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Task2.2 - Localised and user-led needs definition Report

Author: Instituto Pedro Nunes (IPN)



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With the arrival of a new generation of electrically powered aircraft capable of operating in an urban and regional environment, we need to ensure that, beyond maintaining the safety of operations in our skies, conditions meet both the operators' commercial needs and citizens' expectations with regard to privacy and security. Today's Strategy not only widens Europe's capacity to pursue large-scale commercial drone operations but also offers new opportunities, in particular to small and medium sized enterprises. With the right framework in place, the drone services market in Europe could be worth €14.5 billion, and create 145,000 jobs, by 2030.

Adina Vălean, Commissioner for Transport - 29/11/2022 Definition

1. Executive Summary

Project: SME-RISE (Work Package 2)

Document: D2.2 – Localised and User-Led Needs Definition Report

Date: February 2026

This report presents the findings of Task 2.2, conducting a comprehensive Needs-led Analysis of Small and Medium Enterprises (SMEs) and startups/young solo entrepreneurs operating in the European drone services sector, specifically in Portugal, Greece and Cyprus. The objective was to assess the actual maturity of these entities and identify the specific gaps, being technical, regulatory, or business development related that push back their transition from early adopters to sustainable service providers.

The analysis employed a mixed-method approach, triangulating quantitative data from a localized survey (N=34 respondents across Portugal (N=9), Greece (N=17), and Cyprus (N=7) with qualitative "National Snapshots" (Desk Research). This dual approach allowed for the identification of both pan-European trends and region-specific market drivers.

Survey results reveal a consistent gap between technical and business maturity across all partner countries. While respondents self-assess their piloting skills as "Advanced/Expert" (Average: >4/5), confidence drops significantly in Business Management and Sales Strategy. This confirms that the sector is populated by technically skilled operators who lack the strategic frameworks to scale up and monetize their services effectively.

The data reveals distinct operational focuses based on geography. Portugal is driven by Civil Utility and Agriculture, with a strong focus on industrial efficiency. Greece landscape is characterized by a duality between a mature Defense/Security sector and an emerging SME ecosystem in other areas such as Precision Agriculture. Cyprus mirrors the security focus of Greece but distinguishes itself through a unique Blue Economy. Regulatory issues are major points of pain that presents barriers to scaling up. The transition to the EASA "Specific Category" (SORA) is universally identified as a point of high friction. Portuguese respondents cite U-Space/Traffic Management as a critical difficulty, while Cypriot SMEs struggle most with Cross-border operations.

Respondents unanimously report that drone adoption leads to measurable efficiency gains, specifically in "Reduction of Staff Hours" and better "Asset Uptime." Furthermore, the

environmental impact is clearly recognized, with drones replacing carbon-intensive traditional methods (e.g., tractors, helicopters), validating the sector's role in the Green Transition.

Based on these insights, the SME-RISE curriculum (Task 2.5) must pivot from standard technical training to "Business Readiness." Key priorities recommended are Regulatory Compliance with practical training on better understand SORA and national platforms (ANAC/HCAA/DCA), Business Modeling, with specific focus on "Sales & Value Proposition" to help SMEs sell ROI to non-technical clients. A Hybrid/Blended learning approach is strongly preferred (90% in PT, ~60% in GR/CY), accommodating the operational time constraints declared by the respondents of the questionnaire.

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2. Introduction

This section provides the operational framework for Work Package 2 (WP2) of the KA220 SME-RISE project (2026-2027). It outlines the strategic objectives of the Localised and User-led Needs Definition (Task 2.2) and delimits the geographical and thematic scope of the research conducted by the consortium partners to assess the maturity of the drone services sector.

2.1. Project Context & Objectives (WP2)

Work Package 2 (WP2) constitutes the research and strategic planning phase of the SME-RISE project. Its primary goal is to map the current ecosystem of drone services in Southern Europe, moving beyond general market assumptions to capture the specific realities of Small and Medium Enterprises (SMEs). As the first step in this process, **Task 2.2 (Localised and User-led Needs Definition)** is dedicated to the comprehensive gathering of data regarding the maturity, capabilities, and immediate needs of the target group.

The objective of this specific report is to present the "raw" reality of the sector. Led by IPN and executed by all partners, this task engaged directly with professionals in Portugal, Greece, and Cyprus to assess their operational status. This document serves as the foundational data repository that will subsequently feed into the Impact Analysis (Task 2.3) and the final Knowledge Synthesis (Task 2.4).

By focusing on "User-led" definitions, the project ensures that the resulting educational materials are not imposed top-down but are responsive to the actual friction points reported by SMEs. Whether these friction points are technical, regulatory, or financial, the purpose of T2.2 is to bring them to light, creating an evidence base for the curriculum development that will happen in Task 2.5.

2.2. Scope of the Needs Analysis

The scope of this Needs Analysis was designed to capture a multi perspective view of the drone services market, targeting SMEs of different sizes, freelancers, and young entrepreneurs. Geographically, it covers the partner ecosystems, providing a comparative look at how different national regulations and market drivers influence the daily operations of these companies.

While the survey acknowledges the high technical demands of the sector, the scope of inquiry placed significant emphasis on business viability and regulatory compliance. The analysis aimed to identify not just *what* drones the SMEs are flying, but *how* they are sustaining their business

models amidst complex EASA regulations and competitive pressures as any other economic sector.

This specific focus allows the consortium to identify gaps that are often overlooked in standard technical training. While partners recognize the demand for specialized technical skills (e.g., LiDAR processing), the scope of this analysis seeks to validate whether the underlying barriers to growth are, in fact, related to funding access, strategic management, and legal conformity.

Consequently, the findings presented in this report categorise needs into three core dimensions: Business Maturity (Current vs. Ideal state), Regulatory landscape, and Learning needs analysis. The report provides the necessary inputs for the upcoming Impact Analysis (T2.3), where the correlation between these factors and business success will be examined.

3. Methodology

The research methodology employed for Task 2.2 was designed to capture user-centric view of the drone services ecosystem in Southern Europe Countries of Portugal, Greece and Cyprus. To ensure the reliability and depth of the findings, the consortium adopted a Mixed-Method Approach, combining qualitative desk research with quantitative field data collection.

3.1. Mixed-Method Approach (Desk Research and Survey)

The data collection process was structured in two distinct approaches that run parallel to ensure a minimum comprehensive coverage of the sector in each country.

National Ecosystem Snapshots (Qualitative Desk Research)

Each partner conducted a targeted analysis of their national drone landscape (Portugal, Greece, Cyprus). This involved reviewing existing online sources, government reports (e.g., National Aviation Authority), media news and market study, to identify macro-level trends, regulatory pains, and dominant industry sectors. This phase establishes a context baseline for the users led definition.

Online Needs Assessment Survey (Quantitative Field Research)

A structured online questionnaire was developed and distributed by all partners to SMEs, startups, and freelancers in their respective regions. The survey instrument was designed to assess three critical dimensions:

- Business Maturity: Measuring the gap between current operational capabilities and the ideal future state;
- Regulatory Confidence: Assessing the level of understanding and compliance with national regulations;
- Training Needs: Identifying specific skills gaps (technical vs. business) and other information such as preferred learning formats and barriers to training.

3.2. Target Groups & Sampling

The primary target audience for this Needs Analysis consisted of Small and Medium Enterprises (SMEs), Startups, and Young Entrepreneurs operating or intending to operate within the drone

services value chain. The sampling strategy aimed to capture a diverse range of actors, from solo freelancers to established service providers.

Geographical Scope

The survey was localized and distributed in the native languages of the partner countries (Portugal, Greece, Cyprus) to maximize accessibility and response rates.

Sample Size

The consortium managed to obtain a representative sample of approximately 34 individuals in all countries in an approximately three week time span from late January to mid-February of 2026. The final dataset includes responses from a variety of operational profiles, ensuring that the findings reflect the heterogeneous reality of the European drone market.

4. Pan-European Context & State of Play

This chapter establishes the macro-level baseline for the SME-RISE Needs Analysis. By synthesizing recent policy documents such as the European Drone Strategy 2.0¹ we define the current "State of Play" regarding drone services in Europe.

The contextual framework is essential to validate the project's direction. It allows the consortium to compare the localized findings from local partner countries (Portugal, Greece, Cyprus) against the broader European trends, highlighting where these SMEs align with or diverge from the continental trajectory. The following sections outline the key market shifts, regulatory challenges, and skills gaps currently defining the sector.

4.1. The European Drone Service Market: From Novelty to Industry

The European drone context is defined by a balance between ambitious political goals and the current operational reality of SMEs.

The Policy Vision (European Commission)

The European Drone Strategy 2.0 sets a clear vision for 2030: drones are to become a vector for the "smart and sustainable" digitalization of Europe. The Strategy explicitly identifies "Drone Services" (inspection, surveillance, agriculture) as a key pillar of the future economy, calling for a "highly qualified workforce" to support this transition. It frames the sector not just as an aviation niche, but as a critical enabler for the European Green Deal.

The Market Reality (Industry Analysis)

However, while the policy framework is optimistic, market intelligence data (e.g., from Drone Industry Insights) reveals a fragmentation in the actual "State of Play" for businesses. Technical

¹ https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_22_7076/IP_22_7076_EN.pdf

and Hardware maturity is high since professional drones and piloting courses are accessible and affordable for Micro-SMEs.

On the other hand, the commercial maturity and business readiness is lagging. The market is populated by technically skilled pilots who often lack the strategic frameworks to scale from "one-off flights" to recurring "Service Integrators."

Relevance to SME-RISE

This gap between the Commission's vision and the market's reality validates the SME-RISE approach. To achieve the goals of the Drone Strategy 2.0, Europe does not just need more pilots; it needs sustainable Drone Entrepreneurs capable of navigating the competitive gap identified by market analysts.

4.2. The Regulatory Landscape: EASA

The regulatory framework for drones in Europe represents a paradigm shift. The introduction of EASA Regulation (EU) 2019/947² aimed to create a unified, risk-based approach across all member states, facilitating a single market for drone services.

