

PRESTIGIOUS

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Co-funded by the COSME programme
of the European Union

Webinar Prestigious European Drones value chain and Internationalization assistance for SMEs

Agenda – 2PM CET – 9 AM Montreal – 7 AM ALBERTA

- **PRESTIGIOUS results on European UAVs value chain**
 - **Welcome in CANADA**
by AWEX - Toronto Office (Export Agency of Wallonia, Belgium)
 - **Special guests from Canada**
 - [BVLOS Innovation Center](#) & [Foremost Test Range](#)
 - [Drone Deschamps](#) : Drone Imagery, spraying & innovation
 - **Questions & Answers**
- Pitch Session (1 slide - 2min/SME – contact anthony.bievelez@skywin.be)**

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

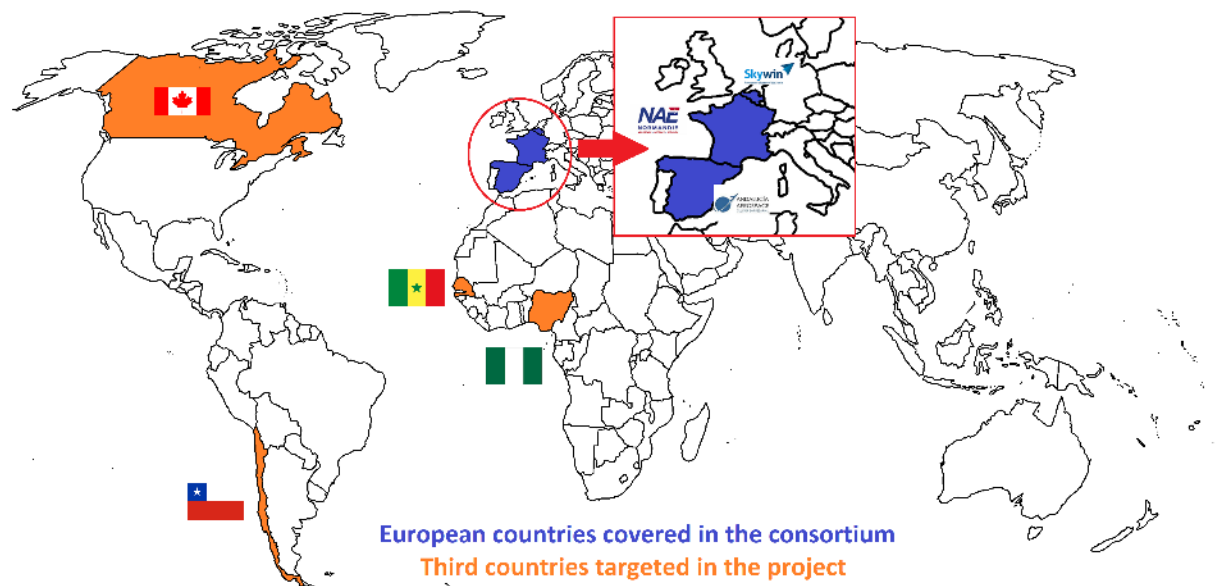


Inspection



Security

for **4** non-european countries



European countries covered in the consortium

Third countries targeted in the project

Canada / Chile / Nigeria / Senegal

with **3** partners



European Drones value chain and Internationalization assistance for SMEs

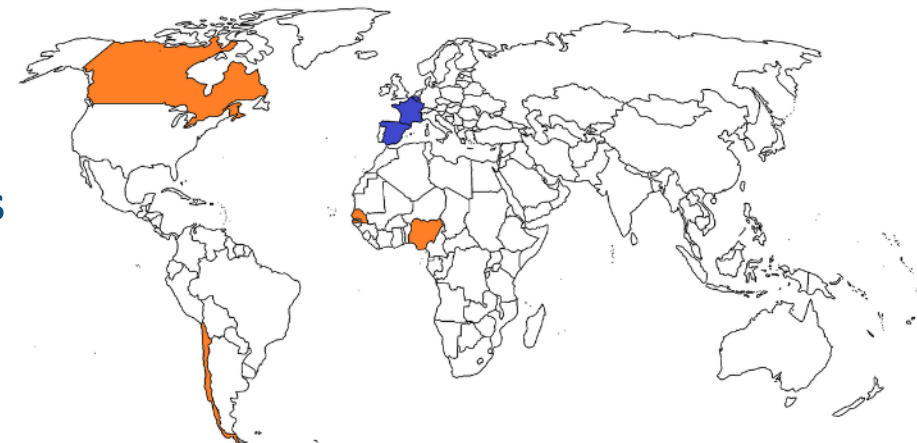
4 main actions

✓ 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**)
- West Africa (**Nigeria, Senegal**)
- South America (**Chile**)



✓ Supply of individual support for European SMEs

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

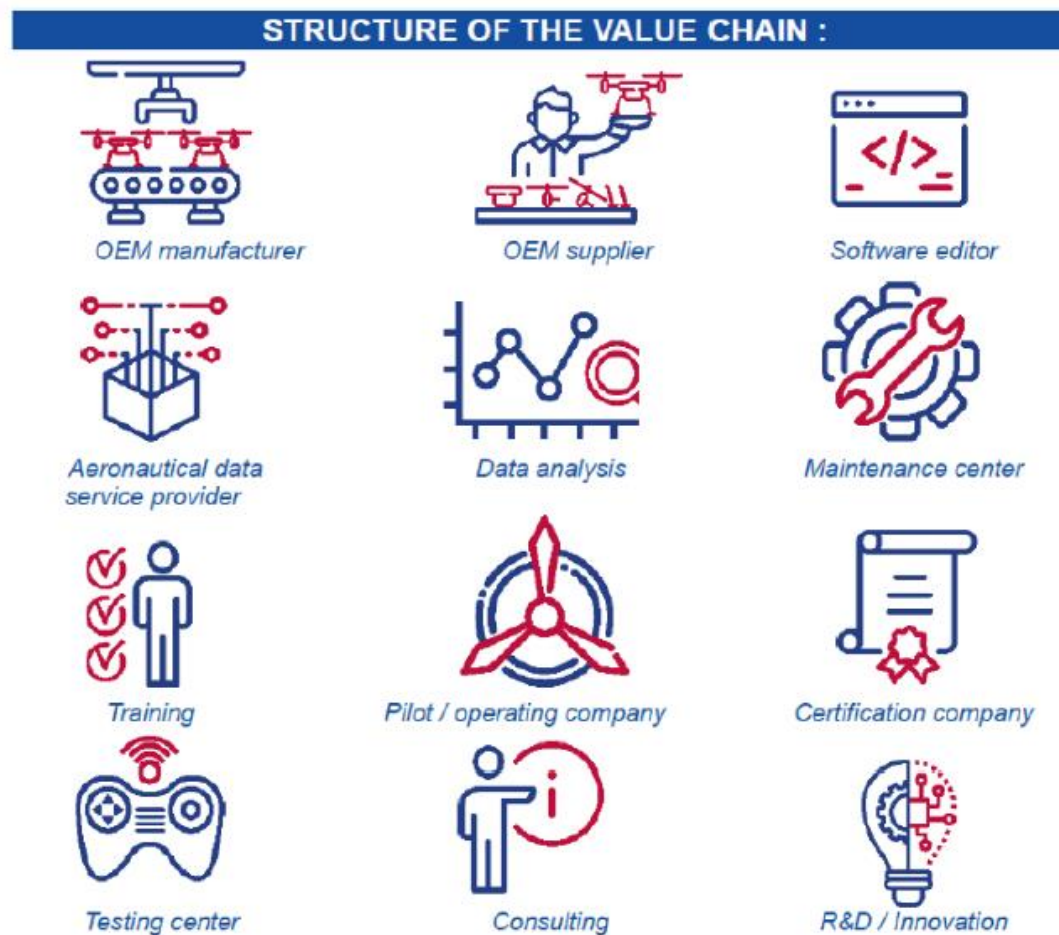
✓ Preparation of a joint internationalization strategy

