The Invisible Drone Wall

Taiwan's Quiet Support for a China-Free European Drone Supply Chain

April 2026 Ting-Wei Lin

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Research Institute for Democracy, Society and Emerging Technology (DSET)

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Author

Ting-Wei Lin | Non-Resident Fellow, National Security Team at DSET

Ting-Wei Lin is a journalist and researcher, serving as a non-resident fellow at DSET's National Security Program. Her research focuses on defense technology and supply chain resilience. Lin specializes in the intersection of technology and geopolitics, cross-strait relations, and Taiwan's public policy. Her work has appeared in Agence France-Presse, Initium Media, The Reporter, and other publications. She holds a B.A. in Anthropology from National Taiwan University.

Contributors

Cathy Fang | Policy Analyst, National Security Team at DSET

Cathy Fang serves as a policy analyst in the National Security and Economic Security Research Program at DSET, where she specializes in analyzing the convergence of technology and geopolitical dynamics. Her research portfolio encompasses critical technological domains, with particular emphasis on the semiconductor industry and the strategic implications of emerging technologies including unmanned aerial vehicles, satellite systems, and subsea telecommunications infrastructure. Currently, she contributes as an editor and podcast host at U.S.-Taiwan Watch. Prior to her role at DSET, she held the position of policy analyst at the Project 2049 Institute. Her professional background includes tenure as a legislative assistant at Taiwan's Legislative Yuan and research experience at the Institute of International Relations, National Chengchi University (NCCU). She holds an M.A. in Asian Studies and International Security from the Elliott School of International Affairs at George Washington University, and a B.A. in Political Science from National Chengchi University.

Samara Duerr | Policy Analyst, National Security Team at DSET

Samara Duerr serves as a policy analyst for the National Security and Dual-use Technology (NSDT) taskforce at DSET. Samara earned a Master's degree in Asia Pacific Studies at National Chengchi University in Taiwan, a Bachelor's degree in International Relations and Chinese Studies at Emory University in the U.S., and has also studied at Yonsei University in Seoul and the School of Oriental and African Studies (SOAS) in London. Her research focuses on dual use technology in relation to Taiwan-U.S. and Taiwan-EU cooperation. With an emphasis on techno-geopolitics, her work specializes in the drone supply chain, emerging technology, and U.S.-Taiwan relations.

Hung-Yuan Teng | Policy Analyst, National Security Team at DSET

Hung-Yuan Teng is currently a policy analyst of the National Security Program at DSET. His primary research focuses on Taiwan–Japan cooperation in the field of UAVs and the interplay between emerging technologies and geopolitics. Before joining DSET, he interned at the Taiwan Association for Human Rights, where he focused on the forced eviction case of the Tsai Jin-Mu residence along the Sindian Liugong Irrigation Canal, as well as human rights issues in Hong Kong, Tibet, and China. He holds a degree from Ritsumeikan Asia Pacific University (APU) in Japan, where his research centered on government foreign policy decision-making.

Tsai-Yuan Tsai | Visual Designer, Design Team at DSET

Tsai-Yuan Tsai is currently a graphic designer at DSET. She graduated from Fu Jen Catholic University with a degree in the Department of Applied Arts (Visual Communication Design). She served as a Commercial Photographer at Eslite Corporation for 2 years. After that, she accumulated professional experience as an in-house graphic designer at the National Cultural Association of Taiwan (NCAT) for 2 years. She has five years of experience as a freelance graphic designer, specializing in event visuals, brand design, and publication layouts.She has also collaborated with various organizations, including government agencies, Jut Art Museum, Public Television Service (PTS), and theatrical groups among others.

Dani Chao | Policy Analyst, Data Team at DSET

Dani Chao is currently an analyst on the Data Team at DSET, focusing on the application of statistics, data analysis, and machine learning to OSINT. Prior to joining DSET, Dani was a PhD researcher at the Max Planck Institute for Astrophysics and a postdoctoral researcher at the Ruđer Bošković Institute.

Fernando (Kheng-iong) Tan | Policy Analyst, Data Team at DSET

Fernando currently serves as an analyst on the Data Team at DSET. He is mainly focused on data collection and visualization, as well as developing and maintaining analytical tools. Previously, he worked as a full-stack engineer in the non-profit sector, where he participated in FIMI investigations and fact-checking projects.

Yun-Ting Cai | Research Fellow, Data Team at DSET

Yun-Ting Cai is a research fellow of the data team. He holds a master's degree in sociology from National Chengchi University. Yun-Ting specializes in data visualization and interactive application, social network analysis, and natural language processing. He has long focused on the study of information society and on the intersection of technologies and their impact on society. His everlasting passion resides in application and contribution of Free and Open Source Software (FOSS) in both academic and personal contexts. Yun-Ting was a research assistant at Institute of Sociology, Academia Sinica, and a researcher at Science & Technology Policy Research and Information Center (STPI).

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Executive Summary

Key Findings

1. **From 2024 to 2025, Taiwan's exports of complete drones to Europe increased from 2,574 to 107,433 units—approximately a 41.7-fold rise.** Exports were concentrated in Poland and Czechia, with possible onward shipment to Ukraine.[1]

2. **Europe, especially Poland and Czechia, is Taiwan's largest export market for complete drones, but Taiwan is not a dominant import source there.** In 2025 Q1-Q3, Taiwan would rank 4th in Poland's and 2nd in Czechia's import market by value, according to Taiwan Customs and Eurostat.[2] China remains the top import source for both countries.[3]

3. **Europe–Taiwan cooperation is less institutionalized than US–Taiwan cooperation.** The EU's *Defence Readiness Roadmap 2030*[4] prioritizes working with member states and NATO, referencing Indo-Pacific cooperation with only Japan and India—not Taiwan. In contrast, U.S.–Taiwan cooperation is supported by a range of policies covering procurement, technology cooperation and certification, and co-production, reflected in initiatives such as the 2026 National Defense Authorization Act (NDAA)[5] and the Blue UAS program[6]. In Europe, however, comparable institutionalized frameworks remain largely absent at both the EU and national levels.

4. **Unlike the United States, the EU does not frame drone strategy around "non-red," focusing instead on reducing reliance on "non-associated third countries" outside Europe.** Lithuania is the only European country with a clearly codified non-red policy.[7]

5. **Within Europe, overall, Taiwan's cooperation with Central and Eastern European countries is closer than its engagement with Western Europe.** In Central and Eastern Europe, cooperation most often takes the form of quasi-official channels—association-level MoUs, structured matchmaking, and localization. In Western Europe, cooperation is mostly firm-to-firm collaboration.

6. In January 2026, the **European Parliament urged deeper cooperation with Taiwan on a democratic non-red drone supply chain** through its report "Drones and new systems of warfare: Adapting the EU to today's security challenges,"[8] but the tangible policy impact remains uncertain.

