

PRESTIGIOUS

euroPean stRatEgic cluSter parTnershlp to Go InternatiOnal for Uav Smes



Co-funded by the COSME programme
of the European Union



Horario Actividades

- 16:00 Resultados PRESTIGIOUS sobre la cadena de valor europea de drones.**
Mélanie Durth – Responsable de proyectos e innovación en ANDALUCIA AEROSPACE
- 16:15 Cómo desarrollar su negocio en Chile.**
Nicola Ybarra – Jefe de proyecto de la Antena de EXTENDA en Chile
- 16:25 Contexto general del sector drones en Chile.**
José Merino – Presidente de APANT Chile
Loreto Moraga – Presidenta de ACHHEL
Sebastian Orellana - Gerente General de ECODRONES.
- 16:55 Preguntas.**
- 17:10 Pitch Session (2min/empresa).**
- 17:30 Comentarios.**
- 17:40 Cierre.**



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General Information

✓ **PRESTIGIOUS** is an European project co-funded by the Cosme programme of the European Union to



STRENGTHEN THE COMPETITIVENESS AND SUSTAINABILITY OF "DRONES" SMES IN EUROPE

In **2** markets

for **4** non-european countries

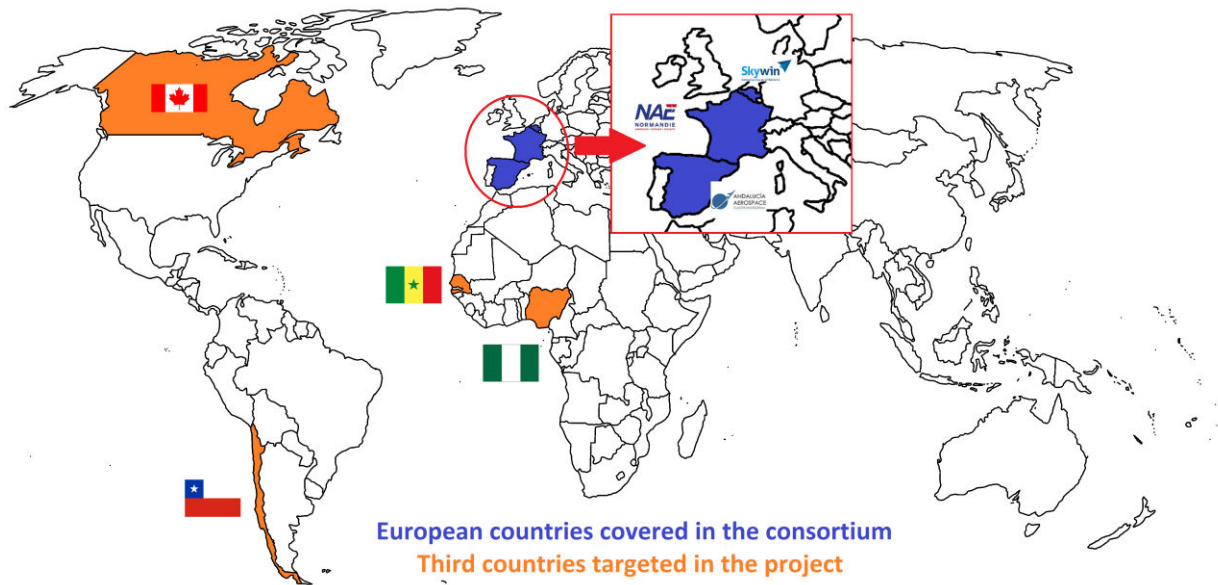
with **3** partners



Inspection



Security



Canada / Chile / Nigeria / Senegal



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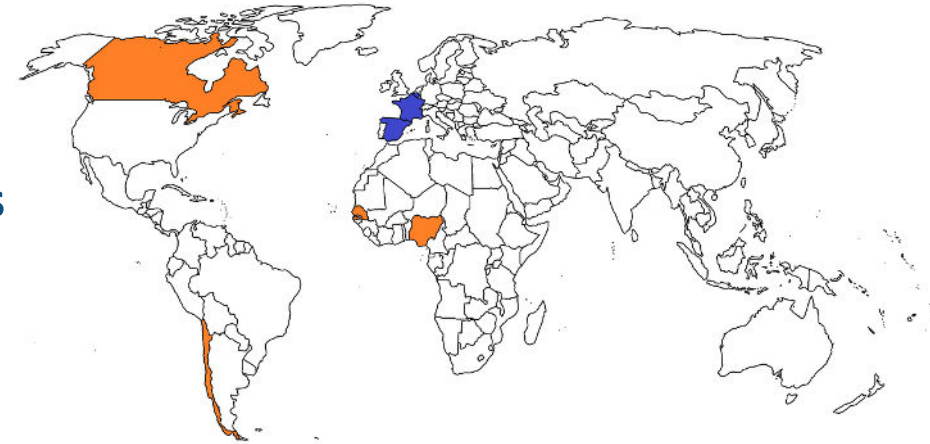
4 Main actions

✓ Assessment of the value chain for drones in Europe

- *Identify the strengths of European SMEs*

✓ Organization of 3 missions to non-European countries

- *Identify potential end users outside Europe*
- North America (Canada)
- Central Africa (Nigeria, Equatorial Guinea)
- South America (Chile)



✓ Supply of individual support for European SMEs

- *Organization of training seminars for the transfer of information*

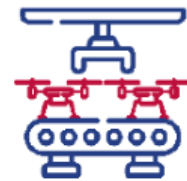
✓ Preparation of a joint internationalization strategy

- *Roadmap to establish a European strategy for drones*



- ✓ **Objective:** define the “Inspection” and “Security” value chain in Europe and identify where the European players are positioned on the value chain.

STRUCTURE OF THE VALUE CHAIN :