- *Roadmap to establish a European strategy for drones*



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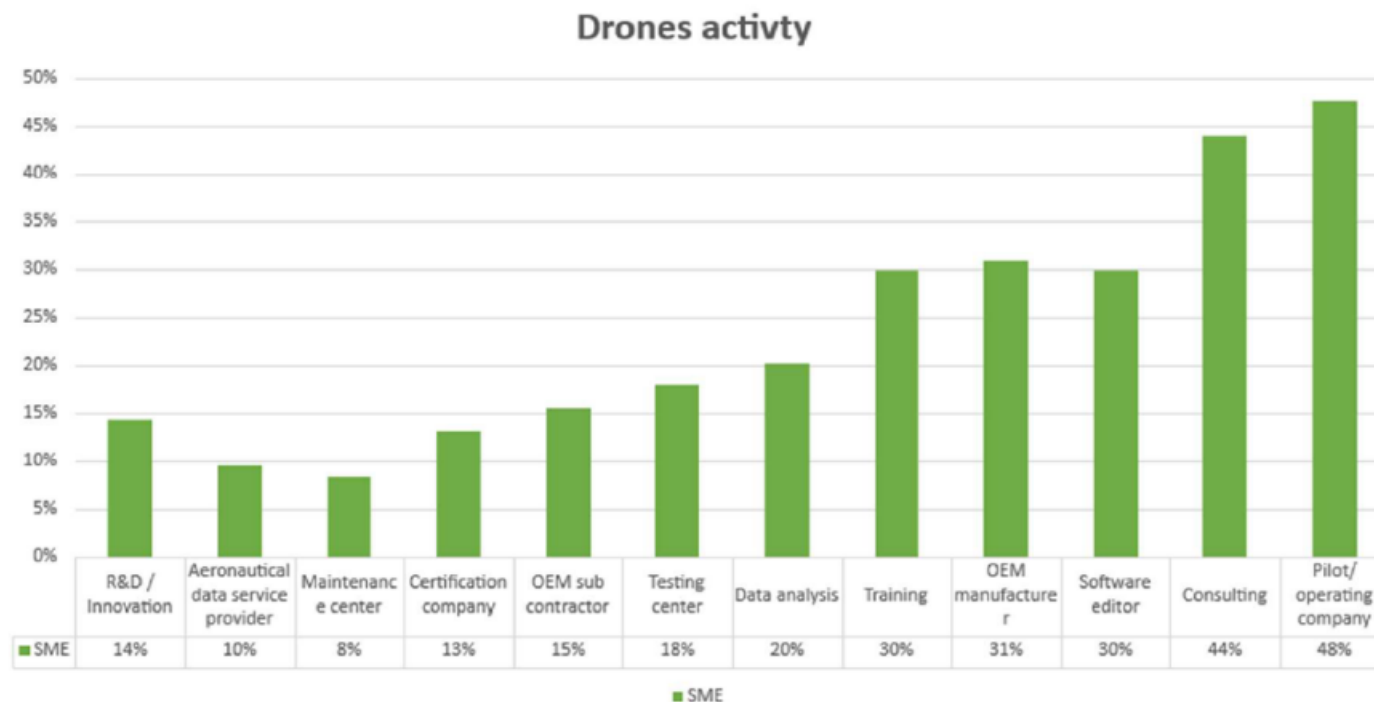
- ✓ **Objective:** define the “Inspection” and “Security” value chain in Europe and identify where the European players are positioned on the value chain.