7. **Poland is a visible partner, but an intensely contested market for Taiwanese manufacturers**. In military procurement, Taiwan faces competition on two fronts: established U.S. and Turkish suppliers in the medium-altitude long-endurance (MALE) UAV segment,[9] and Polish domestic defense primes in small- and medium-UAVs.[10] Market access may also tighten under Decision 123/MON's fast-track origin requirement (EU/NATO manufacture), potentially limiting Taiwan-made complete drones in relevant tenders. The broader public-safety market is similarly crowded, where Taiwanese manufacturers face stiff competition not only from Polish firms but also from Chinese commercial drones.[11]

8. **Lithuania is a like-minded partner operating low-profile drone cooperation with Taiwan.** Taiwanese companies are investing in Lithuania as a base for component production or stockpiling, as well as for maintenance and support for the European drone market.[12] Lithuanian drone manufacturers have shown growing interest in partnering with Taiwanese companies to access Taiwan's market.[13] With limited large-scale electronics and mechanical manufacturing but a strong software industry and battlefield-tested experience, Lithuania is highly complementary to Taiwan's hardware and manufacturing strengths.[14]

9. **Czechia's drone industry is a small and medium-sized (SME) ecosystem with limited domestic demand and slow procurement cycles.** The more feasible Czechia–Taiwan cooperation is modular co-development and an SME coordination mechanism, not mutual procurement of complete systems.[15]

10. **France–Taiwan cooperation is localization-first system integration.** The clearest channel is an Industrial Technology Research Institute (ITRI)–Parrot effort to localize key modules and validate endurance/reliability, plus project-based integration where French partners provide avionics/sensor packages while Taiwanese partners provide airframes and manufacturing; constraints remain around hard-to-substitute components and Taiwan's software gaps.[16]

11. **German–Taiwanese companies have business-to-business (B2B) partnerships centered on autonomy, integration, and certification.** With no disclosed bilateral framework, Taiwan–Germany cooperation is driven by **B2B partnerships.**[17]

12. UK firms have expressed interest in drone cooperation, but there are few publicly visible B2B partnerships and no publicly known structured UK–Taiwan drone cooperation program.[18]

Table 1: Summary of Taiwan–Europe Cooperation

(Source: Government documents, news reports, and interviews, compiled by DSET.)

	Taiwan	Europe
Potential Needs	• **Shorter feedback loops** via CEE partners close to Ukraine • A **validation ecosystem** for rapid iteration and field-relevant performance • **Clearer, interoperable certification pathways** to reduce cross-market transaction costs	• **Non-Chinese components** and subsystems to strengthen drone supply resilience (motors, batteries, communications modules) • **Scalable production capacity** with stable quality and yield
Strengths	• An expanding **public procurement** pipeline • Competitive non-red **subsystems** and **manufacturing capacity**	• **Proximity to Ukraine** enabling rapid test–feedback–redesign cycles • Collaboration opportunities with **primes and SMEs** for co-development and systems integration

Limitations	• **Unproven reliability** under contested conditions • **Software and firmware gaps** relative to fast iteration demands • **Logistics to Europe can be slow** relative to wartime timelines; sustainment requires local presence	• No EU-wide **trusted UAS certification** system • **Fragmented market architecture**: procurement rules vary by country and agency • **Political sensitivities** can limit visibility and constrain lethal-use tech cooperation

Existing Europe–Taiwan Cooperation	• **Quasi-official MoUs**: Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA) has signed five MoUs across Poland, Czechia, Lithuania, Latvia, and Estonia.
	• **Business to Business (B2B)**
	  • Polish, Lithuanian, and Czech firms **source components from Taiwan.**
	  • Taiwanese firms have made **local facility investments** in Lithuania and Poland.
	  • Taiwanese firms have signed 11 **B2B MoUs** with European companies since June 2025.
	• **Trade**: In 2025, Taiwan's exports of complete drones to Europe are 107,433 units, worth $80.8 million USD.	

Table 2: Summary of US and Europe Comparison

(Source: Government documents, news reports, and interviews, compiled by DSET.)

Cooperation Partners	US–Taiwan	Europe–Taiwan
Unified Trusted UAS Certification Systems	Blue UAS list, Green UAS list	• **No EU-wide standards**; the voluntary • "European Trusted Drone" label is still in the pilot stage. • Military UAS certification remains the prerogative of each member state.
Primary Demand Driver	Federal procurement "Drone Dominance" Program	Ukraine war-driven demand
Strategic Inclusion of Taiwan	Explicit cooperation framing in the 2026 NDAA, Hellscape Strategy, and others.	**A non-binding political signal** from the European Parliament's report, "Drones and new systems of warfare" (22 Jan 2026)
Non-Red Restrictions	Federal Communications Commission (FCC) restrictions (Dec, 2025)	Uneven; Lithuania is an outlier with enforceable non-red/origin restrictions
Current Cooperation Examples	**Institutionalized Co-Production** • "Co-development" and "co-production" codified in the 2026 NDAA. **Government to Business (G2B) Cooperation** • NCSIST + Anduril • NCSIST + Auterion • NCSIST + AeroVironment • NCSIST + Kratos • NCSIST + Shield AI	**Closer cooperation with CEE partners (Poland, Lithuania, Czechia) via:** • Quasi-official MoU • Sourcing components from Taiwan • Taiwan invests in local facilities • R&D projects • B2B cooperation **Fragmented cooperation with Western European partners (France, Germany, UK) via** • B2B cooperation

Policy Recommendations

Recommendations for Taiwan

Taiwan should establish a Europe-facing, trusted procurement interface for vetted UAV components and subsystems, supported by traceability, documentation, and supplier verification. Taiwanese firms can expand Europe-based dual-function hubs that combine inventory with technical support to shorten upgrade and repair cycles and sustain rapid iteration. Taiwan should also strengthen credibility through standardized testing, quality assurance, and performance documentation, and pursue joint validation with European partners. Finally, Taiwan should close software and iteration gaps by investing in flight-control stacks, secure communications, integration middleware, and update pipelines.

Cross-cutting recommendations for the EU and European partners

The EU should develop an EU-level "trusted UAS" certification pathway, including documentation requirements and standardized testing protocols for procurement security, data governance, and supply chain risk. The European Commission and the High Representative should, through *the EU Defence Readiness Roadmap 2030* and its drone-related flagships, explicitly include Taiwan as a like-minded partner for supply chain resilience and operationalize this by integrating qualified Taiwanese firms into EU and member-state vendor qualification channels for non-red subsystems and scalable manufacturing capacity; the European Parliament's own-initiative report "Drones and new systems of warfare" (22 Jan 2026) provides a basis, and the U.S. 2026 NDAA offers a benchmark for institutionalized partner inclusion.

Recommendations for Central and Eastern European partners

CEE partners could deepen cooperation with Taiwan by co-developing joint testing and validation pipelines—such as test ranges, exercises, and evaluation teams—to produce operationally grounded feedback and validated performance data, accelerating qualification timelines and reducing adoption risk. Where origin requirements limit full-drone imports, CEE partners should institutionalize local assembly and component-supply models, including kit-based assembly, local integration, joint ventures, and certified in-country maintenance.

Recommendations for Western European partners

Where formal cooperation is politically bounded, Western European partners should dual-use enabling technologies that can scale with lower sensitivity, including sensing and data fusion, maritime target recognition, electronic-warfare resilience, secure communications modules, supply-chain assurance, and scalable manufacturing processes. Track 1.5 convening should translate shared operational requirements into pilot projects without formal bilateral defense frameworks. Western European firms can also invest in modular integration by pairing integration-ready subsystems with Taiwanese airframes and manufacturing capacity, and localize module production in Taiwan where feasible.

Introduction

As the war in Ukraine drives demand for drones, Taiwan's commercial ties in Europe are growing but remain uneven and limited in scale. Unlike US–Taiwan cooperation, there is little evidence of EU-wide or national-level "strategic inclusion" of Taiwan in security and defense tech partnerships.[19] Across more than 40 European countries, Taiwan has established formal drone industry cooperation with only five. Types of cooperation include memoranda of understanding (MoUs), component sourcing, and local investment, most visible in Poland, Lithuania, and Czechia, while Western Europe largely remains limited to business-to-business (B2B) deals and modest trade flows rather than institutionalized cooperation.

Taiwan and Europe face a shared predicament: menacing geopolitical threats and defense capabilities that must be rebuilt and modernized for future warfare. Europe sits next to the world's most drone-intensive battlefield, yet its drone market is fragmented by procurement rules, bureaucratic inertia, and certification pathways.[20] Taiwan, meanwhile, has world-class electronics and a growing defense-industrial push, but faces the challenge of scaling production and proving resilience under contested conditions. The overlooked opportunity is that these constraints are complementary: Europe needs capacity, speed, and non-red components, while Taiwan needs test environments, standards alignment, and pathways into broader partner ecosystems.