The Policy Intention (EASA)

The regulation establishes three operational categories: Open (low risk), Specific (increased risk), and Certified (high risk). This risk-centric model was designed to ensure safety while enabling innovation, particularly for complex operations beyond visual line of sight (BVLOS)³.

The SME Reality (Implementation Challenges)

Despite the clear intent, the practical application of these rules creates significant friction for Micro-SMEs, namely for operations falling into the "Specific Category" (e.g., flying over populated areas or BVLOS), operators are required to perform a Specific Operations Risk Assessment (SORA⁴). Industry feedback consistently highlights that the SORA methodology is resource-intensive, often requiring specialized knowledge that small businesses lack.

Also, while the rules are EU-wide, their implementation varies at the national level. Differences in "Geographical Zones" (where flight is restricted) and administrative processing times by National Aviation Authorities (NAAs) create barriers to cross-border operations.

Relevance to SME-RISE

This disconnection between regulatory design and user experience necessitates a practical intervention. The project will address this by developing a Drone Regulation Navigator, trying to translate complex legal texts into actionable checklists for SMEs and entrepreneurs of the sector.

4.3. The Skills Gap: Beyond the Pilot License

² <https://www.easa.europa.eu/en/document-library/regulations/commission-implementing-regulation-eu-2019947>

³ <https://www.caa.co.uk/drones/moving-on-to-more-advanced-flying/beyond-visual-line-of-sight-bvlos/>

⁴ <https://www.easa.europa.eu/en/domains/drones-air-mobility/operating-drone/specific-category-civil-drones/specific-operations-risk-assessment-sora>

Current vocational training in Europe is heavily orientated towards technical piloting certifications (Open, Specific). A brief desk research analysis of existing curricula (CEDEFOP) shows a lack of training in three critical areas such as Operational Management, in issues such as Fleet maintenance, safety management systems, and insurance optimization, but also in Commercial Strategy, such as Pricing models (hourly vs. value-based), client acquisition, and public tendering, and Data Value Chain, namely how to convert raw drone images into advanced engineering-grade data (photogrammetry, LiDAR, multispectral analysis).

Relevance to SME-RISE

The project must fill this gap by providing "Business Readiness" micro-credentials. The main goal is to transform "Drone Operators" into "Drone Entrepreneurs."

4.4. Social & Environmental Impact

The Drone Strategy 2.0 emphasizes the role of drones in the twin Green and Digital Transitions.

Drones are increasingly recognized for their ability to replace carbon-intensive methods (e.g., using a drone instead of a helicopter for line inspections, or precise pesticide spraying to reduce chemical run-off).

While generally positive regarding public safety use cases (firefighting, search and rescue), public acceptance is fragile and often linked to concerns over privacy (GDPR) and noise pollution in urban environments.

Relevance to SME-RISE

The curriculum should include a module on "Social Responsibility & Ethics" to help SMEs operate without generating community friction, ensuring the long-term sustainability of the sector.

5. National Ecosystem Snapshots (desk research)

This chapter provides a comparative overview of the drone services landscape in the partner countries (Portugal, Greece, Cyprus). **Based on the desk research conducted by each partner**, these "National Snapshots" highlight the localized regulatory bottlenecks, dominant market sectors, and social acceptance levels that influence the daily operations of SMEs.

5.1. Portugal

The Portuguese professional drone ecosystem is characterized by a high adoption rate in common drone sectors (Agriculture and Utilities) but faces significant administrative friction and business readiness for micro-SMEs and young entrepreneurs.

Regulatory Landscape

The national registration platform for UAS⁵ managed by ANAC (Autoridade Nacional da Aviação Civil) is functional but reported as "not user-friendly". The complexity of the interface and legal terminology creates a barrier for solo freelancers.

Obtaining flight permissions for the Specific Category (SORA) is identified as a major issue. The involvement of multiple entities in the authorization process often leads to delays, impacting operational agility.

Social & Environmental Responsiveness

There is a generally positive and utility-driven public sentiment. Drones are strongly associated with Wildfire Prevention (ANEPC⁶) and post-disaster assessment, generating high public acceptance for safety-critical missions. There is scepticism regarding urban surveillance and privacy (GDPR). There is widespread use of drones for Precision Agriculture to reduce water and pesticide usage e.g..

There are 200 requests per day to record images and videos with drones⁷, proving that the number of operators is not pushing back soon.

The arguably most significant national initiative is the integration of drone fleets into the National Authority for Emergency and Civil Protection (ANEPC) to monitor forests and detect heat hotspots before fires spread⁸. There are also pilot projects for "Drone Seed Bombing"⁹ to reforest burned areas in the interior regions.

There exists an implementation of drone testbeds (e.g., in Aveiro and Matosinhos) to monitor coastal erosion and detect illegal maritime pollution discharges.¹⁰

There is occasional negative sentiment regarding Airport Safety (due to flight suspensions at Lisbon/Porto airports caused by unauthorized drones) and Privacy, with ongoing debates between the Police (PSP/GNR) and the Data Protection Authority (CNPD) regarding the use of drones for crowd control or traffic monitoring.¹¹ Lisbon airport is one of the most affected in Europe by this hazard.

⁵ <https://www.anac.pt/vPT/Generico/drones/Paginas/AeronavesCivisPilotadasRemotamente.aspx>

⁶ <https://prociv.gov.pt/pt/home/>

⁷ <https://cnnportugal.iol.pt/drones/imagens/ha-200-pedidos-por-dia-para-captar-imagens-com-drones/20241218/676286b3d34ea1acf271f6c4>

⁸ <https://4gnews.pt/como-ajudam-os-drones-a-combater-os-fogos-portugal-ja-criou-um/>

⁹ <https://pplware.sapo.pt/gadgets/drone-ajuda-a-espalhar-sementes-em-serras-queimadas-pelos-fogos-em-portugal/>

¹⁰ <https://www.sciencedirect.com/science/article/pii/S2950492925000069>

¹¹ <https://www.jn.pt/nacional/artigo/drones-perturbam-76-voos-em-quatro-anos-e-lisboa-e-o-aeroporto-mais-visado/18017733>

The market is driven mainly by Energy & Utilities (e.g., power line inspections for E-Redes¹²), Agriculture, and Land Surveying, which are the dominant sectors. The media production¹³ also has a significant role. A unique national driver is the BUPi Project¹⁴ for rural properties inventory in Portugal, which has created a surge in demand for aerial mapping services to update the rural land registry.

As noted in the previous section, the use of drones by ANEPC and GNR for wildfire monitoring is a dominant, state-driven market.

Training Offer

There are Drone training schools available but the offer is somewhat limited to piloting and technical aspects, with several private academies accredited by ANAC to deliver Open and Specific Category certifications (A1/A3, A2, STS).

Vocational training landscape in Portugal for drones is well-established for Technical Piloting. The National Civil Aviation Authority (ANAC) provides accessible online training and examination for the Open Category (A1/A3). For more advanced operations (A2 and Specific Category/STS), there are several private academies offering specialized practical training and theoretical preparation¹⁵¹⁶. However, the current curriculum across these providers is heavily skewed towards operational safety, flight maneuvers, and basic regulatory compliance.

Funding

SMEs have access to digitalization vouchers under Portugal 2030 (Compete 2030)¹⁷ and the Recovery and Resilience Plan (PRR), specifically for "Industry 4.0" adoption in which drone real-world applications are eligible for SMEs.

5.2. Greece



Based on local partner desk research analysis, the Greek drone sector has a mature, state-driven Defense and Security sector¹⁸, contrasted with a growing SME ecosystem facing bureaucratic hurdles in commercial applications.

Regulatory Landscape

¹² <https://www.e-redes.pt/pt-pt/transicao-energetica/inovacao-e-desenvolvimento/redes-do-futuro/drones>

¹³ <https://www.dn.pt/opiniao-dn/a-televiso-e-os-seus-drones>

¹⁴ <https://bupi.gov.pt/pt>

¹⁵ <https://academia.hp-drones.com/plataforma-portugal/>

¹⁶ <https://www.rgdrones.pt/cursos-de-drones>

¹⁷ <https://www.compete2030.gov.pt/>

¹⁸ <https://www.skai.gr/news/world/drones-ti-amyntika-opla-diathetoun-ta-aerodromia-se-ellada-kai-eyropi>

There is an official mandatory system for registering operators and declaring drones, compliant with European regulations¹⁹. It requires a connection with Taxisnet codes , payment of a fee, and the process includes obtaining a Registration Number (AM).

Any natural or legal person who owns/rents a drone (operator) is registered on the platform. Registration is not required for drones weighing less than 250 gr , that do not carry a camera or are considered toys (a common guideline in Portugal too).

In online forums there are some reports from users that the system has technical difficulties or is not clear , with some reporting problems in completing/responding to the flight request or in registering. They often report that the legislation is complex and the procedures are many and if the drone is for a hobby it is very difficult for someone to comply.

There is no official source or other in-depth research that documents the platform's degree of ease and friendliness in terms of registration. The transition to the Specific Category is a significant point of pain. Partners report known delays in obtaining operational authorizations from the APA (HCAA department), largely due to the rigorous review process required for flight permissions.

Social & Environmental Responsiveness

Public discourse is heavily influenced by National Security. News coverage frequently focuses on drones as defense assets or border protection tools, rather than privacy threats. However, "soft power" events, such as the massive drone light shows in Rhodes and Heraklion (Crete)²⁰, are improving public engagement and reducing scepticism.

The green environmental use case is dominated by Civil Protection. A key national initiative involves the deployment of over 80 surveillance drones²¹ to monitor forests during the fire season. Additionally, EU-funded projects like LIFE EL-BIOS²² utilize drones for biodiversity data collection in protected wetlands, showcasing a strong "Green" application.