OEM manufacturer



OEM supplier



Software editor



Aeronautical data service provider



Data analysis



Maintenance center



Training



Pilot / operating company



Certification company



Testing center



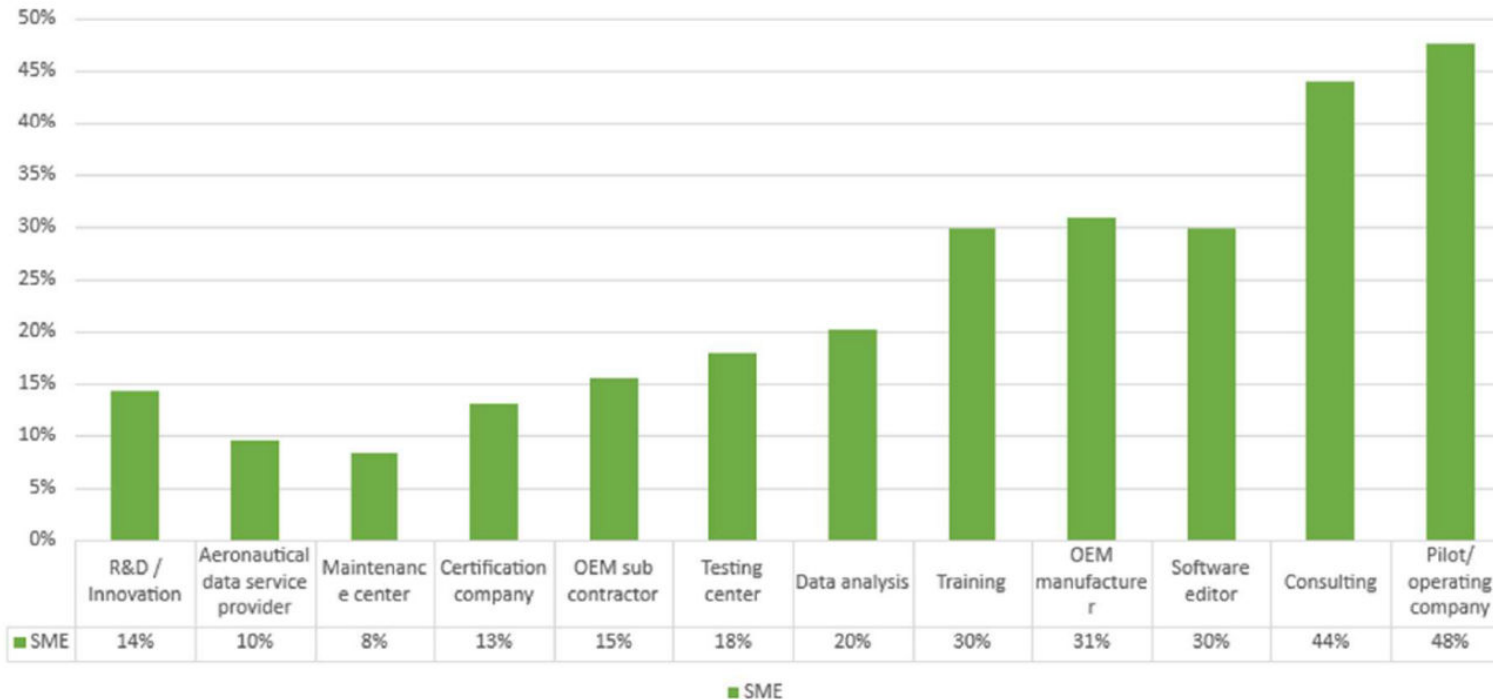
Consulting



R&D / Innovation

✓ **Drones activity: Information gathered from 84 European companies – among which 77 SMES**

Drones activity



The main areas covered by short of 50% of the responding European companies are **“Consulting”** and **“Pilot/operating Company”**.



✓ Priority market detail: Information gathered from 38 European companies



Market still in the maturation phase





✓ Interviews to go further in results details

- 5 from Belgium: companies from 3 to hundreds of employees
- 3 from France: SMEs
- 1 from Spain
- 2 from Denmark: startup & SME
- 3 from Czech Republic: university, spin-off & startup
- 4 from Greece: SMEs



✓ Main conclusion:

- Business is mainly national
- Access to other countries (EU or non-EU) remains difficult