This report assesses the current state of Taiwan–Europe drone cooperation, identifies where industrial complementarity can translate into tangible collaboration, and maps the policy and market barriers that still limit scale. It is structured to move from context, to observable cooperation, to constraints, and then to actionable levers. The report unfolds as follows:

- The Introduction clarifies sources and measurement boundaries in the Methodology and Research Limitations sections.

- Chapter 1 examines Taiwan's drone industry boom since 2024, including shifts in public procurement, industrial capacity, and the export backdrop shaping Taiwan's incentives for deeper cooperation with Europe.

- Chapter 2 explains Europe's demand and policy drivers, including the investment surge in drone and counter-drone systems and Europe's *Defence Readiness Roadmap to 2030*.

- Chapter 3 develops a typology for country cases—Poland, Lithuania, Czechia, France, Germany, and the United Kingdom—to show what forms of cooperation are already visible in practice.

- Chapter 4 identifies the political, regulatory, and market barriers that keep cooperation deal-driven and hard to scale.

- Chapter 5 converts these findings into targeted recommendations, covering Taiwan, cross-cutting actions for the EU and European partners, and differentiated steps for CEE partners and Western European partners.

Methodology

This report adopts a mixed-methods approach that combines: (1) semi-structured interviews with Taiwanese and European drone firms and industry associations; (2) open-source intelligence (OSINT) research, including EU and national policy documents, official statements, procurement and regulatory materials, and credible media reporting; and (3) trade statistics from Eurostat and Taiwan Customs, used to track complete-drone trade flows and to support country-case cross-checks where relevant. In addition, this report also builds on DSET's previous report, *Drones for Democracy: U.S.-Taiwan Cooperation in Building a Resilient and China-Free UAV Supply Chain*.[21]

For interviews, the report draws on DSET's interview database compiled between December 2024 and January 2026, covering interviews with more than 30 Taiwanese drone manufacturers. It also incorporates additional interviews conducted specifically for this report between May 2025 and January 2026 with Taiwanese and European stakeholders across the drone ecosystem, including drone manufacturers, industry associations, government- and policy-related entities, and security experts.

For security reasons, interviewees are kept anonymous, and only general descriptions of their roles in the drone ecosystem are provided. The report does not include direct quotations; instead, insights are paraphrased. The pseudonymized interviewees cited in this report represent a subset of the broader DSET interview database. (See the Interviewee Appendix)

Data Note: Trade Statistics—Definitions and Handling Rules

This report relies on two official trade-statistics sources. Owing to variations in national reporting practices, the figures reported by each side may differ. To avoid selective use of figures, the report applies the following rules consistently.

1. Dataset Definitions—Reporting Side and Units

- **Taiwan Customs** reports Taiwan's import/export declarations from the Taiwan reporting side (values in USD and, in many cases, including unit counts).

- **Eurostat** reports EU member states' trade-in-goods statistics from the EU reporting side (values in EUR).

- When shown together, Eurostat values (EUR) are converted to USD using the average exchange rate for the same reporting period and rounded for readability, with currency context kept explicit in captions and notes.

2. Source Hierarchy—Which Dataset Governs Which Claim

- For Taiwan's export volumes and destination patterns, Taiwan Customs is treated as primary.

- For partner-country import-market size, import-source rankings, and country-level trade patterns, Eurostat is treated as primary.

3. Trade Data Gaps—Cross-Dataset Check and Hypothetical Rank

- **Trade data gaps**. Discrepancies between Taiwan Customs and Eurostat are common due to differences in partner attribution (origin vs. consignment/destination) and reporting timing.[22] In this report, when figures from both sources are presented together, the comparison serves as a cross-dataset check; the report does not average the two series or treat them as interchangeable.[23]

- **Hypothetical rank**. In selected case studies (e.g., Poland and Czechia), the report derives a hypothetical rank by placing Taiwan Customs–reported export values into Eurostat's import-by-origin distribution. For example, when Taiwan Customs reports exports to Poland but Eurostat does not record them in Poland's import data, this method indicates where that Taiwan-reported value would sit under Eurostat's import-source structure. This hypothetical rank is used only as an indicative gauge of market scale and positioning, not as an official Eurostat ranking or a reconciled estimate.

4. HS Scope—Resolution and Coding Limits

Throughout this report, HS 8806 (4-digit) is the common unit of analysis. Taiwan Customs records may exist at finer resolution, but the report uses HS 8806 aggregates unless explicitly stated; more detailed codes (6/8/11-digit) are used only to illustrate composition or classification shifts, and the report does not assume one-to-one subcode matching across databases.

5. Interpretation—One-Sided Visibility

When a flow appears in only one dataset, the report treats it as a single-source trade signal: it indicates that at least one customs authority recorded shipments under HS 8806, but it does not prove the absence of trade on the other side. The report avoids "zero-trade" interpretations because non-appearance can reflect partner attribution, transit/warehousing treatment, timing, thresholds, or classification practices.

Research Limitations

First, this report presents only cooperation developments that can be verified from publicly available sources. Given the traditionally confidential nature of Taiwan–Europe military collaboration, it does not address potential or unpublished projects.

Second, trade statistics are useful for describing broad patterns, but they are not a single, fully consistent ground truth. Eurostat and Taiwan Customs are different reporting systems and can diverge; for this reason, cross-dataset comparisons in the report should be read as indicative rather than reconciled measures.

Third, international HS coding does not provide a clean, drone-specific category for parts and components: many "aircraft parts" headings mix manned and unmanned applications, and many drone-relevant components (electronics, optics, batteries, motors, chips) are declared under non-aerospace HS chapters. This prevents a trade-data-based quantification of "drone parts" flows and requires the report to rely on interviews and open-source documentation for component-level supply-chain patterns.

Fourth, interview-based insights are essential, but when interviews are anonymized and not directly quoted for legitimate safety and access reasons, the analysis must be careful not to over-claim beyond what the available evidence supports.

Together, these limitations mean that the report's typology is best read as a map of observable patterns, not a complete inventory of all ongoing cooperation.

Chapter 1.

Progress and Challenges in Taiwan's Drone Industry

(Co-Authors: Cathy Fang & Samara Duerr)

Since 2022, Taiwan's UAV industry has been catalyzed by Ukraine's demonstrated asymmetric drone strategy success. Striving to match this resiliency, Taiwan has begun incorporating drone technology into its national defense strategy. In order to do this, and in recognition of supply chain risks, the Taiwanese government has been progressing towards an increasingly self-reliant UAV ecosystem such that, in times of crises, it would not be wholly dependent on allies' exports.

Progress has been most visible on the demand and policy-coordination fronts. In particular, on October 16, 2025,, Taiwan approved a national UAV development and procurement framework[24] that contains four main strategic pillars to escalate industry development, enhance defense autonomy, and create a resilient non-red supply chain:

(1) Expanding domestic and international demand;
(2) Fostering technological advancement and international cooperation;
(3) Forming industry clusters and ecosystems;
(4) Improving regulatory frameworks for unmanned vehicles.

This development is not without its challenges, however, as according to DSET's *Drone for Democracy* report published in June 2025, Taiwan's UAV industry continues to face three structural constraints: limited production scale, persistent reliance on foreign technologies, and supply-chain bottlenecks.[25]

Historically, high unit costs for non-red components—2-3x more expensive than PRC-made ones—are driven up by fragmented and relatively modest domestic procurement, and the absence of sustained foreign government orders which has prevented economies of scale.[26] While Taiwan has achieved China-free final assembly, it remains dependent on allied suppliers for mission-critical subsystems, including flight-control, positioning, and communications chips; flight-control and ground-

control software; and advanced payloads such as gimbal and thermal imaging systems. These dependencies are compounded by upstream vulnerabilities, including exposure to U.S. export controls on military-grade components—particularly thermal imaging modules—and continued reliance on China for critical minerals used in battery cells and electric motors.

