

AEROSPACE & MAINTENANCE

in Brabant



**BRABANT
IS BRIGHT**

This is why Brabant excels



Strong industrial heritage
(100+ years) of companies like
Philips and MSD



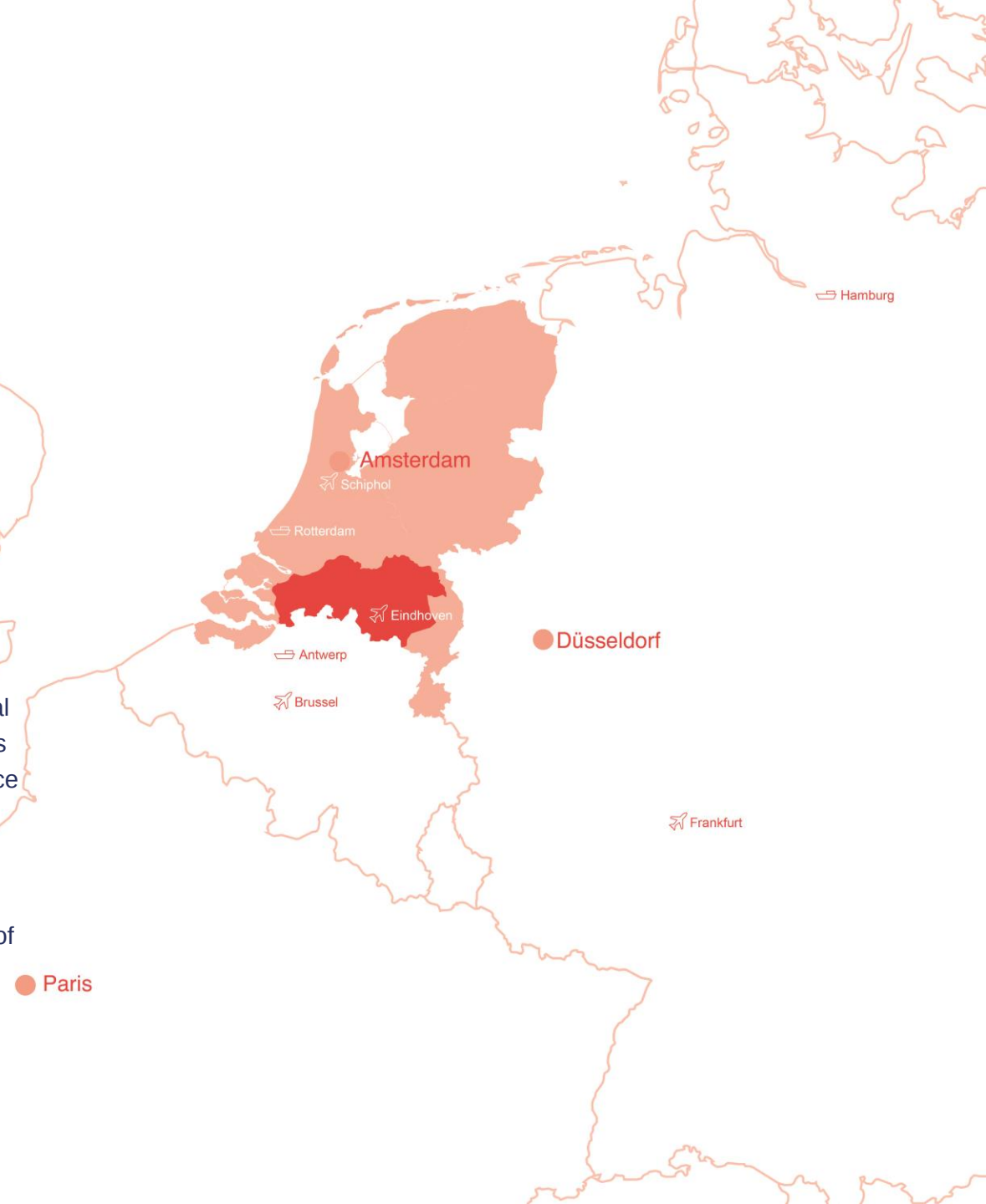
A distinct connection to regional
HTSM-companies as suppliers
to the Aerospace & maintenance
cluster



Excellent education at 15 top
universities within a 1.5 hour's
drive



Perfect geographical location
between the biggest (air)ports of
Europe



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TODAY

In Brabant a number of key ingredients have been fruitfully mixed together over the last 100 years, creating one of the strongest high tech systems and materials regions in the world, offering its technology to the global Aerospace industry.