- Market size is still limited
- China and the USA are a major part of the current drone hardware value-chain (OEMs and part suppliers) for the European actors
- European companies are open to EU-based solutions if
 - price is the same for the same quality
 - quality is higher
- Drones and satellites are considered as complementary regarding Earth Observation (inspection in agriculture, forestry, sea, as well as security)
- Certification is a strategic issue. EU is late compare to the USA.
- There is an opportunity for drone (spare) parts production in the EU

✓ IRL maturity results

Based on the analysis of different criteria, the SMEs has been classified according to 5 levels:

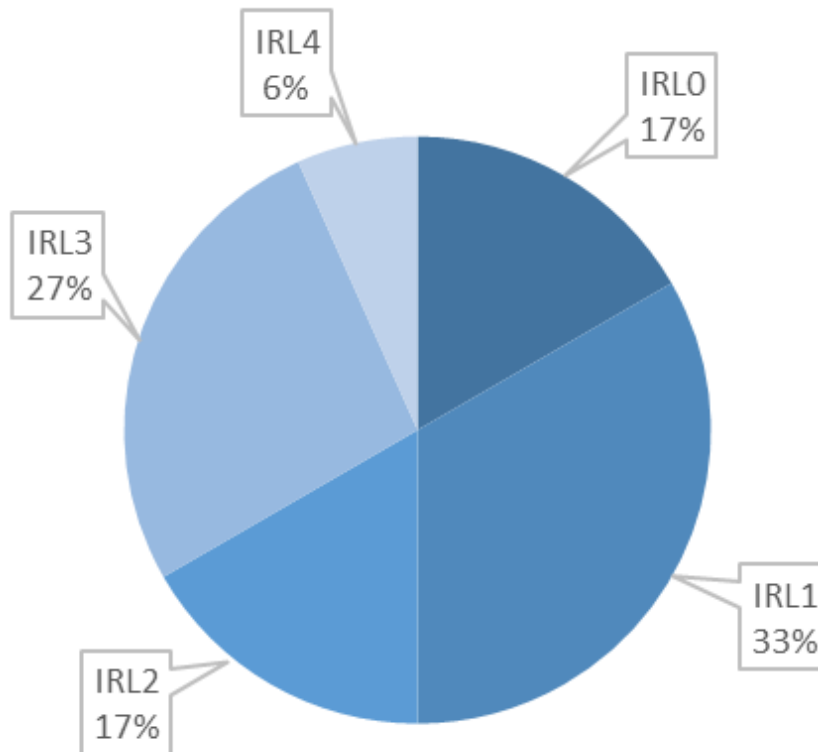
- IRL0: Neither international activity;
- IRL1: Wish to go international but without a roadmap;
- IRL2: Beginning international activity with a roadmap;
- IRL3: International activity;
- IRL4: Structured organization and activity for international