Moreover, the recent surge in demand has exposed new constraints. It remains uncertain whether domestic manufacturers can expand production capacity within compressed timelines while maintaining quality assurance, cybersecurity standards, and trusted supply-chain compliance. As a result, despite stronger policy alignment and unprecedented procurement commitments, Taiwan's UAV industry continues to face enduring challenges: persistent cost disadvantages relative to Chinese systems, production volumes far below wartime benchmarks such as Ukraine's million-unit annual output, limited access to foreign government procurement markets, ongoing dependence on China-sourced upstream materials, and continued reliance on foreign suppliers for mission-critical subsystems.

To address these entrenched vulnerabilities, the October 2025 framework establishes a targeted roadmap for industrial maturity. Thus, the remainder of this section unpacks each pillar in turn, highlighting the concrete policy instruments Taiwan has adopted, from large-scale procurement and industrial subsidies to international partnerships and regulatory reforms.

Pillar 1: Scaling Demand Through Public Procurement

To expand domestic demand, Taiwan's Ministry of National Defense (MND) initiated the largest drone procurement plan in Taiwan's history in July 2025.[27] By 2027, Taiwan plans to acquire 48,750 units across five drone types, with a total budget of around USD $1.56 billion (NT$50 billion). Compared with 3,422 units procured in 2024, this represents an increase of more than fourteen-fold. Type A, or Group 1 FPVs, accounts for the bulk of planned purchases—about 34,000 units. This procurement requires domestic assembly, with preference given to those who source components locally. Moreover, Chinese-made parts and brands are prohibited, meaning companies from China, or those with Chinese investment including via third countries, are not eligible to participate.

Table 3: Ministry of Defense Drone Procurement Types and Quantities

(Source: News reports, Taiwan's military drone procurement tender notice, and video materials, Compiled by DSET.[28])

Platform	Type	Control & Transmission Range	Endurance (Unloaded / Loaded)	Payload Capacity	Key Features	Planned Procurement (2026)	Planned Procurement (2027)
Immersive FPV attack drones	Multi-rotor, Vertical Take off and Landing (VTOL)	Over 6 km	30+ min (unloaded) / 7+ min (loaded)	Over 2.5 kg	Equipped with optical payload; designed for short-range real-time imaging	7,500	26,500
Bomb-drop multirotor drones	Multi-rotor VTOL	Over 25 km	60+ min (fully loaded)	10 kg (including optical payload)	Enhanced for mid-range reconnaissance and payload delivery	1,020	3,120
Medium-range loitering munitions	Fixed-wing catapult launch	Over 90 km	2+ hrs (fully loaded)	10 kg (including optical payload)	Modular, disassemblable for transport; loitering capability; long-range reconnaissance	980	3,060

Small loitering munitions	Fixed-wing catapult launch	Over 30 km	30+ min (fully loaded)	2.5 kg (including optical payload)	Modular, disassemblable; loitering capability; tactical short-range operations	1,340	4,520
Coastal ISR drones	Fixed-wing VTOL	Over 100 km	2.5+ hrs (fully loaded)	Optical payload (avg. flight speed > 80 km/h)	Wind resistance over Beaufort scale 5; combines VTOL flexibility with fixed-wing range	350	360

On top of this procurement tender, on November 26, 2025, President Lai Ching-te announced a proposed special defense budget package of up to USD $40 billion (NT$1.25 trillion) under a draft *Special Act on Procurement for Enhancing Defense Resilience and Asymmetric Capabilities* (hereafter, the Special Defense Budget), an eight-year framework (2026-2033) with a provisional ceiling of USD $40 billion (NT$1.25 trillion).[29] It includes funding lines for ISR and strike drones, uncrewed surface vessels, and counter-drone systems. The budget for the MND's 48,750-unit plan is also included.

To complement the MND plan, the Executive Yuan later announced investments valuing USD $1.43 billion (NT$44.2 billion) over six years (2025–2030).[30] It aims to consolidate 50,898 additional systems for civilian and interagency use, with delivery scheduled for 2027 and 2028. Combined with the MND's 48,750-unit plan, Taiwan's public-sector procurement pipeline would reach roughly 100,000 drones before 2030.[31]

Table 4: Taiwanese Government's Investments in the Domestic Drone Industry
(Source: News reports, Taiwan's military drone procurement tender notice, and video materials, compiled by DSET.[32])

Government Agency	Planned Acquisition Number	Budget Planning
Ministry of National Defense	48,750 units across five drone types	US$1.56 billion (NT$50 billion)
	635 Counter UAS System	US$303.7 million (NT$9.6 billion)
Executive Yuan	50,898 systems for civilian and interagency use	US$625 million (NT$20 billion)

Furthermore, in January 2026, Taiwan's Minister of National Defense, Wellington Koo, disclosed unclassified details of the Special Defense Budget: under the "Uncrewed Platforms and Counter-UAS" category, the plan combines foreign acquisitions—1,554 ALTIUS-700M loitering munitions and 478 ALTIUS-600 ISR systems—with large-scale domestic procurement, including roughly 200,000 UAVs, over 1,000 uncrewed surface vessels (USVs), and multiple counter-UAS systems, guided by a "domestic-production-first" principle.[33] This number should be understood as an aggregate planning reference rather than a single, confirmed procurement contract.

The Special Defense Budget is currently being stalled at the Legislative Yuan, where the opposition-controlled legislature has blocked the proposal 8 times—with the latest being on January 23, 2026—from proceeding to committee review.[34] If the draft moves forward, it will highlight that strengthening defense self-reliance is inseparable from the sustained development and scaling of Taiwan's domestic UAV industry.

In 2024, DSET estimated Taiwan's drone manufacturing capacity at 8,000–10,000 units. In 2025, Taiwan's exports totaled at least 122,706 units, providing a lower bound for annual production in that year. This export volume represents a 35.5x increase over 2024 exports.[35] [36]

To further extend its UAV market into the international sphere, Taiwan's Ministry of Economic Affairs (MOEA) established the Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA) in September 2024. This association unites Taiwan's key industry players and assists them with resource integration, technology collaboration, and strategic partnerships. The association has also led delegations to major international exhibitions—including Japan Drone 2025, XPONENTIAL Europe 2025 (Germany), and XPONENTIAL 2025 (United States)—to support Taiwan's entry into the global UAV supply chain.

Since its creation, TEDIBOA has signed twelve MoUs with UAV industry associations and partner organizations in the United States, Poland, Czechia, Lithuania, Latvia, Estonia, Japan, and Ukraine. These 12 MoUs are distributed regionally as 3 from the U.S., 7 from the EU, and 1 from the Indo-Pacific. The three most recent additions include MoUs between TEDIBOA and the Japan UAS Industry Development Association (JUIDA), Ukraine's IRON Lviv cluster, and the Polish Chamber of Unmanned Systems (PISB). (For a complete list of TEDIBOA's MoUs, See Table 5).

Table 5: UAV MoUs Between TEDIBOA and Foreign Partners (2024–2025)
(Source: TEDIBOA[37])

Time	Country/ Signing Entity	Signing Entities	Objectives
Sep 2024	U.S. (Arizona)	Arizona State Government & MOEA (Taiwan)	Deepen collaboration on UAVs and semiconductors, and enhance high-tech personnel exchanges.
Oct 2024	U.S. (Oklahoma)	Oklahoma Defense Industry Association (ODIA) & TEDIBOA (Taiwan)	Establish strategic partnerships and an exchange platform for international drone industry promotion, advanced technology development, and supply chain cooperation.
Nov 2024	Poland	Polish-Taiwanese Chamber of Industry and Commerce & TEDIBOA (Taiwan)	Promote international expansion of the drone industry, develop advanced technologies, and strengthen supply chain collaboration.
Nov 2024	Lithuania	Lithuanian Defence and Security Industry Association & TEDIBOA (Taiwan)	Integrate the drone industry with the European supply chain and strengthen alignment in technologies and business opportunities.
Feb 2025	Latvia	Latvian Federation of Defence and Security Industries (FSDI) & TEDIBOA (Taiwan)	Promote bilateral cooperation in the drone industry and expand regional business opportunities.