The Brabant Aerospace industry stands out because of its many high tech companies and experts that shape the advancement of our HTSM and Maintenance sector.

TOMORROW

The High Tech Systems & Materials (HTSM) cluster in Brabant secures the innovative drive of aerospace companies worldwide. In fact there is almost no machine that cannot be built in Brabant, because of the available value chain for HTSM manufacturing. From processing raw materials to the manufacturing of assets for OEM's like ASML, Philips Healthcare, DAF and VDL busses.

In combination with the activities around The Netherlands Air Force bases in Woensdrecht, Eindhoven and Gilze-Rijen, the region offers a worldclass Aerospace MRO ecosystem.



Because of our aviation heritage Brabant particularly excels in:



New materials:

Maintenance, repair and modification of composite structures and components.



Engine & component repair:

Scroll Compressor System, APU Load Compressors, avionics cooling, environmental control, power generation etc.



Aircraft MRO and upgrades:

Tailor-made solutions, parts supply, component MRO, Modification engineering.



Future concepts:

Predictive maintenance, AI, automated repair, additive manufacturing, electrification etc.



Aircraft Systems:

Aerostructures, electrical wiring systems, landing gear.

Cluster size Aerospace & Maintenance

Source: In-depth Analysis Aerospace, 2020
(commissioned by BOM)

key facts

In total Linked to Aerospace

160+
companies

18,700
jobs

137

suppliers to the
Aerospace industry

20%

employs between
100 - 500 people

Aerospace & Maintenance in Brabant

6.8 billion
euros

turnover of Aerospace related
activities in Brabant

jobs

5 regional airports
and airforce bases

5,310

employees with the
Dutch Air Force

19.6%

of the Dutch Aerospace
jobs are in Brabant

1,900

jobs in Aerospace
research

32

Aerospace research
operations

Patent applications



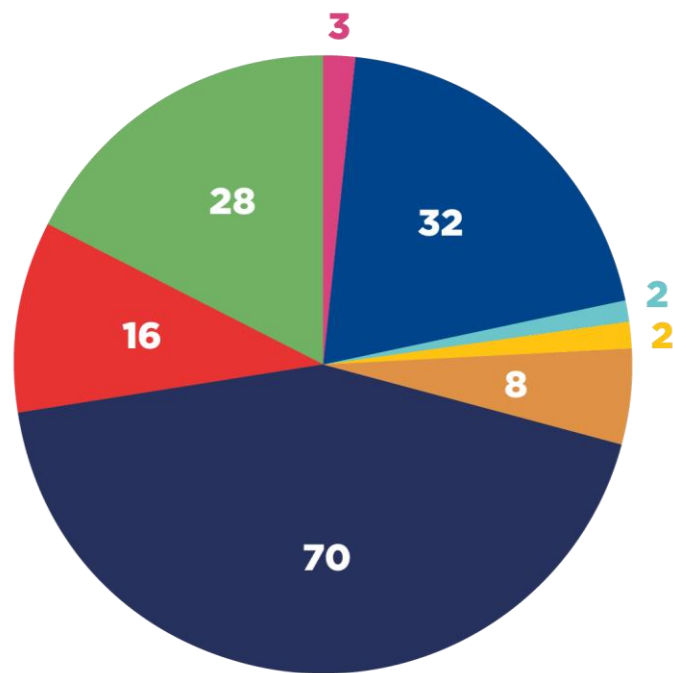
of all European patent
applications from the
Netherlands are gene-
rated in Brabant