Objective : Check the capability of SMEs to address the global UAV market.

Information gathered from 30 SMES

✓ IRL maturity results

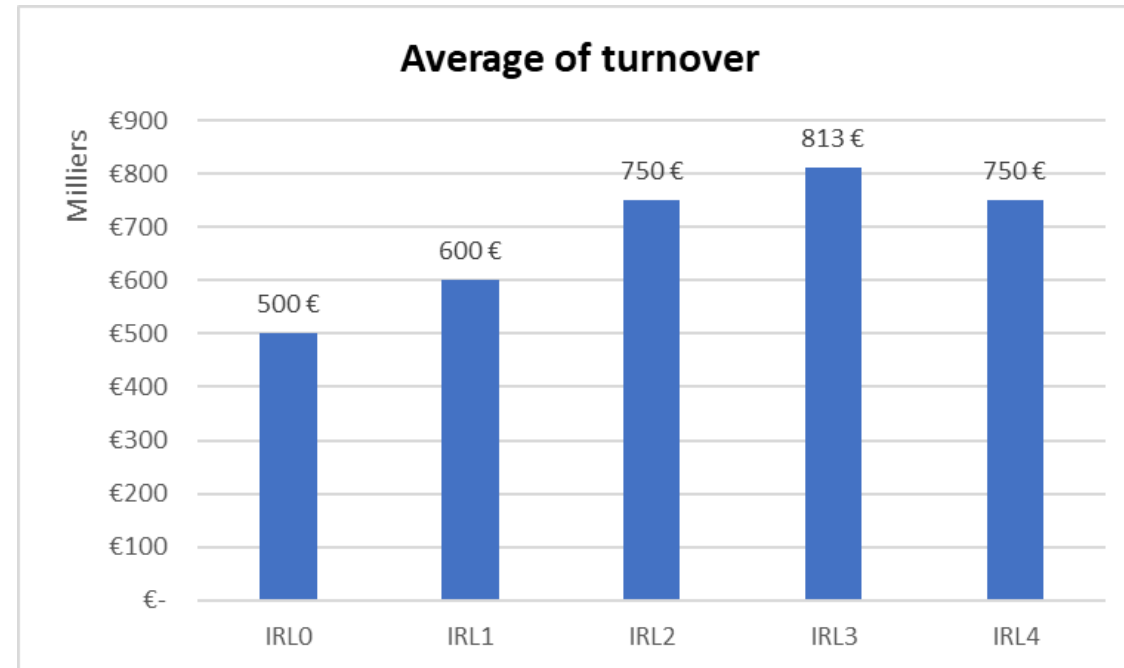
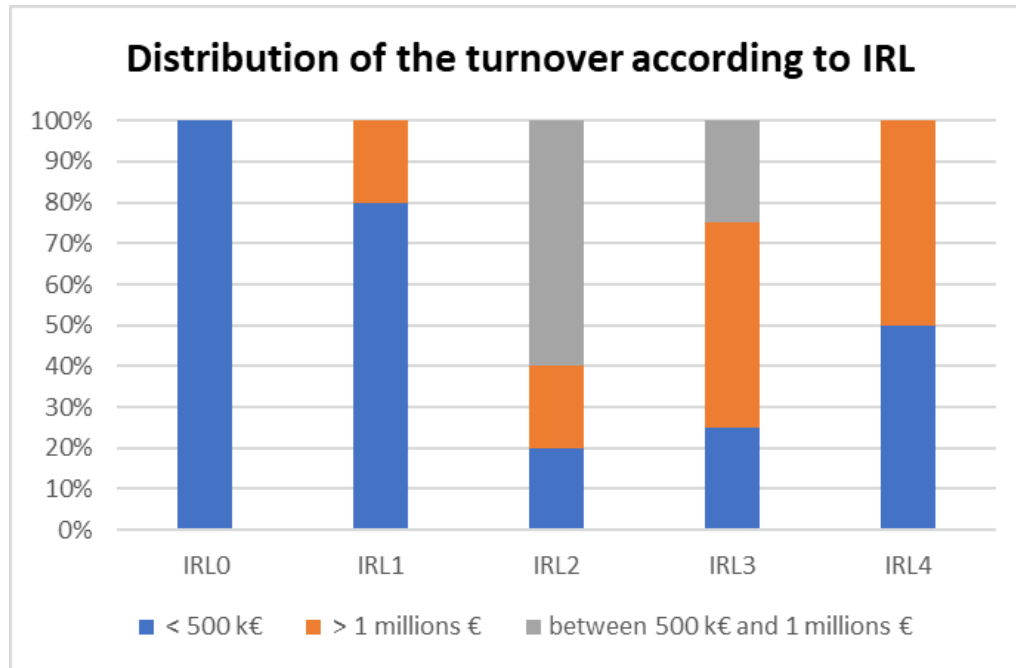
Distribution International Readiness Level