Feb 2025	Czech Republic	Czech-Taiwanese Business Chamber (CTBC) & TEDIBOA (Taiwan)	Develop business opportunities for drones in Europe.
Feb 2025	Japan	Japan Drone Consortium (JDC) & TEDIBOA (Taiwan)	Establish a UAV supply chain,with a focus on collaboration in disaster relief operations.
May 2025	Estonia	Estonian Defence and Aerospace Industry Association, Estonia Aviation Cluster & TEDIBOA (Taiwan)	Collaborate on drones, aerospace and related industries.
May 2025	U.S.	Association for Unmanned Vehicle Systems International (AUVSI) & TEDIBOA (Taiwan)	Establish a trusted supply network free from potential adversaries.
June 2025	Japan	Japan UAS Industry Development Association (JUIDA)	Promote the peaceful use of drones and fostering international industrial cooperation
September 2025	Ukraine	IRON Lviv cluster	Create a platform for future bilateral industrial cooperation.
December 2025	Poland	Polish Chamber of Unmanned Systems (PISB)	Joint development of a trusted supply chain, cooperation on system integration and critical technologies, regulatory alignment, and cross-border testing and demonstration platforms.

Regionally, Taiwan's effort to enter the U.S. market is marked by the breakthrough addition of Thunder Tiger's FPV ‘Overkill' being added to the Blue UAS Cleared list—meaning that it is now eligible for U.S. federal procurement. In parallel, Taiwan's defense and UAV ecosystem have expanded institutional engagement with U.S. firms. For example, NCSIST has signed MoUs with Anduril, Northrop Grumman, AeroVironment, and MARTAC.[38] There is also an increase of U.S. state government procurement of Taiwanese drones, as evidenced by Oklahoma's MoU with Taiwan in September 2024.[39]

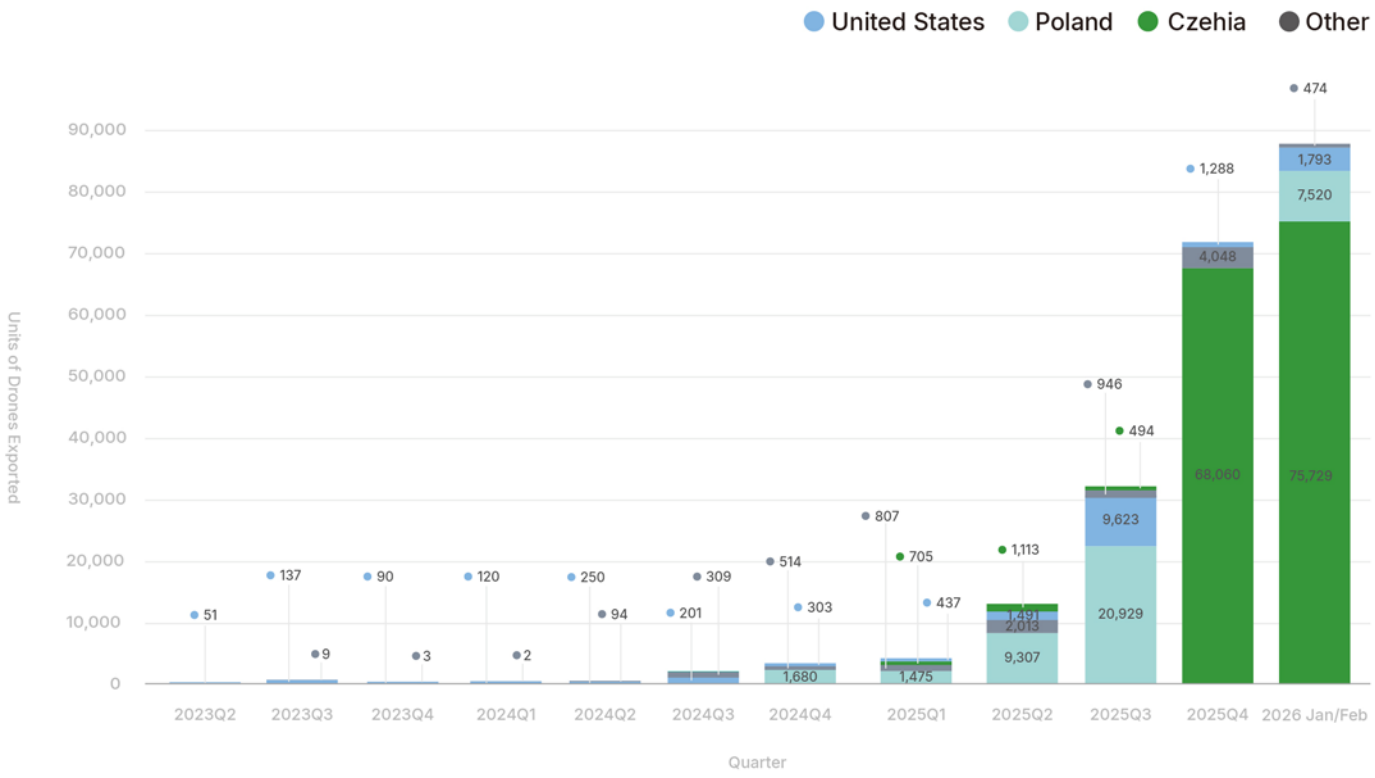
In the European region, DSET interviews indicate a rising demand in Central and Eastern Europe for non-PRC UAV components, especially motors and battery cells. Foreign Minister Lin Chia-lung has also revealed joint ventures in Poland and cooperation with the Baltic states and Czechia.[40] Additionally, Ahamani, a Taiwanese UAV motor manufacturer, is reportedly planning a motor plant in Lithuania next year, targeting 100,000 units per month, which would be the largest UAV motor facility in Europe.[41]

Indo-pacific cooperation, however, remains limited to exploratory frameworks rather than the hard procurement seen in the West. In Japan, while the Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA) signed a supply chain MoU with the Japan UAS Industry Development Association (JUIDA) in June 2025 to integrate Taiwanese chips with Japanese precision mechanics, yet the lack of mutual certification standards has stalled procurement efforts.[42] Similarly, cooperation with the Philippines is currently defined by recent efforts for 'drone diplomacy', in which Taiwan hopes to donate drones to like-minded allies.[43] Along with this, there have been discussions focused on using the Philippines as a potential testing ground for Taiwanese systems.[44]

Overall, Taiwan's 2023-2025 export data reflects the increased interaction between Taiwan's budding UAV industry and foreign counterparts. Specifically, in 2025, there were 122,706 drone units exported, a 35.5x increase from 2024 exports.[45] These exports are valued at NT$2.95 billion (US$94.4 million), a 20-fold increase from NT$140 million (US$4.5 million) in 2024.[46] (See Graph 1 Below).

Graph 1. Taiwan's Exports By Country 2023-2026

(Source: Taiwan's Ministry of Finance, Compiled by DSET)



Pillar 2: Building Technological Capabilities Via Domestic Subsidies and International Partnerships

Since 2023, Taiwan has used targeted subsidy programs to close capability gaps in its drone sector and localize enabling technologies. Not only has MOEA designated the development of the "three chips" (flight-control, communications, and navigation/sensing chips) and the "two software" (flight-control software and ground control software) as the core framework of its UAV subsidy program, but it has paired this effort with international cooperation to accelerate technology development; testing and validation; and adoption into trusted markets.

According to the MOEA, critical technology gaps fall into two categories based on domestic capability maturity[47]:

1. **Technologies with Insufficient Domestic Capability That Need** Indigenous Breakthroughs: AI-enabled flight control software, infrared (IR) and thermal imaging systems, and laser rangefinders

2. **Technologies with an Established Domestic Foundation, But Have Limited Scale and Production Readiness:** communications integrated circuits (ICs), GNSS/GPS ICs, flight control processors, and ground control software.