Market Maturity²³²⁴

The market is stratified. In Greece, the adoption of drone technology is spreading across many sectors, with some being more mature and others developing dynamically in recent years. The most mature sector is Defense & Security (Armed Forces/Police), followed by Civil Protection (Firefighting e.g.). For SMEs, the growth drivers are Precision Agriculture (still early-stage) and Construction/Topography pushed by the Real estate sector.

Pilot projects with technology for fire prevention/suppression are present and there are international examples of collaborations that incorporate innovative solutions (AI, 5G) with

¹⁹ <https://uas.hcaa.gov.gr/Account/Login?ReturnUrl=%2F>

²⁰ <https://www.sigmalive.com/news/greece/1289526/ksanazontanepse-o-kolossos-ston-oyrano-tis-rodoy-me-1000-drones-binteo>

²¹ <https://internationalfireandsafetyjournal.com/greece-to-operate-80-surveillance-drones-during-2025-wildfire-season/>

²² <https://www.etc.uma.es/life-el-bios/>

²³ <https://startupper.gr/startupper-mag/123407/drones-enas-polytimos-symmachos-stin-ypiresia-tou-politi-kai-tou-kratous-geosense/>

²⁴ <https://www.olympia.gr/1558637/ellada/i-prolipsi-ton-pyrkagion-to-programma-quot-aigis-quot-kai-oi-efarmoges-ton-drones-stin-politiki-prostasia-stin-ellada/>

drones for early detection of forest fires in collaboration with Greek agencies, this is important for the protection of natural ecosystems.²⁵

Training offer

Greece reports, there are several educational centers that meet the demand that exists and there is no shortage.

Funding

Greek SMEs have access to specific digital transformation funding. The partner identified programs such as the **“Digital Media Tools” Voucher** and the **“Development of Digital Products & Services”** (under NSRF 2021-2027) as key financial instruments that allow companies to subsidize drone hardware and software as part of broader "Industry 4.0" investments.

5.3. Cyprus



The Cypriot drone ecosystem mirrors the Greek on security but distinguishes itself through a strong maritime focus and a thriving local manufacturing industry.

Regulatory Landscape

The Department of Civil Aviation (DCA) manages the national drone portal (drones.gov.cy)²⁶. This platform allows users to register as a drone operator, complete online training and exams for pilot certificates, and manage related processes. Unlike the reported complexity in other partner countries, the Cypriot platform is publicly considered functional with no usability issues. A dedicated “Contact Us” section is also available to support user questions and provide assistance.

In general, there are no officially published processing times or documented systemic delays (e.g., defined as “fast” or expressed in months) for Specific Category drone flight authorisations. While some online sources note that commercial drone licensing procedures, potentially overlapping with Specific Category operations, may take up to one year, this information does not constitute official data specifically referring to the current Specific Category authorisation process.²⁷

Social & Environmental Responsiveness

²⁵ <https://www.huawei.com/en/sustainability/the-latest/stories/win-win-development/detecting-early-signs-forest-fires-creece>

²⁶ <https://drones.gov.cy/>

²⁷ <https://www.lawyersincyprus.com/legal-framework-for-drones-in-cyprus/#:~:text=The%20use%20of%20drones%20for,umbrella%20of%20existing%20licensed%20operators.>

Cyprus has seen recent major news stories on drones primarily focused on defense and security advancements, rather than privacy scandals or life-saving civilian uses. Coverage highlights military applications like the unveiling of THISEAS surveillance drones and DroneEYE anti-drone systems under the ATHENA program, plus National Guard acquisitions of H-10 Poseidon drones from local firm Swarmly Aero.²⁸

Also, scientific and environmental projects using **underwater drones** to monitor artificial reefs and marine life have been reported, showing beneficial and innovative applications of drone technology.²⁹

Similar to Greece, public discourse is dominated by Defense and Security. Major news stories focus on the acquisition of surveillance drones (e.g., "Poseidon" drones for the National Guard) and anti-drone systems, reflecting the geopolitical reality of the island.

A unique feature of the Cypriot landscape is the use of underwater drones in Blue Economy for marine conservation. Notable projects like EONIOS³⁰ utilize autonomous swarms of drones to monitor artificial reefs and combat illegal fishing off the coast waters, showcasing a highly innovative application that goes beyond aerial operations.

Market Maturity

The market is primarily driven by Defense & Security, with local companies (e.g., Swarmly Aero) emerging as exporters of military-grade UAVs³¹. This positions Cyprus not just as a user, but as a developing hub for drone manufacturing. Following defense, there is growing adoption in Infrastructure & Surveying (using LiDAR for construction³²) and Precision Agriculture.

Training Offer

There is sufficient availability of training for the Open Category,³³ both through the official DCA³⁴ portal (online) and third-party providers with EASA compliance³⁵, indicating that basic pilot certification is not a barrier to entry.

Funding

²⁸ <https://thedefensepost.com/2026/01/13/cyprus-poseidon-surveillance-drones/>
<https://knews.kathimerini.com.cy/en/news/cyprus-unveils-advanced-defense-drones-and-anti-drone-systems-photos>

²⁹ <https://www.euronews.com/green/2025/02/25/scientists-in-cyprus-are-using-a-small-swarm-of-drones-to-help-artificial-reefs-attract-se>

³⁰ <https://www.euronews.com/green/2025/02/25/scientists-in-cyprus-are-using-a-small-swarm-of-drones-to-help-artificial-reefs-attract-se>

³¹ <https://in-cyprus.philenews.com/dark-room/cyprus-emerges-as-european-leader-in-drone-exports-with-global-reach>

[National Guard receives Cypriot-made drones | Cyprus Mail](#)

³² <https://www.6wresearch.com/industry-report/cyprus-lidar-drone-market>

³³ <https://www.photoshine.com.cy/academy/hobby-training/>, <https://cyprusmediaacademy.com/dji-drone-mavic-3-training-course/>

³⁴ <https://drones.gov.cy/>

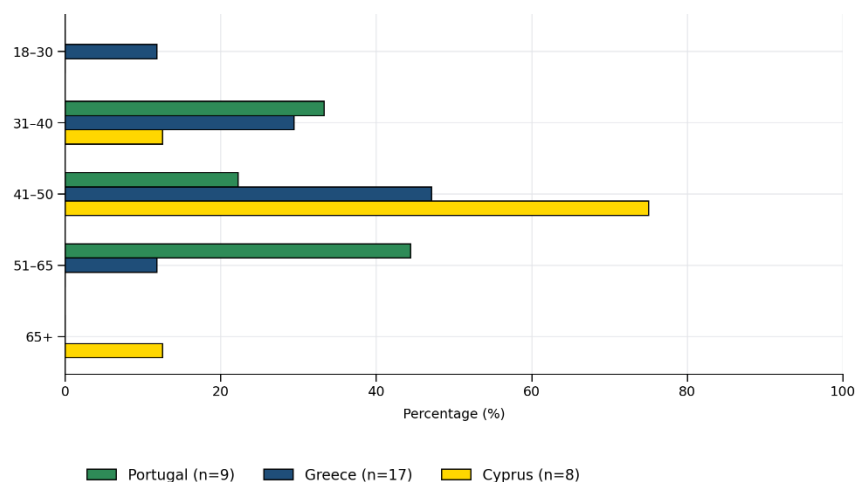
³⁵ <https://drones.gov.cy/approved-exam-centers/>

Access to specific funding information is limited. While the "SME Digital Upgrade Scheme" (Ministry of Energy, Commerce and Industry)³⁶ theoretically covers digital tools like drones, reliable information on active calls is scarce, making it difficult for SMEs to plan subsidized investments

6. Field Research Findings (Survey Analysis)

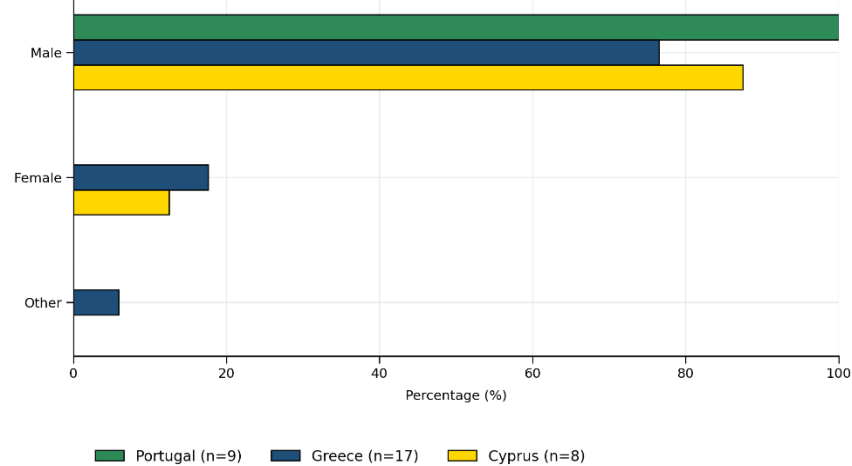
The structured online questionnaire was implemented across partner countries to collect comparable data from SMEs, startups, and freelancers on business maturity, regulatory confidence, and training needs, amidst other sector related issues. Results are presented mostly in percentage for better comparison between different size samples. Comments are added for better data and tendency interpretation. Not all questions from the questionnaire are subject to analysis in this section. All raw data is provided in annex for traceability of data inputs.

