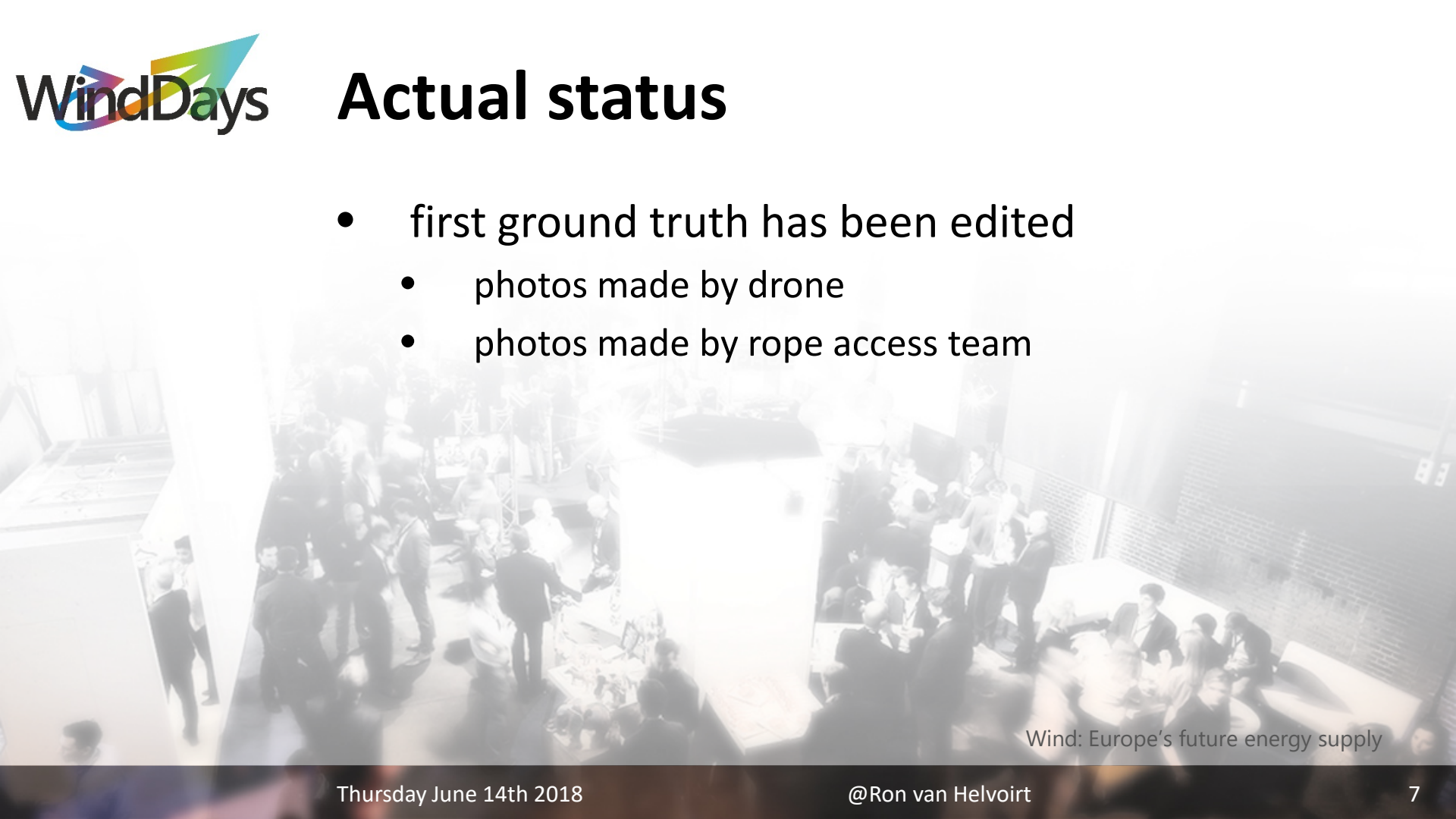
## Work package (WP)

1. fly at sea and land
2. automate visual inspections
3. automating the flight proces
4. integration prototype
5. impact of pollution and damage on the performance of offshore wind turbines

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# Actual status

- first ground truth has been edited
  - photos made by drone
  - photos made by rope access team

A high-angle, slightly blurred photograph of a large, busy exhibition hall. Numerous people are seen walking, talking, and interacting with various displays and booths. The lighting is bright, and the overall atmosphere is one of a professional event. The image is semi-transparent, allowing text to be overlaid on it.

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# Impression





A blurred, high-angle photograph of a crowd of people walking through a modern, brightly lit interior space, possibly a convention hall or exhibition center. The people are out of focus, creating a sense of movement and activity.

Inspection with Automated  
UAV's using Computer Vision

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# Request

We are urgently looking for windmills for testing on- and offshore!

## **PAYBACK**

Free BZEE Rotor blade inspection incl. Report

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# Thank you for your attention!

Contact details:

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