Policy implementation is anchored in several main government programs (See Table 6 below). On the civilian-industrial side, the MOEA's subsidy efforts have emphasized UAV-specific chips and modules, including AI vision chips, flight-control systems, and secure communications modules. In September 2025, the MOEA approved seven funded projects, prioritizing AI vision modules and cost-effective flight-control solutions, with requirements oriented toward system-level validation and steps toward production readiness.[48]

On the defense R&D side, the MND has launched a cross-domain program for 2026-2028 to integrate government, industry, and academia in developing core unmanned-system enabling technologies across air, surface, and subsurface domains.

Table 6: Taiwan UAV & IC Design Subsidy Programs (2024–2029)

(Source: Official Taiwanese government sources, compiled by DSET[49])

Program	Lead Agency	Core Objective	Primary Focus Areas	Timeframe
UAV Key Chips and Modules Indigenous R&D Subsidy Program	MOEA / Department of Industrial Technology (DoIT)	Reduce reliance on foreign core UAV technologies; build indigenous "three chips, two software"	Flight-control chips, AI vision chips, communications ICs (long-range / anti-jamming), flight-control & ground-control software	2025 – 2029
Advanced Development Incentive Program for Domestic IC Design Firms	MOEA / Industrial Development Administration (IDA)	Strengthen domestic IC design and accelerate system deployment	Communications, LiDAR, thermal imaging, GPS chips; system-level core chips	NT$51 billion (USD $1.62 billion, pending approval)
IC Design Summit Incentive Program	MOEA	Support frontier, globally competitive IC and system technologies	Advanced IC design, pilot production, high-risk/high-performance systems (UAV-weighted)	2024: NTD$8 billion (USD $253million) 2025: NT$13 billion (USD $412 million)
Advanced UAV Technology R&D and International Market Acceleration Subsidy Program	MOEA / Department of Industrial Technology (DoIT)	Close system-level and module-level capability gaps; accelerate commercialization	Complete UAV systems; flight control, communications, payloads, propulsion; real-world validation	2026 (proposed): NT$20 billion (USD $633 million)

Advanced Unmanned Systems Multi-Domain Integrated Technology Development Program	MND / Armaments Bureau	R&D in dual-use unmanned systems and enabling technologies	EO/laser payloads, anti-jamming comms, navigation, composites, radar modules	2026: NT$27 billion (USD $855 million)
Civil–Military Dual-Use UAV Capability Development Program	MOEA / IDA	Strengthen key UAV technologies and mass-production capabilities; advancing system integration, mission applications, and end-to-end manufacturing capacity	1. Dual-use unmanned systems (payloads; communications, flight control and ground control ICs and modules) 2. AI-enabled applications (image recognition, autonomous flight, mission software, and IC integration) 3. Module Optimization (advanced materials and lightweight airframe structures, and high-performance propulsion systems) 4. C-UAS (passive radar, active radar, electronic jamming systems)	

As aforementioned, Taiwan has simultaneously expanded international cooperation to accelerate capability development; testing and validation; and trusted-market access. This takes two main forms: (1) association-led cooperation to catalyze cross-border partnerships, and (2) firm-to-firm collaboration to integrate mature overseas technologies—especially autonomy software, sensing, and operational experience—into Taiwanese platforms.

At the firm level, cross-border partnerships have increased. DSET data indicate that at least 31 MoUs were signed between Taiwanese UAV companies and foreign partners between June and September 2025, with the United States accounting for the largest share.[50] This time period was chosen for assessment due to the surge in MoUs caused by Taiwan's Aerospace and Defense Technology Exhibition (TADTE) in September and Taiwan's announcement of UAV military tenders. During this timeframe, approximately one-quarter of these agreements focused on distribution or agency arrangements to support overseas market entry. (See the complete breakdown of Taiwan's International UAV MoUs from June to September 2025 in Table 7 below).

Table 7: Taiwan International UAV MoUs (June-September 2025)

(Source: International news outlets and company press releases, compiled by DSET)

	Parties Involved	Date Signed	Countries	Category	Focus Area
1	NCSIST (National Chung-Shan Institute of Science and Technology) + Auterion	2025/06/17	Taiwan + Swiss-American	Drone Software	Long-term partnership to adopt Ukraine combat-tested modular open-source UAV software.
2	Thunder Tiger (雷虎科技) + Auterion	2025/06/25	Taiwan + Swiss-American	Drone Software / AI Integration	MoU to integrate Auterion's AI & autonomy stack across Thunder Tiger's entire UxV portfolio (air/land/sea), boosting real-time targeting, navigation, and overall mission performance.
3	Aeroprobing Inc. (翔探科技) + Blue Innovation Co., Ltd.	2025/07/01	Taiwan + Japan	Strategic Alliance	Strengthen the drone-based solutions in Japan and overseas markets.
4	AbonMax (銘旺科技) + GMG Trading	2025/07/30	Taiwan + Japan	Strategic Alliance	Joint development of drone products and application solutions, which covers agricultural monitoring, patrol inspections of energy facilities, logistics, and defense.

5	Sysgration (系統電) + Vantage Robotics	2025/08/19	Taiwan + USA	Strategic Alliance	Cooperation on AI edge computing and UAV solutions.
6	Industrial Technology Research Institute (ITRI) + Kawasaki Heavy Industries, Ltd.	2025/08/29	Taiwan + Japan	Strategic Alliance	Market research and industrial layout planning in Taiwan, focusing on smart robots, drones, and green sustainable technologies.
7	Taiwan Defense Industry Association + Polish Taiwan Business Association; + Lviv Tech (IRON)Cluster	2025/09/03	Taiwan + Poland + Ukraine	Industry MoU	Association-level MoU to promote international connections and UAV business collaboration.
8	Sysgration (系統電)+ Quantum Systems	2025/09/11	Taiwan + Germany	Strategic Alliance / eVTOL-ISR	Alliance to introduce German eVTOL ISR platforms and develop AI edge-enabled UAV systems.
9	AIDC (漢翔) + Shield AI	2025/09/15	Taiwan + USA	Full UAS Ecosystem	AIDC handles local maintenance; Shield AI trains Taiwanese engineers; potential to substitute U.S. system components with Taiwan-made parts.

10	Apex Aviation (安捷航空) + Tekever	2025/09/18	Taiwan + Portugal	ISR/Training (MUM-T)	Introduced AR3 UAV with combat experience; promoting manned–unmanned teaming and pilot training integration.
11	EJAT (益捷)+ Edge Autonomy	2025/09/18	Taiwan + USA/Latvia	Distribution/ Agency	Became exclusive authorized distributor for Taiwan and Southeast Asia.
12	EJAT(益捷) + Safesky Systems	2025/09/18	Taiwan + USA	Distribution/ Agency	Authorized distributor for Safesky Systems (e.g., BMR2 "Peregrine" urban-operations drone, VTRX, Sentinel).
13	EJAT(益捷) + Aerovel	2025/09/18	Taiwan + USA	Distribution/ Agency	Distributor for Aerovel **Flexrotor** UAV in Taiwan/APAC.
14	EJAT(益捷) + iRed	2025/09/18	Taiwan + UK	Distribution/ Agency	Distributor/partner for UK-based **iRed** (thermal imaging & drone solutions).
15	EJAT(益捷) + Ascent AeroSystems	2025/09/18	Taiwan + USA	Distribution/ Agency	Distributor for **Ascent AeroSystems** (e.g., Spirit, NX30 coaxial UAVs).
16	EJAT (益捷)+ IXI	2025/09/18	Taiwan + USA	C-UAS Agency	Distributor for **IXI** electronic-warfare "Music On" anti-drone system and drone jammers.