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



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

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✓ 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

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✓ 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:

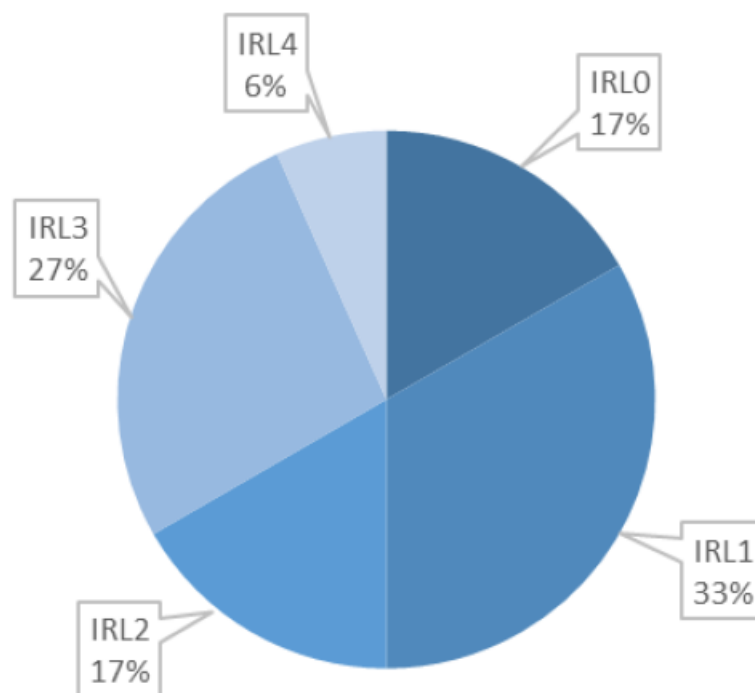
- ▬ IRL0: Neither international activity;
- ▬ IRL1: Wish to go international but without a roadmap;
- ▬ IRL2: Beginning international activity with a roadmap;
- ▬ IRL3: International activity;
- ▬ IRL4: Structured organization and activity for international

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

Information gathered from 30 SMES

✓ IRL maturity results

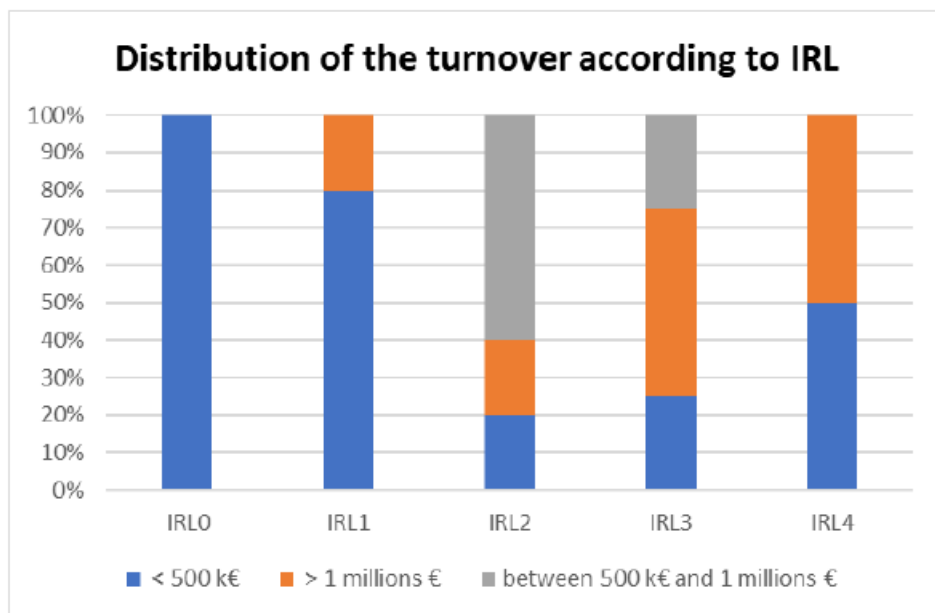
Distribution International Readiness Level