50% of drone companies are structured to develop internationally (IRL 2 to 4)

Or 12% (from the 122 companies reached out)

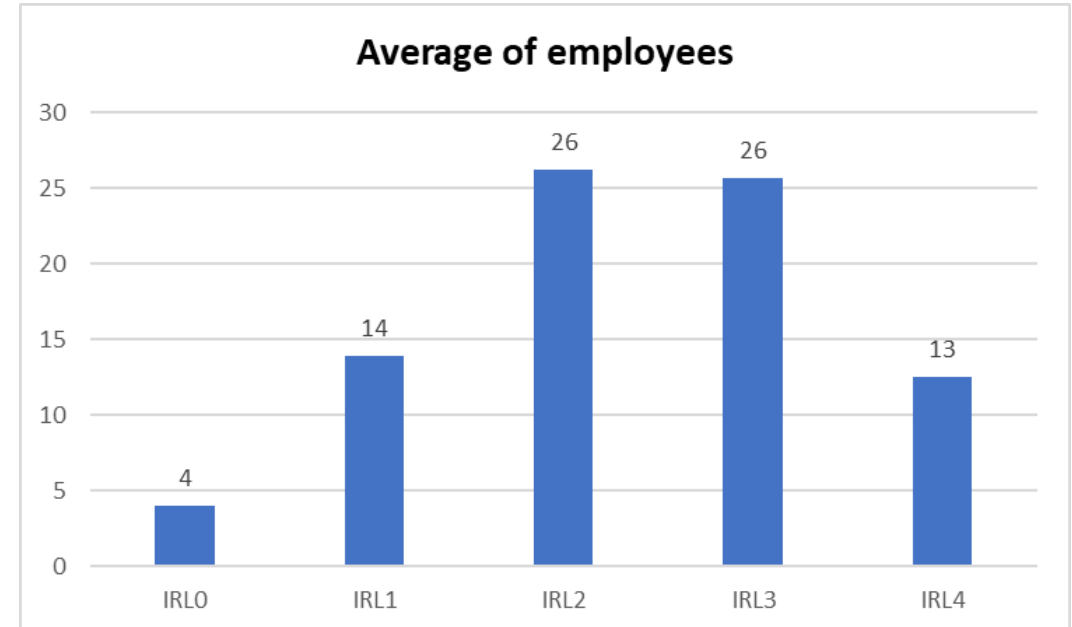
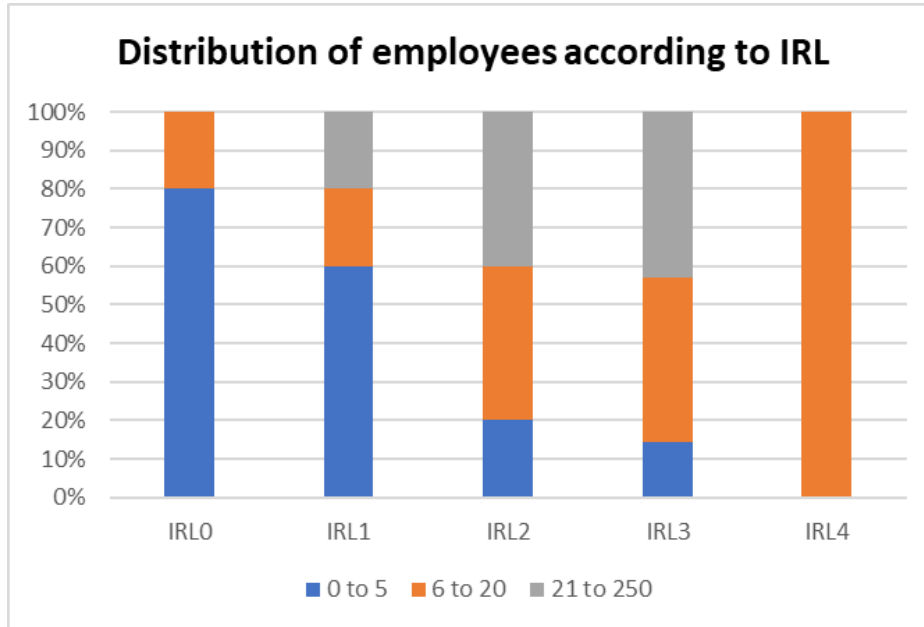
✓ Impact of turnover on the IRL maturity level