6.1. Participant Profile

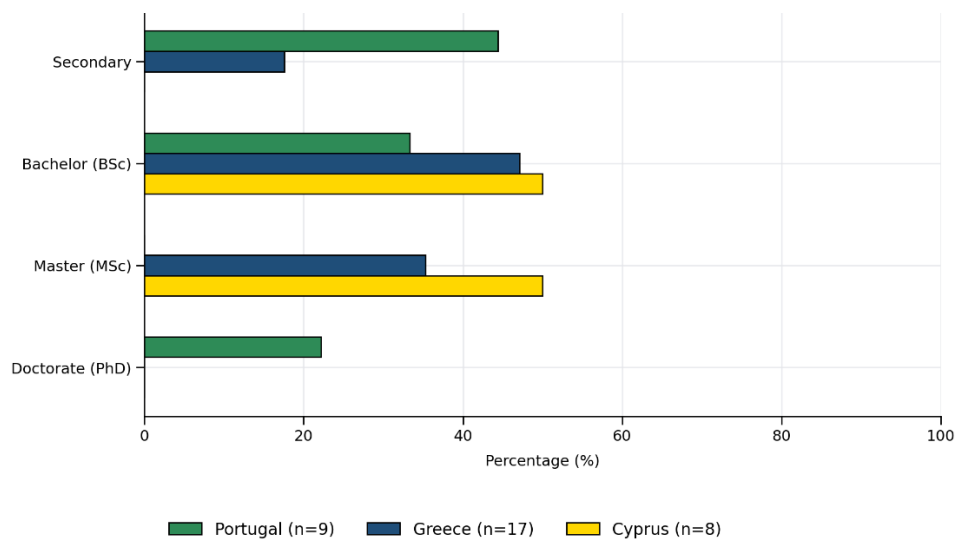


GRAPHIC 1 - AGE DISTRIBUTION BY COUNTRY (%)

³⁶ [Funding Programmes - Ministry of Energy, Commerce and Industry - Gov.cy](#)



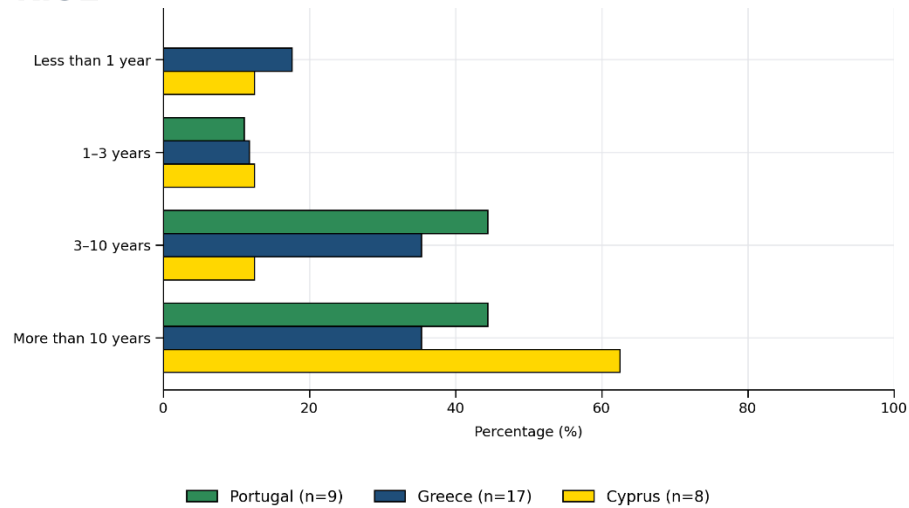
GRAPHIC 2 - GENDER DISTRIBUTION BY COUNTRY (%)



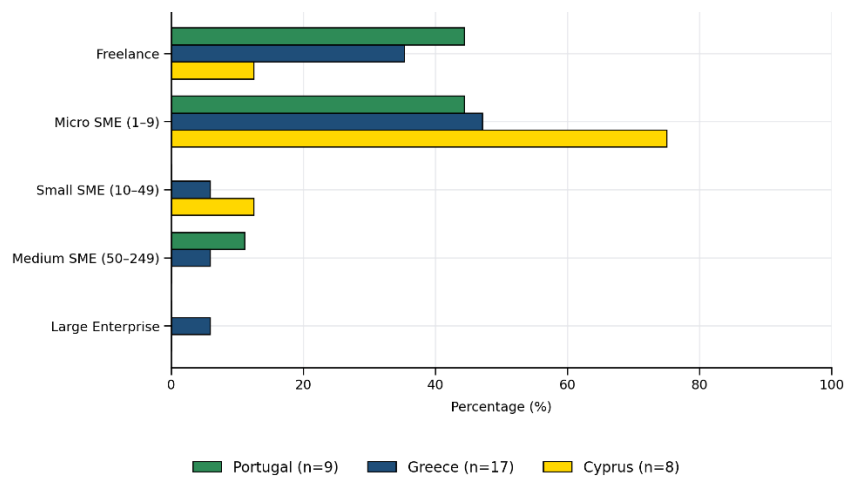
GRAPHIC 3 - QUALIFICATIONS BY COUNTRY (%)

The three introductory questions indicate that the respondent profile across partner countries is predominantly composed of mid-career professionals, particularly within the 41–50 age group, with Portugal showing a slightly older distribution compared to Greece and Cyprus. A clear gender imbalance is observed, with male participants representing the majority in all countries, although Greece demonstrates comparatively greater diversity. In terms of educational background, they are generally highly qualified, with most holding Bachelor's or Master's degrees, and Portugal including 2 doctoral-level participants. Overall, the data reflect a professionally experienced and academically strong target group, supporting the validity of the subsequent analysis on business maturity, regulatory confidence, and training needs.

6.2. Business Structure

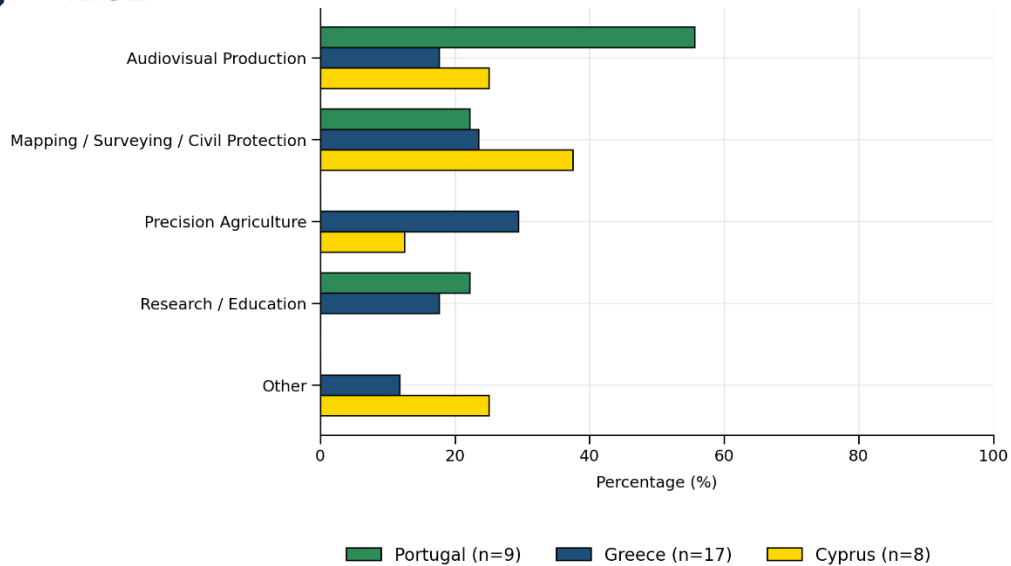


GRAPHIC 4 - YEARS OF OPERATION BY COUNTRY (%)

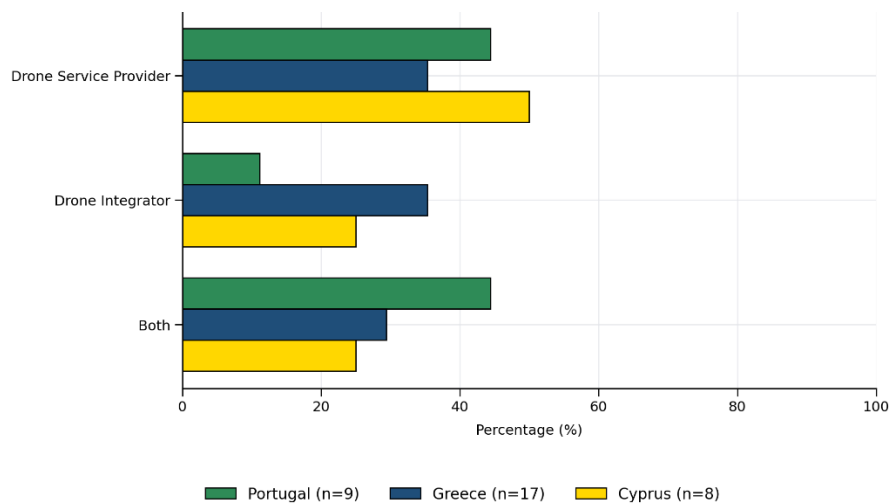


GRAPHIC 5 - COMPANY SIZE BY COUNTRY (%)

The business structure analysis indicates that the project's target group is predominantly composed of micro-enterprises and freelancers across all partner countries, reflecting the small-scale and flexible nature of the drone ecosystem. Most organisations report medium to high operational experience, with a significant proportion active for more than 10 years, particularly in Cyprus and Portugal.