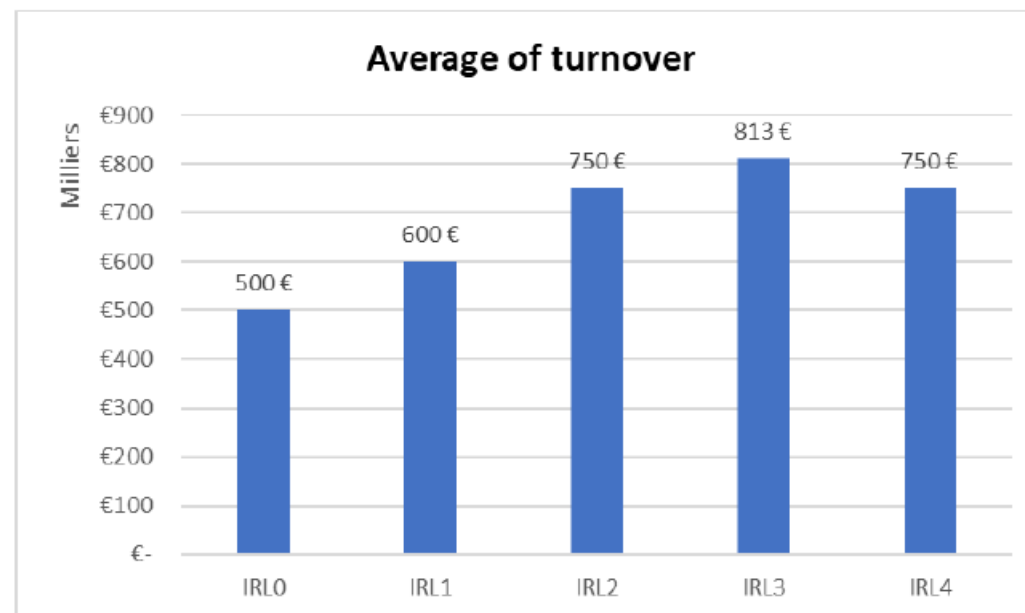
50% of drone companies are structured to develop internationally (IRL 2 to 4)

Or 12% (from the 122 companies reached out)