no apparent correlation between turnover and maturity to grow internationally

higher the average of turnover, the higher the maturity level.

✓ Impact of number of employees on the IRL maturity level



no apparent correlation between number of employees and maturity to grow internationally

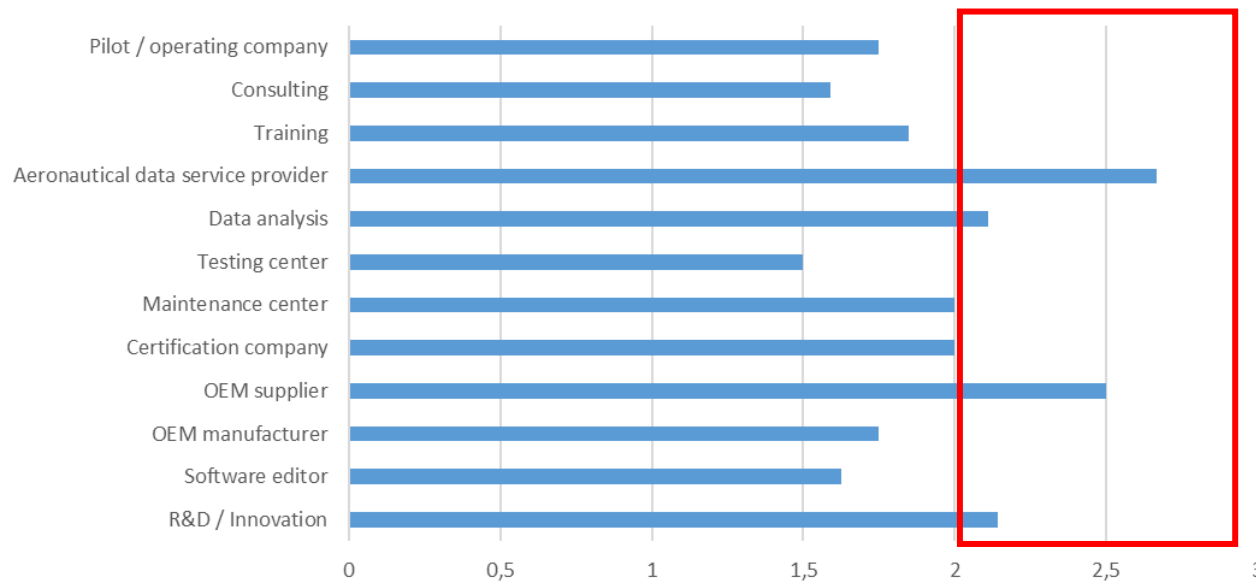
➡ Key figures of a drone company able to address international markets