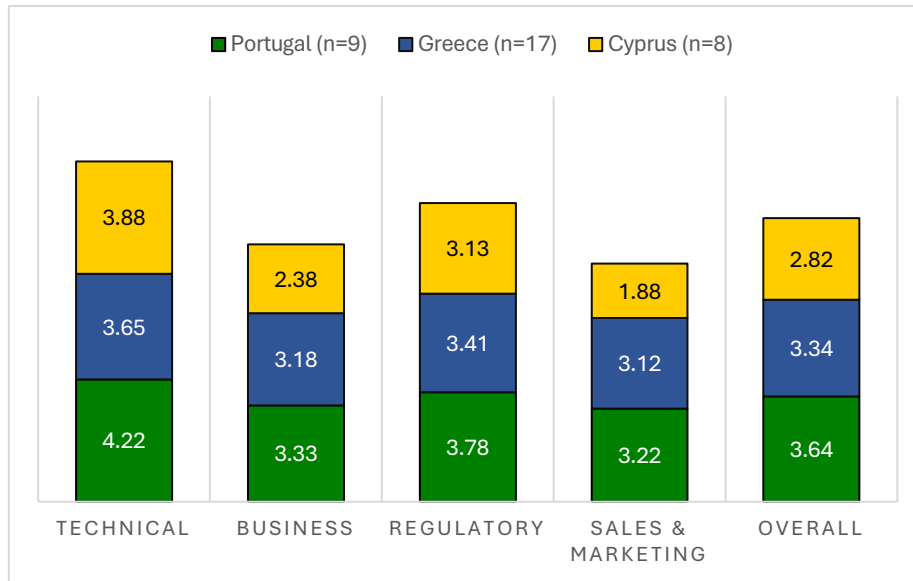
GRAPHIC 6 - SECTOR OF ACTIVITY BY COUNTRY (%)



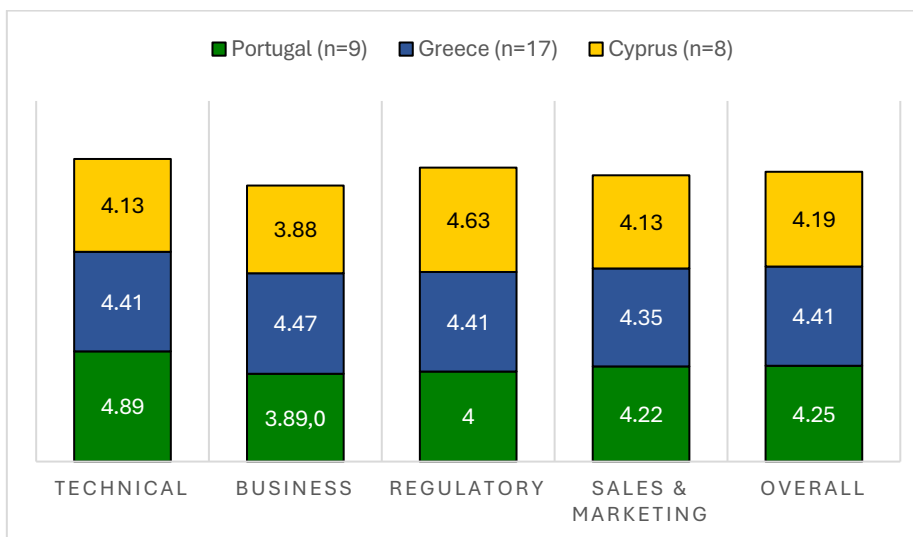
GRAPHIC 7 - ROLE IN DRONE ECOSYSTEM (%)

Sectoral distribution varies by country, with Portugal showing strong representation in audiovisual production, Greece in precision agriculture and environmental applications, and Cyprus in mapping and civil protection services. In terms of operational role, respondents are primarily drone service providers or combine service provision with integration functions, highlighting a practice-oriented and market-driven profile within the consortium's stakeholder base.

6.3. Business Maturity & Cost Effectiveness

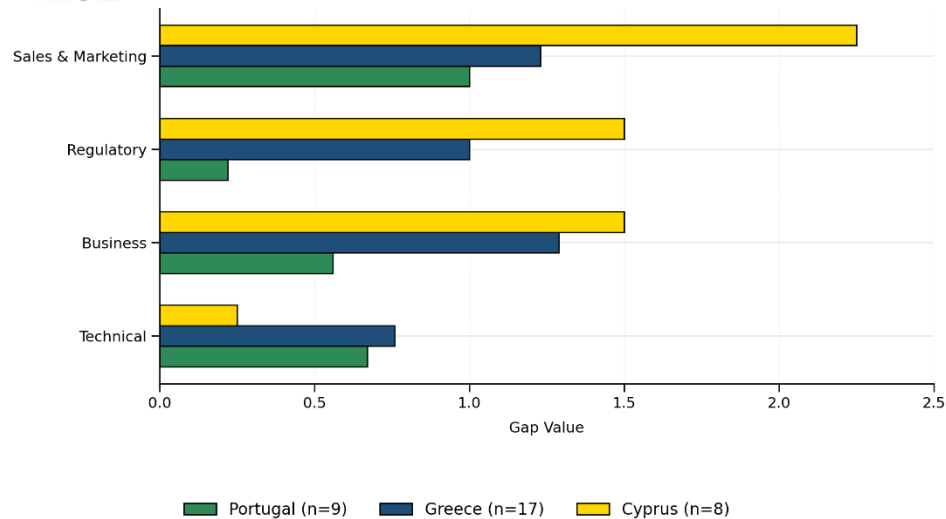


GRAPHIC 8 - MATURITY SELF-ASSESSMENT RATES (1-5)

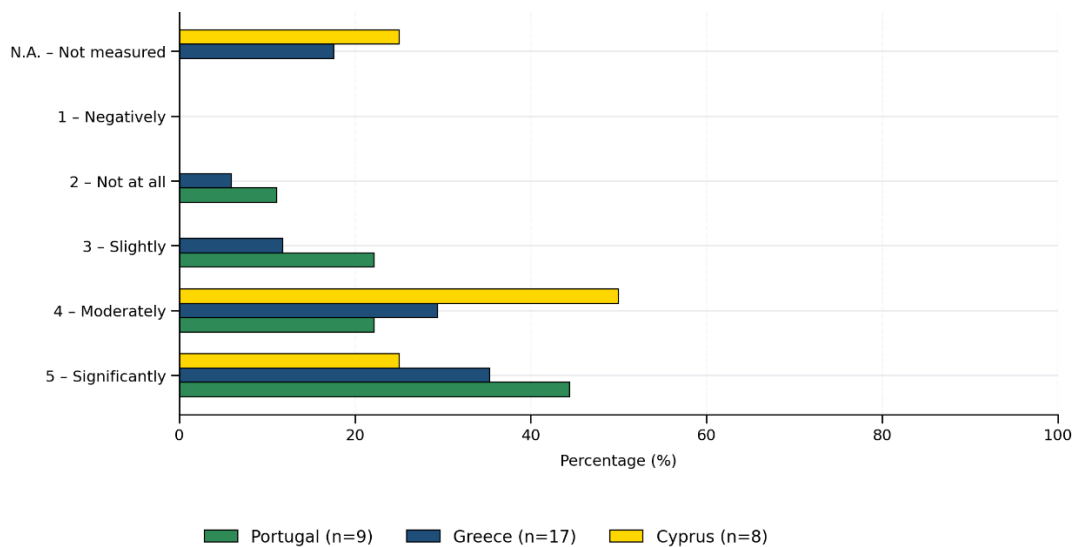


GRAPHIC 9 - IDEAL STATE SELF-ASSESSMENT RATES (1-5)

The results reveal a consistent gap between current maturity levels and the desired ideal state across all three partner countries, underscoring clear capacity-building needs in the drone sector. Technical competencies emerge as the most developed dimension across all countries, with the smallest gap to the ideal state. Conversely, Business Management & Strategy and also Sales & Marketing are the weakest areas, particularly in Cyprus, where the gaps are most pronounced (+1.50). Greece, despite moderate maturity scores, shows the most ambitious aspirations, suggesting a clear awareness of the competencies required for sectoral growth. These findings support the relevance SME RISE project and suggest that training outputs should prioritise business development, regulatory knowledge, and commercialisation skills rather than purely technical competencies, which apparently more consolidated by the target group.

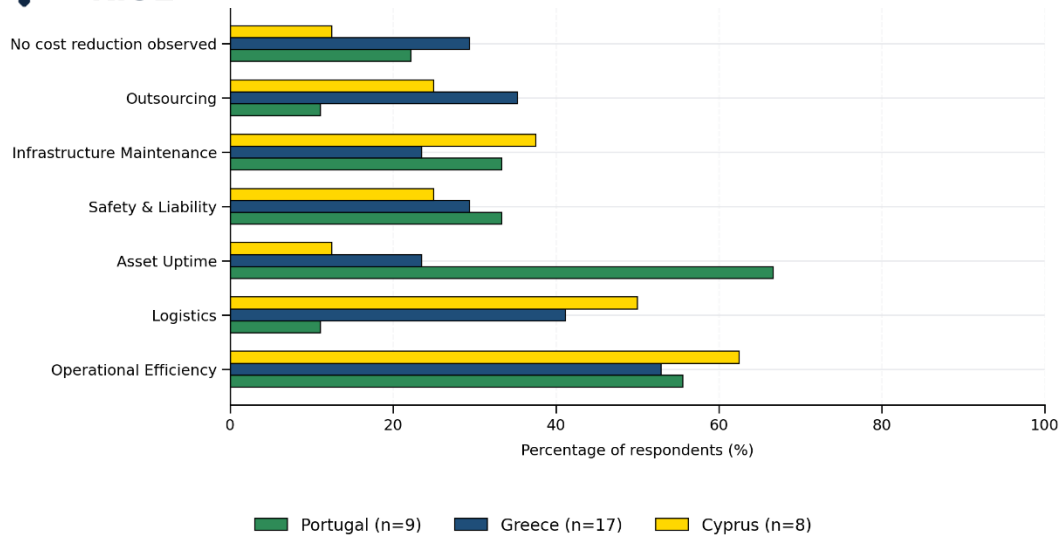


GRAPHIC 10 – SKILLS GAP ANALYSIS (IDEAL STATE RATE MINUS ACTUAL MATURITY RATE)



GRAPHIC 11 – OPERATIONAL EFFICIENCY: IMPACT OF DRONE SERVICES VS BUSINESS EFFICIENCY (IN RELATION TO COSTS) (%)

In the three participating countries the survey results show a consistently positive perception of how drone services improve operational efficiency. A large share of respondents reported either significant or moderate gains, particularly in Portugal and Cyprus, where more than 60% of responses point to measurable reductions in staff hours, faster execution of tasks, and fewer on-site interventions. Greece also demonstrates a positive trend. Cyprus presents a higher proportion of “not measured” responses (33%), suggesting that while drones are increasingly integrated in workflows, the systematic monitoring of efficiency gains is still evolving in some organisations.