5th

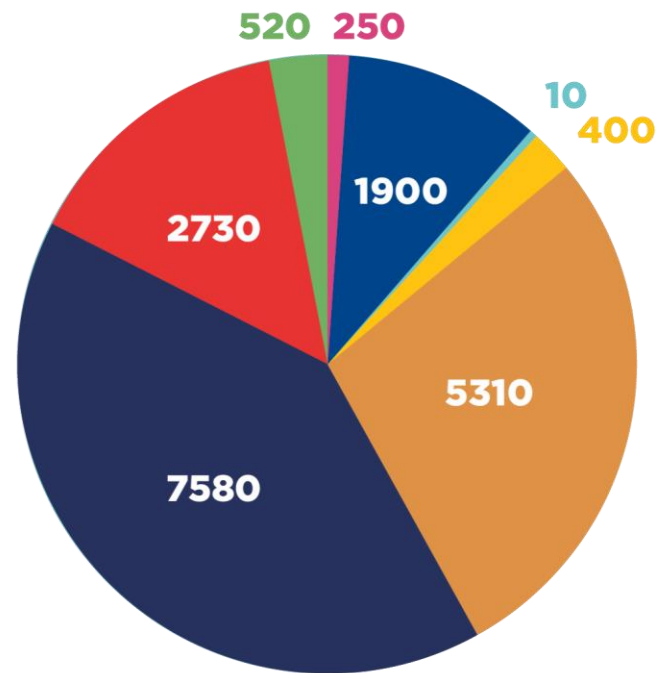
place in Europe for regions with the
highest number of patent applications



**ESTABLISHMENTS IN AEROSPACE,
DIRECT AEROSPACE AND AEROSPACE RELATED**



**JOBS IN DIRECT AEROSPACE,
DIRECT AEROSPACE AND AEROSPACE RELATED**



- Research
- Aerospace HTSM
- Aerospace Materials
- Airport
- Defence Royal Netherlands Air Force
- HTSM
- Materials
- Others



Integrated value chain core



Integrated value chain support

Selection of organisations



Milestones foreign investment

2015



StandardAero buys DutchAero to perform maintenance on the F-16 for RNLAf in Woensdrecht.

2016



Aeronamic and Fokker/GKN receive additional contracts for component repair and MRO services for the F-35. The airbase of the RNLAf and Aviolanda Businesspark prepare their premises for the global F-35 program.

2017



DCMC The Development Center for Maintenance of Composites initiates the innovation projects with Fokker, NLR, Airborne/Specto, TiaT, RNLAf, Rewin and BOM.

..... 2018



Specto receives contract from Boeing to perform MRO of rotor blades of the Apache and Chinook helicopters.

2019



Onelogistics and RNLAf officially open the regional warehouse for the global F-35 program.

2020



KMWE receives order to produce high tech components for the F135 Pratt & Whitney jetengine as part of the F-35 program.

Prominent players in Brabant



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Aerospace footprint

Aerospace campus locations

1. Automotive Campus (Helmond / Slimme & groene mobiliteit)
2. Aviolanda Air Campus
3. Brainport Industries Campus
4. High Tech Campus Eindhoven
5. TU/e Campus (Eindhoven / HTSM)
6. TU Delft Science Park
7. Gate 2 Aerospace (Gilze-Rijen / Maintenance)
8. Brightlands Health Campus (Maastricht)