>26 employees

~800k€ of turnover

✓ Value chain and IRL

Average IRL for each brick of value chain



Players working on the following 4 main bricks of the chain have a higher maturity and capability of developing internationally:

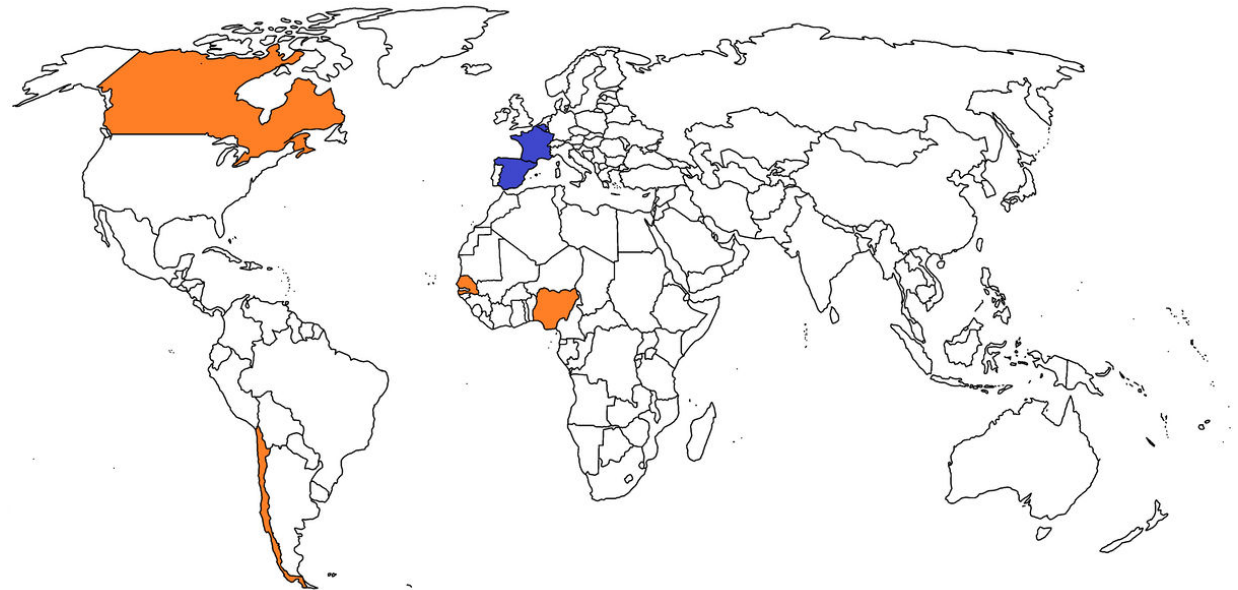
- Aeronautical data service provider
- Data analysis
- OEM Supplier
- R&D / Innovation



✓ Organization of 3 missions to non-European countries

The countries visited in the scope of the international Fact-Finding Mission were :

- 🇨🇦 Canada (visit to Montréal, Québec)
- 🇨🇱 Chile (Santiago de Chile)
- 🇸🇳 Senegal (remote)
- 🇳🇬 Nigeria (remote)