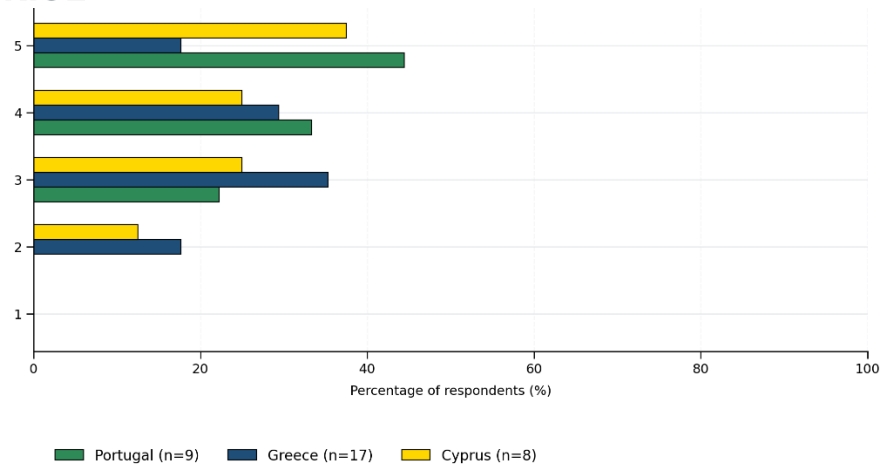


GRAPHIC 12 - AREAS OF REDUCTION OF COSTS ATTRIBUTED TO DRONE SERVICES (%)

The analysis of cost-reduction areas reveals different national patterns but a shared direction of impact. In Portugal, respondents highlight the strongest reductions in asset downtime and operational efficiency, reflecting intensive use of drones in industrial inspections, terrain modelling and monitoring tasks. In Cyprus, cost savings are most visible in operational efficiency and logistics, where drones replaces heavy equipment and reduce the need for on-site crews. Greece shows a more diversified profile with cost reductions distributed across several areas, including efficiency, logistics, safety, and outsourcing, indicating a broader range of drone-supported applications across sectors.

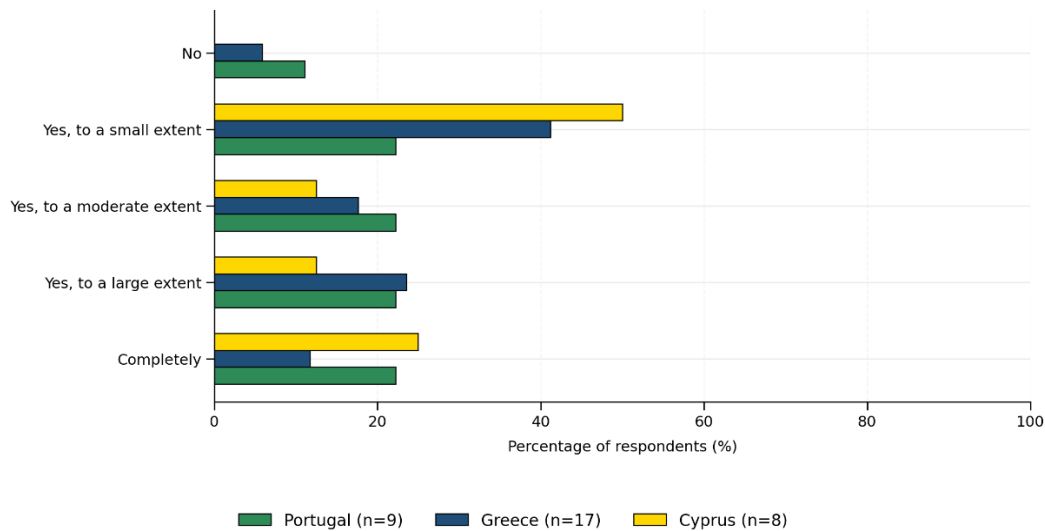
The **survey's open-ended responses** (to question 14. Success cases) reinforce these patterns through concrete examples. Several respondents described replacing traditional tools with drones, In Cyprus one example stating *"instead of setting up cranes we often used drones, reducing setup times and crew numbers - drones do the job of three to four riggers."* In Portugal, an industrial service provider reported that for a major client in the cement industry, drone deployment *"eliminated thousands of hours of unnecessary field operations"* and significantly improved worker safety. Similar advantages were highlighted in Greece, where one respondent explained that drone-based mapping replaced multi-day ground surveys, noting that *"a UAV can cover the same area in a fraction of the time, significantly reducing man-hours and travel expenses."* Another Greek participant illustrated the scale of efficiency gains in the hospitality sector, describing how drone mapping enabled inspections of *"~70 buildings in just 4–6 flight hours,"* replacing 5–7 days of manual roof checks.

6.4. Regulatory Landscape



GRAPHIC 13 - REGULATORY CONFIDENCE (%)

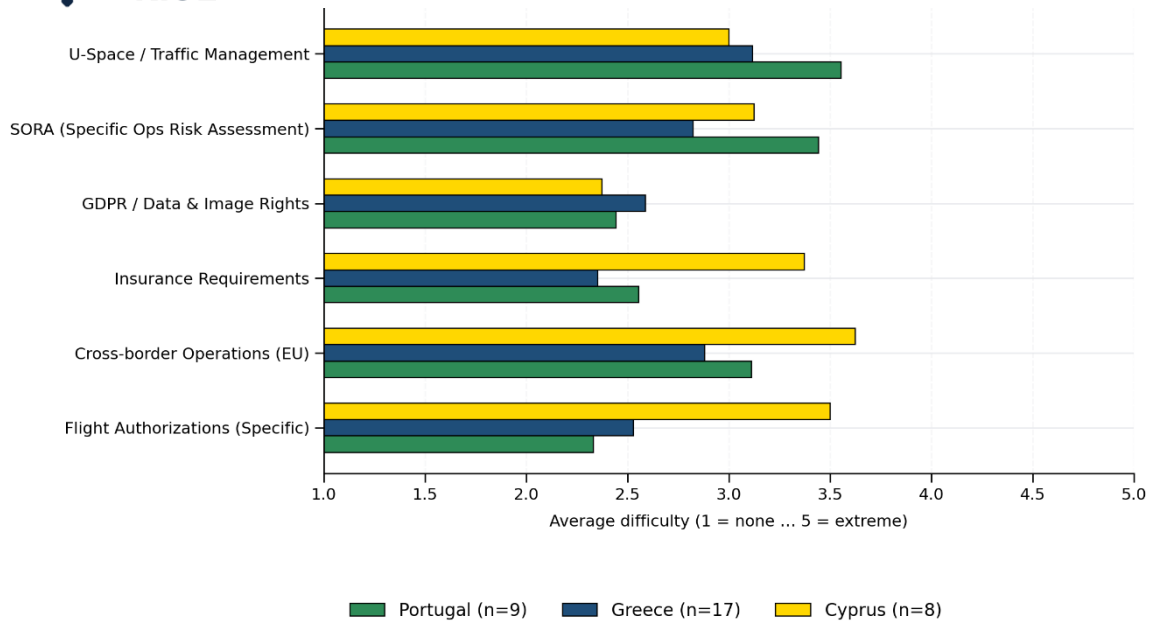
Portugal and Cyprus cluster at higher confidence level regarding Regulatory confidence (4 and 5), while Greece concentrates around 3 and 4, indicating intermediate confidence and greater dispersion. No country shows meaningful responses at 1 level (no regulatory confidence at all)



GRAPHIC 14 - ADAPTABILITY MECHANISMS (%)

Portugal and Cyprus lean toward stronger readiness since most answers fall in “Completely / Yes, to a large or moderate extent” whereas Greece clusters around “Yes, to a small/moderate extent” with only a small share selecting “No.”

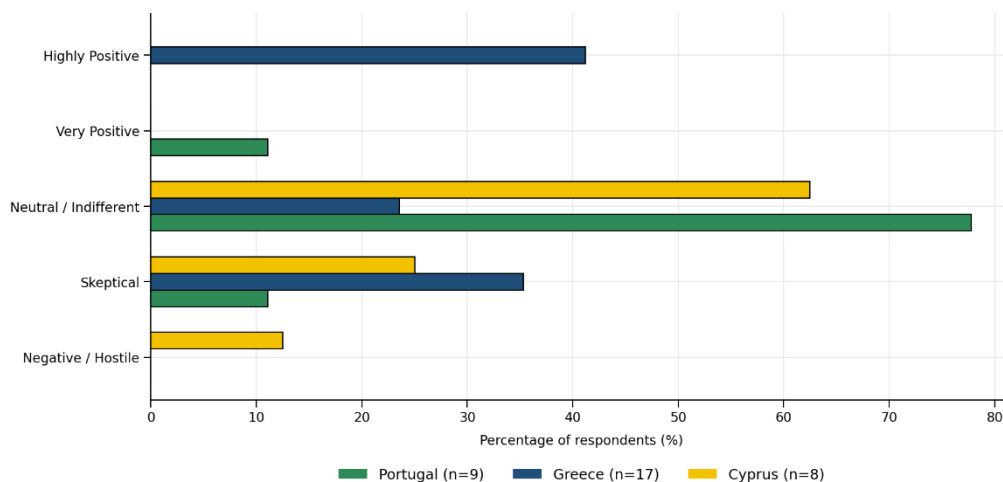
Overall, this indicates that mechanisms to adapt to legislative changes are generally in place across all three countries, with Portugal/Cyprus showing higher confidence (20% are completely prepared for regulatory framework change over time), while Greece is displaying a more gradual stance.