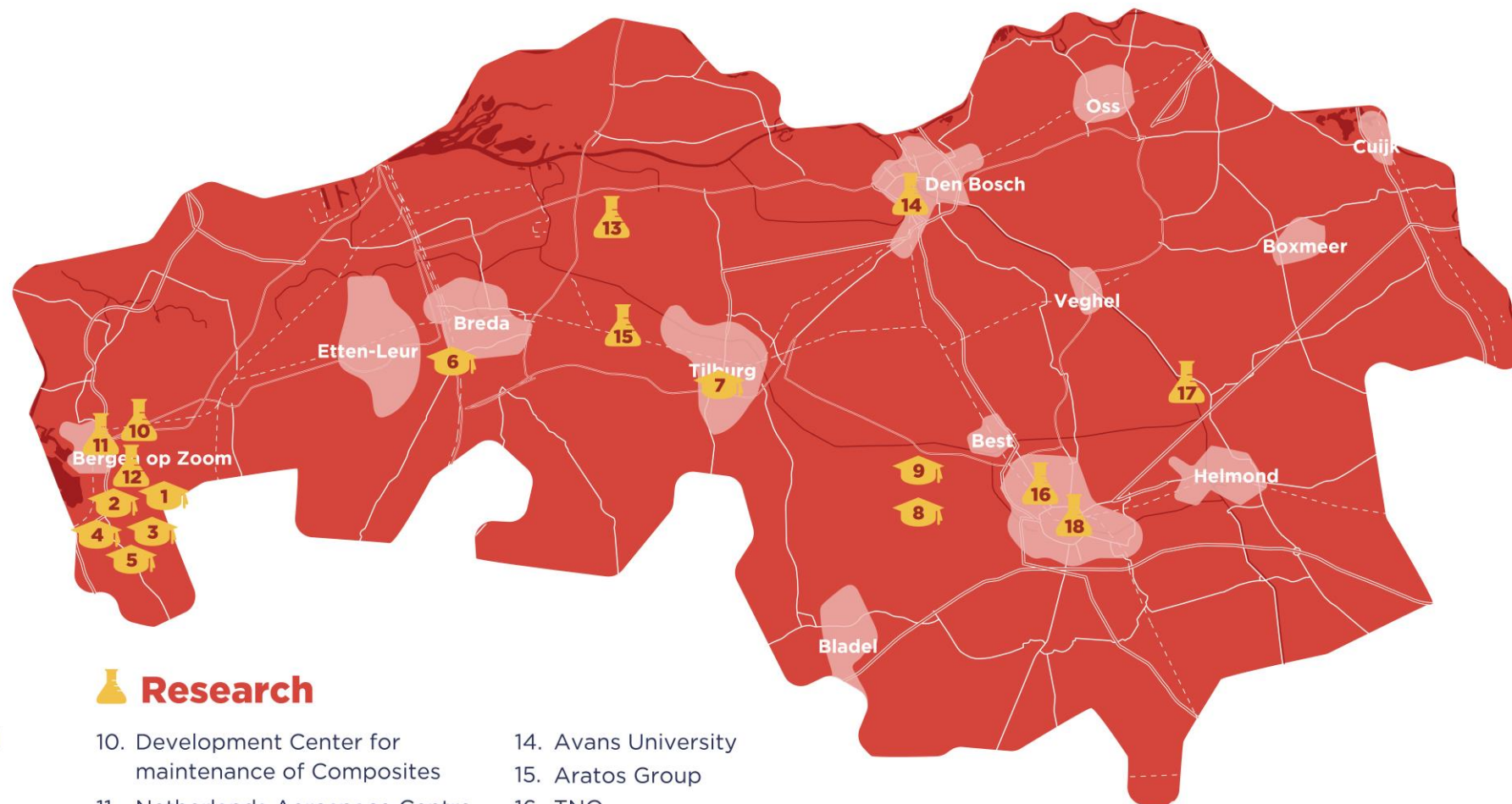
Aerospace footprint

Training & education

1. Development Center for maintenance of Composites
2. Koninklijke Luchtmacht
3. TiaT Europe
4. Dutch Drone Centre
5. Aircraft Maintenance & Training School
6. World Class Maintenance
7. Avans University
8. Fontys
9. Summa College