✓ Economic environment data

| | Canada | Chile | Nigeria | Senegal |
|--------------------------|--------|-------|---------|---------|
| Population (Millions) | 39 | 19,8 | 206,1 | 17 |
| GDP (bn USD) | 1991 | 353 | 432 | 25 |
| GDP by inhabitant (USD) | 51051 | 17828 | 2096 | 1471 |
| Balance of trade (% GDP) | 0,16 | 2,16 | 0,39 | -15,5 |
| Employment (%) | 60,3 | 54,9 | 66,7 | 56,1 |
| Unemployment rate (%) | 5,2 | 8 | 33 | 22 |
| Life expectancy | 81,7 | 80.3 | 68.2 | 55.0 |

✓ Contribution to GDP of following sectors (in billion USD)

| | Canada | Chile | Nigeria | Senegal |
|---------------------------|--------|-------|---------|---------|
| Services | 1150 | 165 | 223 | 12 |
| Mining | 122 | 46 | 31 | 0,6 |
| Manufacturing | 170 | 25 | 51 | 3,5 |
| Agriculture, forest, fish | 47 | 10,4 | 103 | 4,2 |

GDP values by sector are indicators of business potential for drones in that industry

✓ Potential of specific market

| | Canada | Chile | Senegal | Nigeria |
|---|--------|-------|---------|---------|
| Long range Inspection (power- & pipe-lines) | X | X | X | X |
| Inspection of towers (telecom) | X | | | |
| Security (borders, infrastructures and agriculture) | | X | X | X |
| Agriculture, vegetation monitoring | X | X | X | X |
| Environmental monitoring | X | X | X | |
| Mining | X | X | | X |
| Arctic and cold weather operations | X | | | |
| Photogrammetry & mapping | X | X | X | |
| Training | | | X | X |
| Material (aircrafts, payloads) | | | X | X |
| Drone detection | X | | X | |
| R&D (any topic) | X | | | |

- Long range inspection is a common need
- Security aspect less covered in Canada: already historically implemented in aerial and defense related solutions -> demonstration of the maturity of the market
- “Drone detection” category:
 Senegal: counter-UAV solutions regarding invading drones
 Canada: R&D regarding integrated airspace management.



✓ high-level recommendations regarding a first approach on these specific markets :

Canada

- Seek R&D partners in any high-tech area
- BVLOS, U-Space and 'cold condition flight' development
- For existing solutions: use test ranges to benchmark EU vs existing local solutions (incl BVLOS)

Chile

- Favor operations outside of the populated areas, where regulation is less strict
- Agro-forestry monitoring (growth, counting and intrusion detection) is in demand
- The needs in the mining industry is wide: site monitoring (safety and production volume), equipment maintenance (fixed and moving), exploration for new resources.

Senegal and Nigeria

- As the markets and access to business and drone-operation authorizations are still sometimes unguaranteed, explore these markets if strong local contact exists and business case (including regulatory) is demonstrated.
- Economically robust EU organizations may find an opportunity to sow the seeds and help the local institutions define a favorable UAV roadmap. Advice and support from your country's/regions's local economic/business agency is highly recommended.



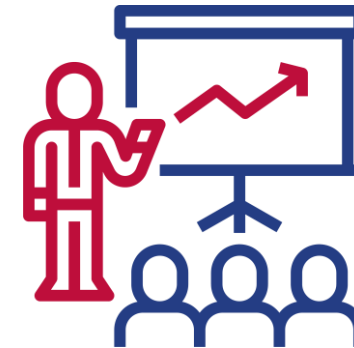
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For you

✓ **Be referenced** in the European value chain of “drones”



**TO BENEFIT FROM PRESTIGIOUS,
COMPLETE THE SURVEY - HERE**





✓ NAE

- ✓ Created in 1998 (more than 160 members)
- ✓ Network for air, space, defense and security businesses in Normandy
- ✓ Cover all aspects of the drone industry (training, R&D, drone fleets, Artificial Intelligence, test and pilot centers)



✓ Andalusia Aerospace

- ✓ Created in 2018 (60 members – 40 SMEs)
- ✓ Cover several sectors for the use of drones (indoor inspection, inspection of coastal areas, agriculture, safety, etc.)



✓ SKYWIN

- ✓ Created in 2007 (158 members – 111 SMEs)
- ✓ Focus on development of applications, sensors, control systems, ...



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*More information
scan here*