GRAPHIC 15 - REGULATORY POINTS OF CONFUSION (MEDIUM RATES OF DIFFICULTY)

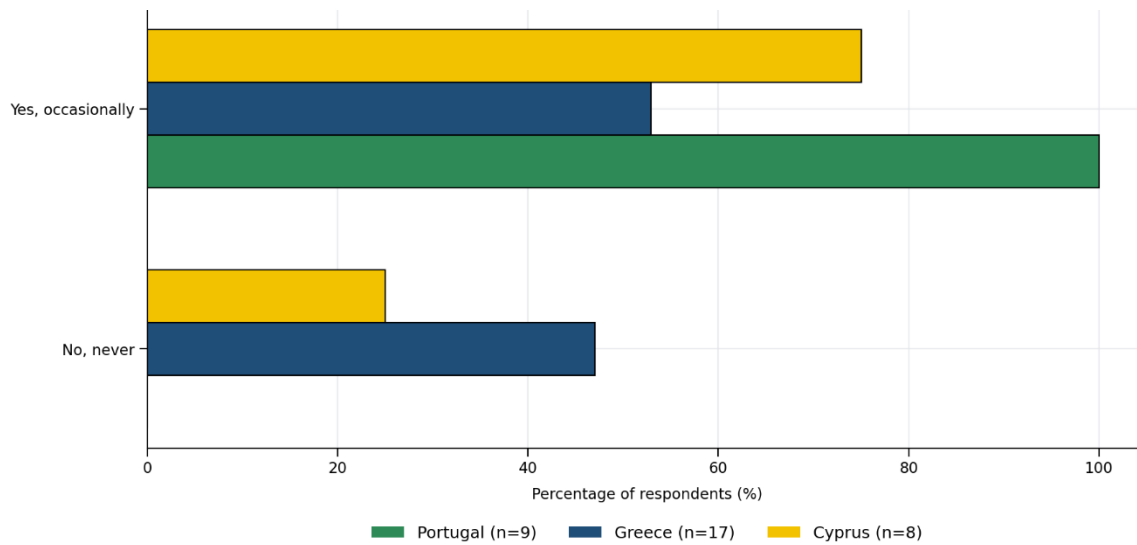
Across the six regulatory topics, the aggregated results show an overall moderate difficulty profile, with country averages ranging roughly from ~2.3 to ~3.6 on a 1 to 5 scale (1 = none, 5 = extreme difficulty). Portugal peaks on U-Space/Traffic Management (~3.56) and SORA (~3.44), with Cross-border around ~3.11, while GDPR and Insurance remain lower (below ~2.6). Greece presents a flatter pattern, U-Space (~3.12) ahead of Cross-border (~2.88) and SORA (~2.82), with GDPR/Insurance ~2.35 indicating broadly moderate, more evenly distributed challenges. Cyprus reports the highest burdens on Cross-border (~3.63), Flight Authorizations (~3.50) and Insurance (~3.38), with GDPR the least critical (~2.38).

6.5. Social & Environmental Responsiveness



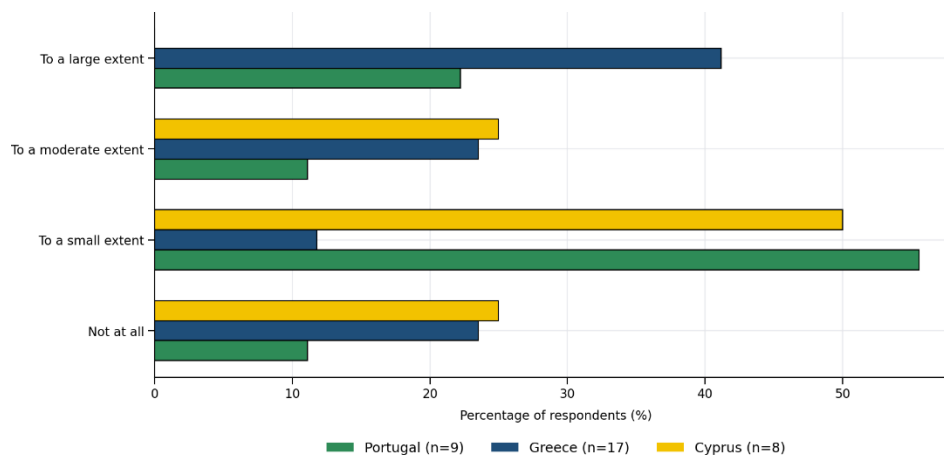
GRAPHIC 16 - PERCEIVED PUBLIC ACCEPTANCE OF DRONE SERVICES IN CITY/REGION (%)

Perception remains mostly moderate among partner countries, with Cyprus and Portugal showing strong “Neutral / Indifferent” patterns, while Greece stands out with higher rates of “Highly Positive”. This suggests a generally cautious attitude toward drones, except in Greece where acceptance and perceived benefits are more consolidated.



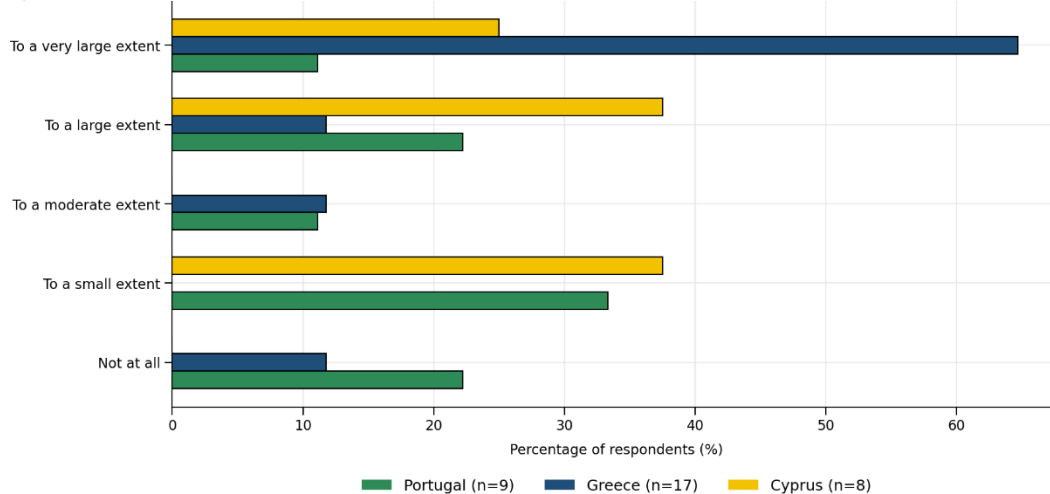
GRAPHIC 17 - FACING BUSINESS CHALLENGES DUE TO SOCIAL RESISTANCE OR PRIVACY COMPLAINT (%)

Portugal and Cyprus overwhelmingly report “Yes, occasionally”, indicating minor but recurring social challenges. In contrast, Greece reports mostly “No, never”, suggesting fewer perceived social constraints or maybe greater alignment of drone use with local practices.



GRAPHIC 18 - DRONE SERVICES PROVIDING SOCIAL VALUE (%)

Cyprus respondents show mostly low to moderate perceived social value, while Portugal combines “To a large extent” with frequent “To a small extent”, revealing mixed but positive expectations. Greece displays the strongest scores, with many responses at “To a large extent”, signalling higher perceived community benefit.



GRAPHIC 19 - DRONE SERVICES PERCEIVED CONTRIBUTION TO REDUCING THE ENVIRONMENTAL FOOTPRINT COMPARED TO TRADITIONAL METHODS (%)

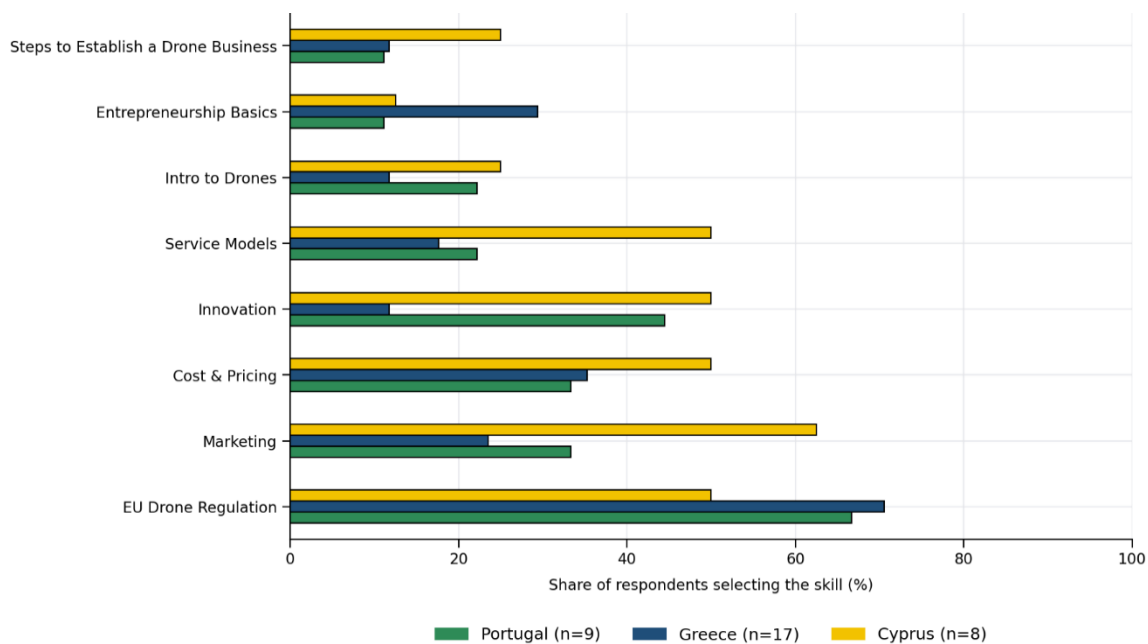
All countries recognise environmental benefits, but the intensity differs significantly. Greece consistently rates impact “To a very large extent”, reflecting strong environmental gains. Portugal and Cyprus show benefits too, but with wider variation.

Regarding the open ended questions on this section, where respondents were called to briefly explain how drone services impact in reducing the environmental footprint compared to traditional methods, Cyprus respondents highlighted both reduced emissions and the wider environmental benefits enabled by drone operations. A comment claims drones produce “no fossil fuels no exhaust emissions no noise pollution” and contribute directly to conservation, such as “forest protection.”