Research

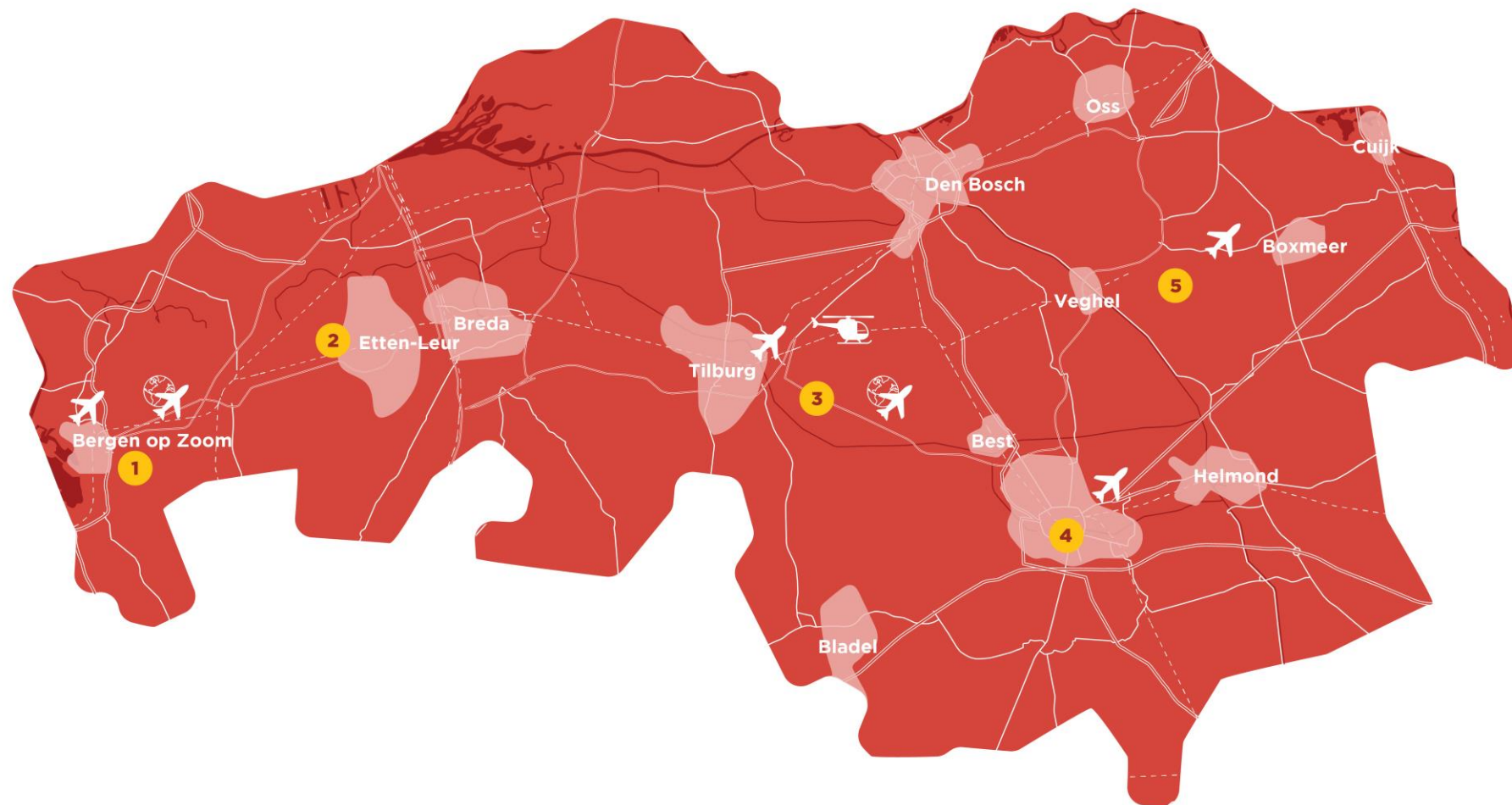
10. Development Center for maintenance of Composites
11. Netherlands Aerospace Centre
12. Koninklijke Luchtmacht
13. World Class Maintenance
14. Avans University
15. Aratos Group
16. TNO
17. Battery Competence Center
18. University of Technology (TU/e Campus)



Aerospace footprint

Air Base & Airport

1. Woensdrecht Air Base
2. Breda Airport
3. Gilze-Rijen Air Base
4. Eindhoven Airport & Air Base
5. Volkel Air Base



International Air Force programs



Rotary Wing Air Base



Military Air Base

State-of-the-art facilities Aerospace MRO cluster in Woensdrecht



OBJECTIVES

The collaboration between Aviolanda and the Royal Netherlands Air Force offers opportunities for new business opportunities, labour capacity and technological developments.