✓ Impact of turnover on the IRL maturity level

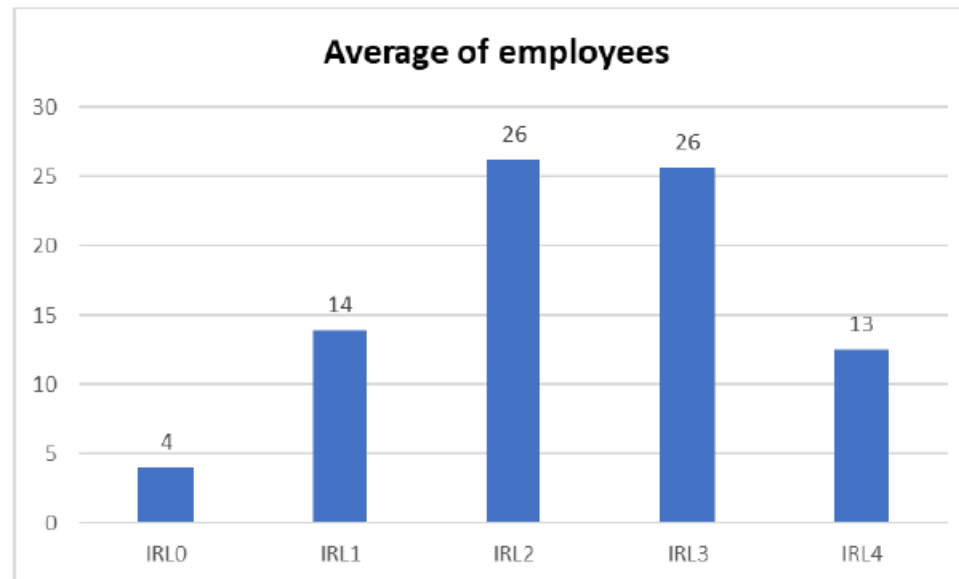
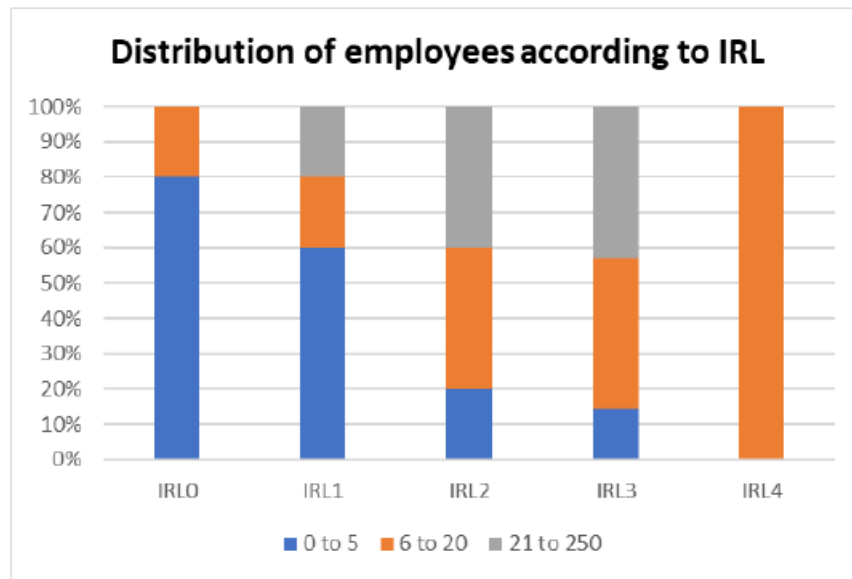


no apparent correlation
between turnover and
maturity to grow
internationally



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

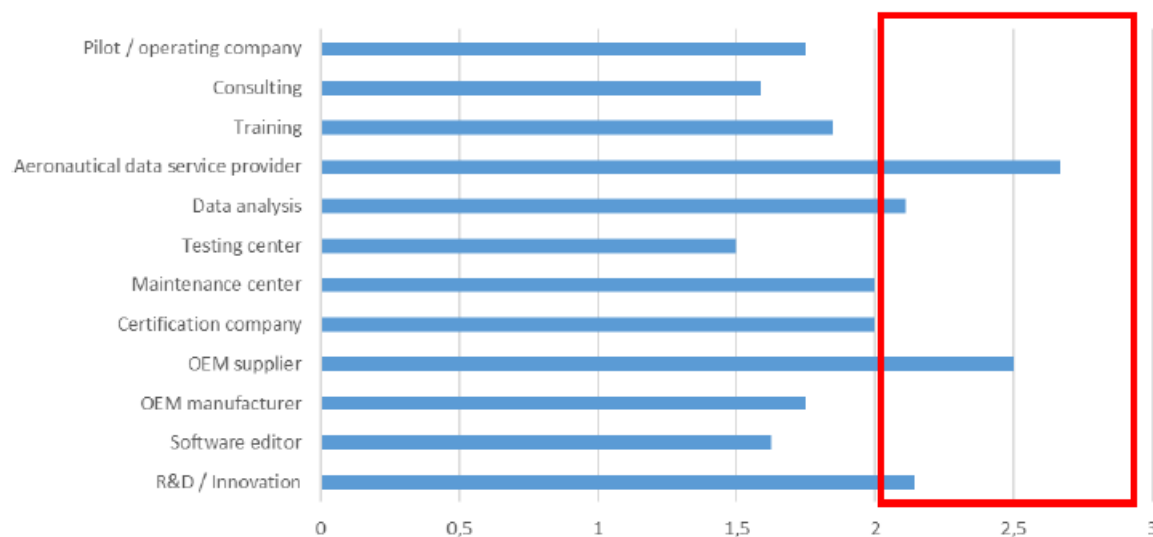
➡ Key figures of a drone company able to address international markets