17	EJAT (益捷) + Elbit Systems (ReDrone)	2025/09/18	Taiwan + Israel	C-UAS Agency	Authorized distributor/ integrator for **Elbit ReDrone** counter-UAS solution.
18	Solutions Consulting (方案諮詢) + BRINC Drones	2025/09/18	Taiwan + USA	Supply Chain / Tactical UAV	Serves as an important Asian supply-chain partner for **BRINC drones**, known for window-breaching UAVs deployed in Ukraine.
19	NCSIST + AeroVironment	2025/09/18	Taiwan + USA	General-purpose military and civilian UAV system	Collaborating with NCSIST's Institute of Aeronautics and Astronautics.
20	NCSIST + Anduril	2025/09/19	Taiwan + USA	Low-cost Autonomous Cruise Missile (Loitering Munition) and Autonomous Unmanned Multi-Purpose Vehicle (Drive-LD)	Collaborating with NCSIST's Shenlong Project team.
21	NCSIST + Airshare	2025/09/19	Taiwan + Canada	Interceptor UX ribbon rocket, as well radar, electro-optical systems, and jammer capabilities	Collaborating with NCSIST's Institute of Electronics to neutralize hostile drones and protect military units and critical infrastructure.

22	NCSIST + MARTAC	2025/09/19	Taiwan + USA	Joint unmanned boat project with AI-based target recognition and tracking	Collaborating with NCSIST's Shenlong Project team.
23	NCSIST + Northrop Grumman	2025/9/19	Taiwan + USA	Air and Missile Defense Capabilities	Collaboration on air and missile defense modernization.
24	Ramatek Company, Champion Auto, and Vivian + Northrop Grumman	2025/9/19	Taiwan + USA	AN/TPS/78 Advanced Capabilities Radar	Advanced radar capabilities.
25	AIDC + Maxar	2025/09/19	Taiwan + USA	Drone flight precision	Cooperation with Maxar to enhance UAV precision flight and geospatial intelligence.
26	Carbon-Based Tech (碳基科技) + Markforged	2025/09/19	Taiwan + USA	3D printing technology	Partnership to adopt aerospace-grade 3D printing for UAV critical parts.
27	Carbon-Based Tech (碳基科技) + AbonMax + Bosa Industrial Group	2025/09/19	Taiwan + USA	Strategic Partnership	Cooperate in aerospace-grade composite materials, AI-enabled intelligent flight system, and modular design.

28	Fong Jaw Aerospace (豐兆) + RH Thomas & Associates + AscendX Tactical	2025/09/19	Taiwan + USA	Strategic Partnership	Strategic alliance to expand tactical UAV and aerospace applications.
29	AIDC + Orbital Composites	2025/09/19	Taiwan + USA	Carbon fiber composite 3D printing technology	Collaboration on carbon fiber composite 3D printing technologies for aerospace/UAVs.
30	Jiin Ming (錦明實業) + ELEVONX	2025/09/19	Taiwan + Slovenia	Distribution/ Market Development	Partnership to distribute Tango™ eVTOL UAV in Taiwan and APAC.
31	TAIPO Taiwan + Poland Chamber of Commerce	2025/9/19	Taiwan + Poland	Industry MoU	Cooperation between Polish Chamber of Commerce and companies associated with TAIPO – Taiwanese-Polish Chamber of Commerce.
32	Jiin Ming (錦明實業) + PolTaiw Apex	2025/09/21	Taiwan + Poland	Strategic MoU	Signed MoU with Polish partner to strengthen UAV market entry into Europe.

33	Ahamani (其易) — Poland plant plan	2025/09/25	Taiwan + Poland (+ South Korea interest)	Investment/ Factory	Announced UAV motor factory in Poland; also in talks with Korean UAV manufacturer to purchase non-China-made motors.

Overall, Taiwan has begun signaling an outward-facing 'drone diplomacy' posture. In October 2025, the head of the Ministry of Foreign Affairs' (MOFA) Department of Non-Governmental Organization (NGO) and International Affairs announced a shift in UAV foreign policy, aiming to supply drones to allies and like-minded European partners facing Russian aggression[52]. Officials noted the planning of a new 'drone diplomacy task force' which will donate civilian drones in two phases to diplomatic allies including Asia-Pacific nations such as Japan and the Philippines, and Central and Eastern European nations including Estonia, Latvia, Lithuania, Poland, Czechia, and Germany[53].

In a broader view, Taiwan's association-led and firm-to-firm collaborations take form in different manners when interacting with various countries. Based on each country's technological or manufacturing strengths, weaknesses, and supply chain demands—as well as government-to-government ties with Taiwan or lack of—cooperation is uniquely constituted to meet each actor's needs. Still, the countries that receive Taiwan's largest exports are predominantly the same countries that Taiwan has signed MoUs with. (See Table 8 and 9 for international cooperation examples and models).

Table 8: International Cooperation Examples By Country

(Source: International news outlets and company press releases, compiled by DSET)[54]

Partner	Example(s)
U.S.	NCSIST × **Auterion: Autonomy stack adoption** (Auterion OS + Nemesis swarm ops platform)[74] NCSIST × **AeroVironment: Lifecycle sustainment package** (tech support, training, sustainment processes for JUMP 20)[59] NCSIST × **Anduril: Command and control / mission-system integration options** (Lattice OS AI-enabled command-and-control)[75] NCSIST × **MARTAC: Uncrewed surface vessels (USVs) integration** (co-production and technology-sharing initiatives)[76] NCSIST × **Kratos: Co-production / localized production + flight testing** (Mighty Hornet IV co-production + US live flight testing; USV localized production)[77] NCSIST × **Airshare: Counter-UAS integration upgrades (Interceptor UX integration**; radar/electro-optical (EO)/electronic warfare (EW) upgrade path)[78]
European Union	TEDIBOA × Polish Drone and Robotics Association (PISB): Certification & procurement requirements alignment (reduce entry barriers), joint testing/validation/demonstration sites[79] Asia UAV AI Innovation Application R&D Center + Taiwan National Drone Industry Associations × TÜV Rheinland × STMicroelectronics: **EU notified body regulatory validation** (TÜV Rheinland role), **design-alignment support** (semiconductor & sensing expertise from STMicroelectronics)[80]
Japan	TEDIBOA × **JDC/JUIDA**: supply-chain integration, market linkage; demonstration projects (disaster response, emergency operations); autonomous flight testing (application-driven trials)[81,82]
Ukraine	TEDIBOA × **IRON Lviv Cluster** platform for industry cooperation[10]

Table 9: Taiwan–Partner UAV Cooperation Models

(Sources: Government documents, international news reports,and anonymized interviews, compiled by DSET)

Evidence layer	Indicator	US	Japan	Ukraine	Poland	Lithuania	Czechia	France	Germany	UK	Austria
Layer A: Policy signals	**A1. Official Strategic Inclusion**	✓	—	—	—	—	—	—	—	—	—
Layer B: Institutional channel signals	**B1. Quasi-Official Industry Framework**	✓	✓	✓	✓	✓	✓	—	—	—	—
Layer C: Operational cooperation signals (projects, capabilities, industrial activity)	**C1. Technology sharing / co-development / co-production initiatives**	✓	—	—	—	—	—	—	—	—	—
	C2. Foreign government purchases / contract awards to Taiwanese vendors	✓	—	—	—	—	—	—	—	—	—
	C3. Certification alignment	✓	—	—	—	—	—	—	—	—	—

	C4. R&D cooperation institutional or firm-level R&D projects visible in open sources/ interviews	✓	✓	✓	—	—	✓	✓	—	—	—
	C5. Component / Subsystem Sourcing	✓	✓	✓	✓	✓	✓	—	—	—	—
	C6. Local Investment / Facilities assembly, factories, service hubs	✓	—	—	✓	✓	—	—	—	—	—
	C7. Firm-level Project Deals / B2B MoUs integration packages, project contracts	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
Layer D: Market Signals	**D1. Recorded Trade Flows** in official statistics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Legend
✓ = Documented / Verifiable
— = No Evidence Found

Pillar 3: Building Technology Clusters and Expanding Testing Infrastructure

Intending to shorten the gap between R&D and scaled production, Taiwan has been building shared infrastructure to reduce fragmentation across the drone supply chain. Two government-backed facilities play distinct roles: the Minxiong Aerospace and UAV Industrial Park and the Asia UAV AI Innovation Application R&D Center.