The cluster facilitates military and civil MRO activities that range from training and education, to specialized aircraft upgrades.



PROMINENT COMPANIES

- Fokker/GKN
- Fokker Services
- Aeronamic
- Specto Aerospace
- Boeing
- StandardAero
- Onelogistics
- AMTS
- Thales



KEY CHARACTERISTICS

- European MRO & logistics for F-35
- MRO/U & logistics for RNLAf
- MRO training & education RNLAf
- Air Campus
- Drone pilot training
- MRO & logistic facilities (hangars)
- 3,000 jobs
- 15 companies
- Runway
- Composites Expertise Centre
- Safe & secure premises
- Firebrigade training centre



AVIOLANDA
AEROSPACE



Koninklijke Luchtmacht

State-of- -the-art facilities Gate2 Gilze-Rijen



OBJECTIVES

Gate2 Gilze-Rijen is a Smart Industry hub that facilitates the development and realization of innovative Smart Factory projects. It includes the Cyber Physical Factory for new production techniques, simulation and digitization, as well as the Campione fieldlab for predictive maintenance.

It cooperates with education institutes for training programs regarding new production and repair techniques in the domains of new materials, 3D printing, non-destructive testing and predictable maintenance. It is also an international top location for aviation simulation training.



PROMINENT COMPANIES

- Aratos Systems
- Daedalus
- Ericsson
- WorldClassMaintenance



KEY CHARACTERISTICS

- HAPS Expertise Centre
- (Military) Flight Simulation Centre
- Cyber Physical Factory
- 5G research center
- Special OPS training
- Predictive Maintenance fieldlab
- Expert centre gluing techniques
- Business Center facilities

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State-of- the-art facilities

*Air Base
Eindhoven*



OBJECTIVES

Eindhoven Air Base is the home base of the Air Mobility Command of the Royal Netherlands Air Force. Their most important task is the provision of military air transport for worldwide military operations, humanitarian missions and special assignments. In addition, air force personnel are tasked with airport duties at Eindhoven Airport day and night.



TASKS

- Providing military air transport and air-to-air refuelling for military aircraft;
- Handling cargo and passengers;
- Making the airport available for joint military and civilian use;
- Facilitating national and foreign military units.



KEY CHARACTERISTICS

- Base for military transport aircraft
- MCCE program (military transport Europe)
- EATC program (aircraft deployment planning)
- MRTT (Multi Role Tanker Transport)



Koninklijke Luchtmacht

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State-of-the-art facilities

Electric Aviation Community



OBJECTIVES

The Electric Aviation Community was established in 2021 to facilitate partnerships between stakeholders from different industry sectors that can contribute to the realization of electric flying.



FOUNDERS

- Battery Competence Center
- Automotive Campus
- University of Eindhoven
- Eindhoven Airport
- Brainport Eindhoven
- Brabantse Ontwikkelings Maatschappij



KEY CHARACTERISTICS

- Members are active in various industry sectors, like airport management and infrastructure, aircraft engineering and construction, new energy concepts, MRO, maintenance, airline operation, battery development, drive chain development etc.
- National cooperation with a.o. Duurzame Luchtvaart Tafel, NAG, NLR, TNO, National Airports, industry partners etc.
- Project participation (PowerUp!)
- Matchmaking activities



**BRABANT
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1,000 KM / 600 MILES

500 KM / 300 MILES

€6.8
billion
turnover

19.6%
of the Dutch
Aerospace jobs
are in Brabant

**250 million
consumers**
within
1,000 kilometers
(600 miles)

**170 million
consumers**
within
500 kilometers
(300 miles)

18,700
jobs at more than
160 Aerospace
companies

50%
of patent
applications in the
Netherlands



Strong industrial heritage (100+ years
of companies like Philips and MSD)



Excellent education at 15 top
universities within a 1.5 hour's drive



A distinct connection to regional
HTSM-companies as suppliers to the
Aerospace & Maintenance cluster



Perfect geographical location between
the biggest (air)ports of Europe



European Centre for the F-35 MRO and
logistics activities

Key location benefits Aerospace

Milan



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