One respondent describes more advanced sustainability practices, explaining that KTV Working Drone Cyprus avoids heavy equipment and chemical products, instead using “filtered water without harsh chemicals,” while its specialised coatings “break down airborne pollutants like NOx” and reduce maintenance needs, resulting in a significantly lower environmental footprint.

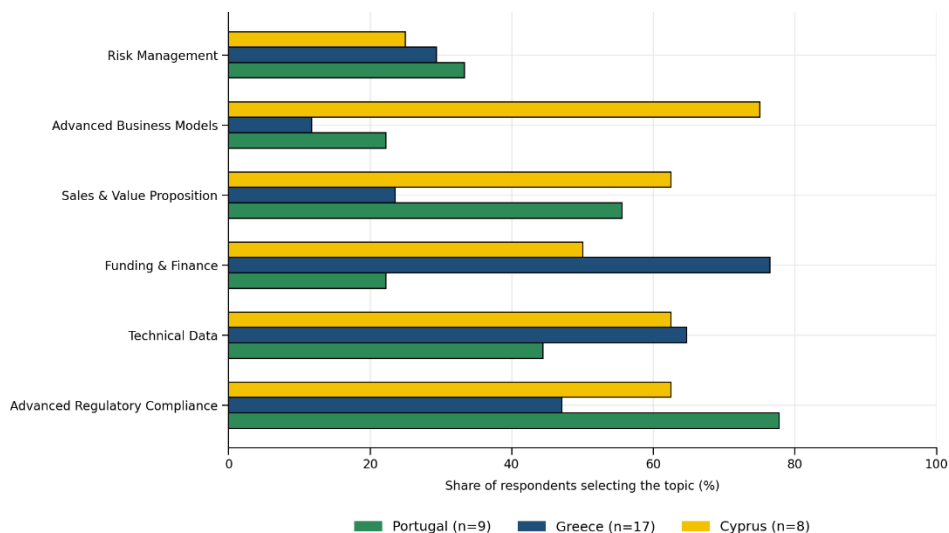
Portuguese respondents reinforce similar benefits, particularly in reduced transport needs and less reliance on combustion-engine machinery. One participant notes that “almost all of the operations with drone result in less people and less time of working”. Another highlights agricultural impacts, explaining that drone use reduces tractor and machinery activity, leading to “lower fossil fuel consumption” and more efficient crop management.

In Greece, contributions emphasise precision-based environmental gains, especially in agriculture. Respondents describe drones as “environmentally friendly and safe for human health,” while enabling targeted application that reduces resource use. Several comments highlight substantial efficiency improvements, including “significantly reduced water consumption per service” and the “Elimination of Agricultural Tractor Usage” as in Portugal. Drone usage also lowers soil disturbance.



GRAPHIC 20 - SKILLS LACKING TO SCALE BUSINESS (%)

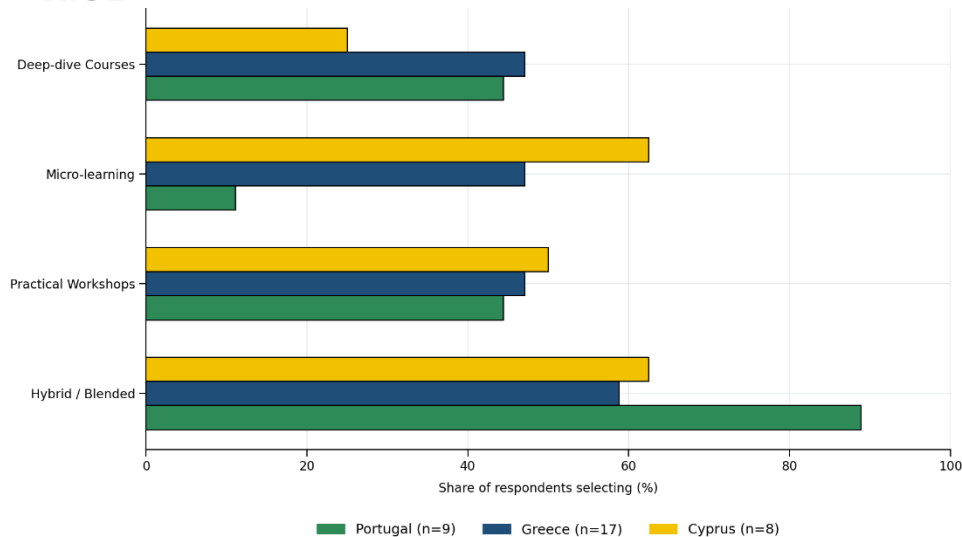
In all countries the most significant gap in learning needs is EU Drone Regulation, consistently selected by over 50% of the respondents, followed by varying needs in Marketing, Cost & Pricing, and Innovation. Cyprus shows broad gaps in multiple areas. Portugal has a stronger tone in Innovation also, while Greece highlights also displays needs in the areas of Cost & Pricing methods and Entrepreneurship Basics, to scale up their businesses.



GRAPHIC 21 - PRIORITY LEARNING TOPICS (%)

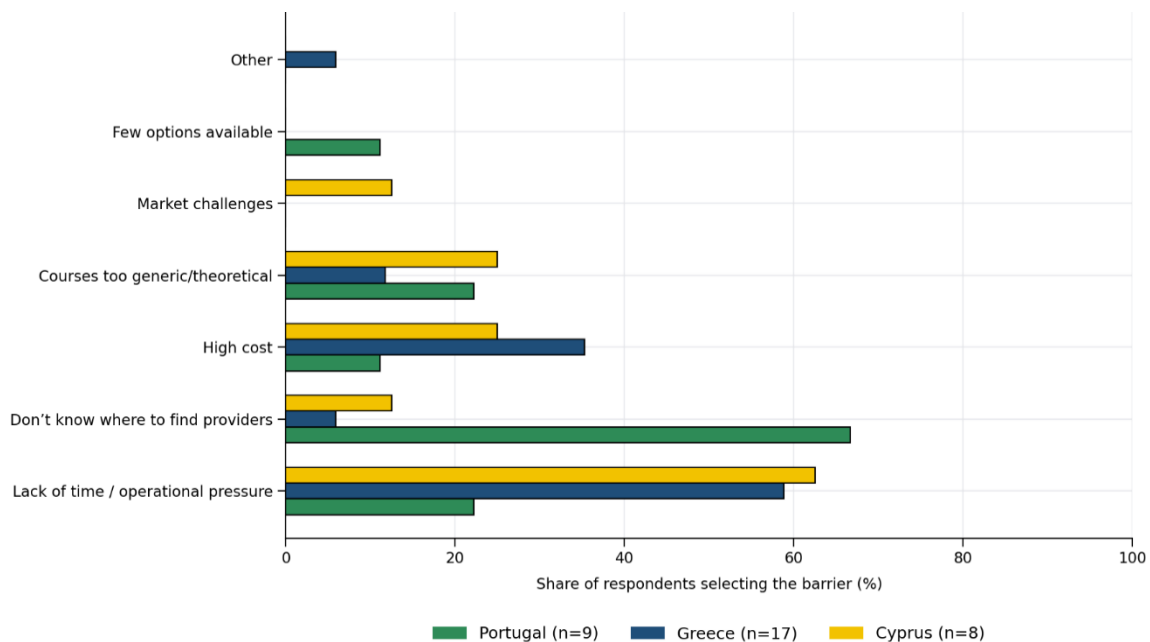
Across all countries, the strongest upskilling needs concentrate around Advanced Regulatory Compliance, Technical Data, and Funding & Finance, though the relative weight varies by market.

Cyprus shows broad multi-topic demand, Greece places sharp emphasis on Funding and Technical Data, while Portugal highlights Regulation and Sales & Value Proposition as priority areas.



GRAPHIC 22 - PREFERRED LEARNING FORMAT (%)

Hybrid/Blended is the top format selected in every country (PT ~90%, GR ~60%, CY ~63%), while Cyprus also favors Micro-learning (~63%) and practical Workshops (~50%). Portugal shows strong secondary interest in Deep-dive courses and practical workshops and little interest in Micro Learning. Greece is balanced across formats preference among the respondents.



Across surveyed countries, the main barrier to training is lack of time/operational pressure, especially in Cyprus and Greece (~60%). Portugal differs sharply, with the dominant obstacle being not knowing where to find quality providers, while cost and overly generic courses appear as secondary issues

7. Conclusion & Integration with Next Steps

This Needs Analysis Report ambitions to serve as the foundational data layer for the subsequent activities in Work Package 2. The transition of knowledge ensures a coherent development of the SME-RISE activities and main goal.

The quantitative data gathered will now be transferred to Task 2.3. (European Progress, GR), and will directly inform the parameters of the Drone Business Readiness Assessment tool, designed to help SMEs visualize the specific economic impact of adopting drone services.

The qualitative insights from the National Snapshots (desk research performed by the partners in their countries) and the common themes identified in this report (e.g., the specific regulatory bottlenecks in Southern Europe and the diverging market drivers between Portugal and Greece), together with the efforts of Task 2.3, are the core of Task 2.4. Knowledge Synthesis Report (IPN, PT). This report will incorporate the identified Case Study candidates (from the Desk Research mainly) to illustrate best practices. This synthesis will act as the blueprint for the Curriculum Development in Task 2.5, ensuring training modules are not generic, but tailored to the specific friction points revealed by the consortium's efforts.

The SME RISE Consortium

Iscte Conhecimento e Inovação- Centro de Valorização e Transferência de Tecnologias (PT)

IPN – Instituto Pedro Nunes, Associação para Inovação e Desenvolvimento em Ciência e Tecnologia (PT)

Future Needs Management Consulting Ltd (CY)

European Progress Omorhythmos Etairia (GR)

Spotlight on Innovation (GR)

8. Annexes

9.1. Annex 1 - Survey Template in ENG (pdf.)

9.2. Annex 2 – Raw data from questionnaires translated by partners in ENG (.zip and .xlsx)

9.3. Annex 3 – Desk research by partners (.pdf)