>26 employees

~800k€ of turnover

✓ Value chain and IRL

Average IRL for each brick of value chain



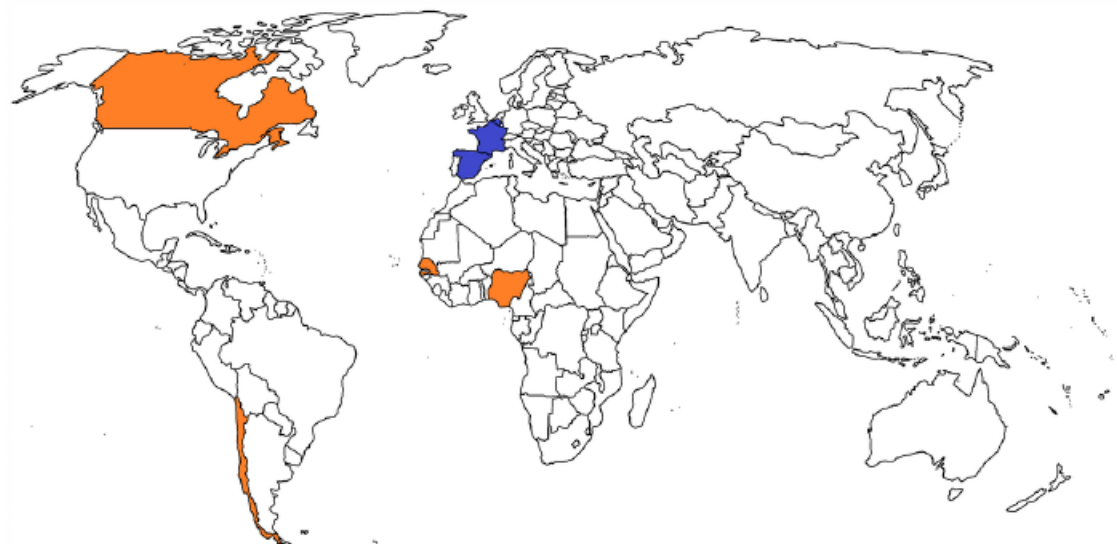
Players working on the following 4 main bricks of the chain have a higher maturity and capability of developing internationally:

- 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

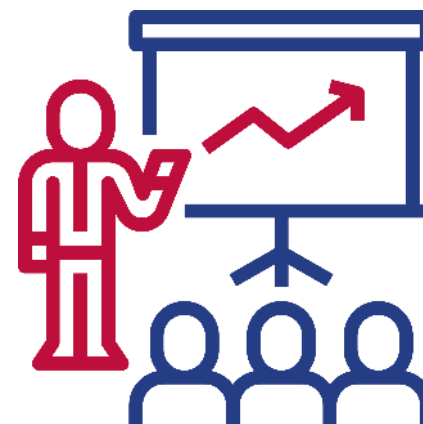
- Favor operations outside of the populated areas, where regulation is less strict
- Agro-forestry monitoring (growth, counting and intrusion detection) is in demand
- The needs in the mining industry is wide: site monitoring (safety and production volume), equipment maintenance (fixed and moving), exploration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



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



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

<https://forms.gle/mnQ7XNjj7BUK4P547>

Partners



✓ 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)



✓ Andalucia 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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ANDALUCÍA
AEROSPACE
CLUSTER EMPRESARIAL



Aerospace cluster of Wallonia



Co-funded by the COSME programme
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- Mélanie DURTH - Andalusia Aerospace
mdurth@andaluciaaerospace.com
- Samuel CUTULLIC - NAE
samuel.cutullic@nae.fr
- Anthony BIEVELEZ - Skywin
anthony.BIEVELEZ@skywin.be



*More information
scan here*