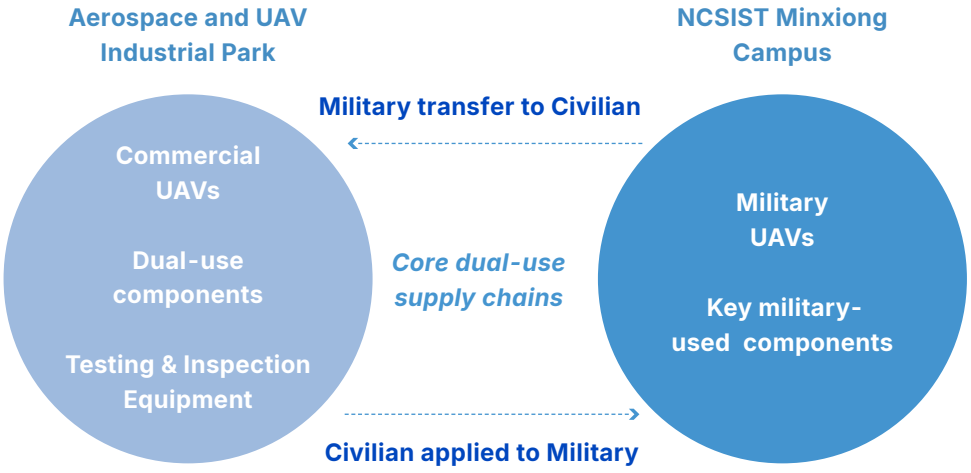
The Minxiong Aerospace and UAV Industrial Park (hereafter, the Minxiong Industrial Park) is designed as a manufacturing and system-integration cluster for dual-use—civilian and military—aerospace and unmanned systems. Approved by the Executive Yuan in 2020, and developed in coordination with the National Chung-Shan Institute of Science and Technology (NCSIST), a state-owned defense R&D and systems integration institute, the park aims to support the development and production of mid to large-sized drones.55

The park is designed as a co-located cluster that integrates R&D, system integration, manufacturing, testing, validation, and certification functions. Development is divided into two linked zones: an Eastern Zone (NCSIST Zone) expected to begin operations in 2026, and a Western Zone (Industrial Zone) for private-sector manufacturers and suppliers, with construction planned for 2026–2028 and initial tenant occupancy scheduled for 2028.56 Planned infrastructure includes shared management facilities, standardized factory units, hangars, dedicated testing areas, and leased parcels for customized facilities.

This cluster strategy is complemented by the Asia UAV AI Innovation Application R&D Center (hereafter, the Asia UAV Center). It functions primarily as an applied R&D and integration hub: it convenes firms, research organizations, and universities to develop, test, and validate UAV-related technologies—especially AI and software-enabled applications. This allows technological theories and concepts to be translated into prototypes and deployable solutions.

In terms of implementation progress, the Asia UAV Center has been operating since 2022 and is positioned as a national platform for applied innovation and cross-sector collaboration—with the government planning an expansion phase to increase its capacity. The Minxiong Industrial park, initiated earlier as a dedicated dual-use industrial base in Chiayi, is being developed in phases. NCSIST facilities are planned to be established first, followed by allocations for additional private-sector space as the cluster matures.

Graph 2: Minxiong Aerospace UAV Industrial Park & The Asia UAV AI Innovation Application R&D Center's Main Functions
(Source: Ministry of Economic Affairs)



Concurrently, Taiwan has begun expanding testing infrastructure. Government planning calls for the development of more than 18 test ranges of different sizes, and relevant agencies have identified Hengchun Airport (Pingtung) and Shui-shang Air Base (Chiayi) as candidate locations for medium and large UAV testing, including higher-altitude and wider-area testing, subject to interagency airspace coordination and safety management measures.

Lastly, this pillar includes the establishment of unmanned-systems innovation laboratories in Tainan's Shalun and Liujia districts, with a stated focus on developing drones capable of operating in harsh or contested environments and an expected output of 26 innovative drone models.

Pillar 4: Aligning Rules and Certification for Trusted Supply Chain

Taiwan is strengthening the bureaucratic infrastructure that regulates uncrewed system testing, procurement by government agencies, imports, exports, and acceptance in trusted overseas markets. This work spans four main tracks: updating domestic UAV rules and testing standards; standardizing public-sector procurement and use guidelines; developing management rules for uncrewed surface and underwater vessels (USVs/UUVs); and improving certification and authorization capacity with greater international recognition.

To better align certification and market access with allies' requirements, Taiwan has begun linking parts of its industrial base to U.S. trusted-technology frameworks. On September 20, 2025, Taiwan's Thunder Tiger became the first Taiwanese firm to add its "Overkill" FPV drone to the U.S. Blue UAS Cleared List.[57] Additionally, in January 2026, the Association for Uncrewed Vehicle Systems International (AUVSI) and Taiwan's Industrial Technology Research Institute (ITRI) announced a cooperation agreement under which ITRI will participate in AUVSI's Green UAS program—a streamlined certification pathway aligned with Blue UAS Cleared status—as a Recognized Cybersecurity Assessor (247).[58] The division of labor under this arrangement is explicit: supply-chain vetting and NDAA-related compliance determinations remain centralized with AUVSI in the United States—supported by its partnership with Altana—while ITRI conducts cybersecurity testing, penetration testing, and technical cyber evaluations.

At the bilateral level, this certification alignment enables institutionalization of U.S.–Taiwan cooperation by strengthening trusted supply chains while translating regulatory alignment into concrete market access and deeper defense-industrial integration.

This cooperation has three key implications. First, it designates Taiwan as the first non-U.S. location authorized to conduct Green UAS–aligned cybersecurity assessments. Second, AUVSI-led training enables ITRI to internalize U.S. cybersecurity methodologies and benchmarks, thereby expanding in-country testing capacity that is aligned with U.S.

standards. Third, interviews conducted by DSET indicate that Taiwan's existing domestic vetting mechanisms have been less stringent than U.S. and international practices—particularly with respect to internal UAV communications and system-level cybersecurity—allowing this cooperation to directly address this gap.

Alignment with U.S.-level cybersecurity standards generates both indirect and direct benefits for Taiwanese firms. Indirectly, it raises product-level cyber resilience while elevating enterprise cybersecurity and supply-chain risk management. These are all core compliance requirements under Green UAS in the "Corporate Cyber Hygiene" and "Supply Chain Risk Management" categories.[59] More directly, Green UAS certification is functionally equivalent to Blue UAS eligibility. For firms targeting U.S. federal and Department of War procurement, Green UAS certification consequently serves as a de facto market-entry prerequisite. Simultaneously, firms focused on U.S. state-level procurement and commercial markets are subject to FCC regulations, meaning that they gain regulatory clearance through FCC-recognized exemption pathways—like Green UAS certification.[60]

Alongside this key development, Taiwan's AIDC and NCSIST have attained cybersecurity assurance from the U.S. Department of War cybersecurity via the Cybersecurity Maturity Model Certification (CMMC) program, reflecting a broader effort to align with U.S. defense supply-chain compliance expectations.[61]

In harmony with these external milestones is a distinct domestic governance framework designed to manage security and procurement within Taiwan. Domestically, Taiwan's UAV governance is overseen by multiple agencies: flight safety, airspace management, and civil certification sit with the Civil Aeronautics Administration (CAA); communications compliance is overseen by the National Communications Commission (NCC); product safety by the Bureau of Standards, Metrology and Inspection (BSMI); and cybersecurity assessments by the Ministry

of Digital Affairs (MODA). On the public-procurement side, the Executive Yuan has issued restrictions on government agencies from procuring PRC-made Information and Communication Technology (ICT) products—covering network-connected, data-processing systems—while the MND applies stricter "non-PRC" sourcing requirements for military UAVs.

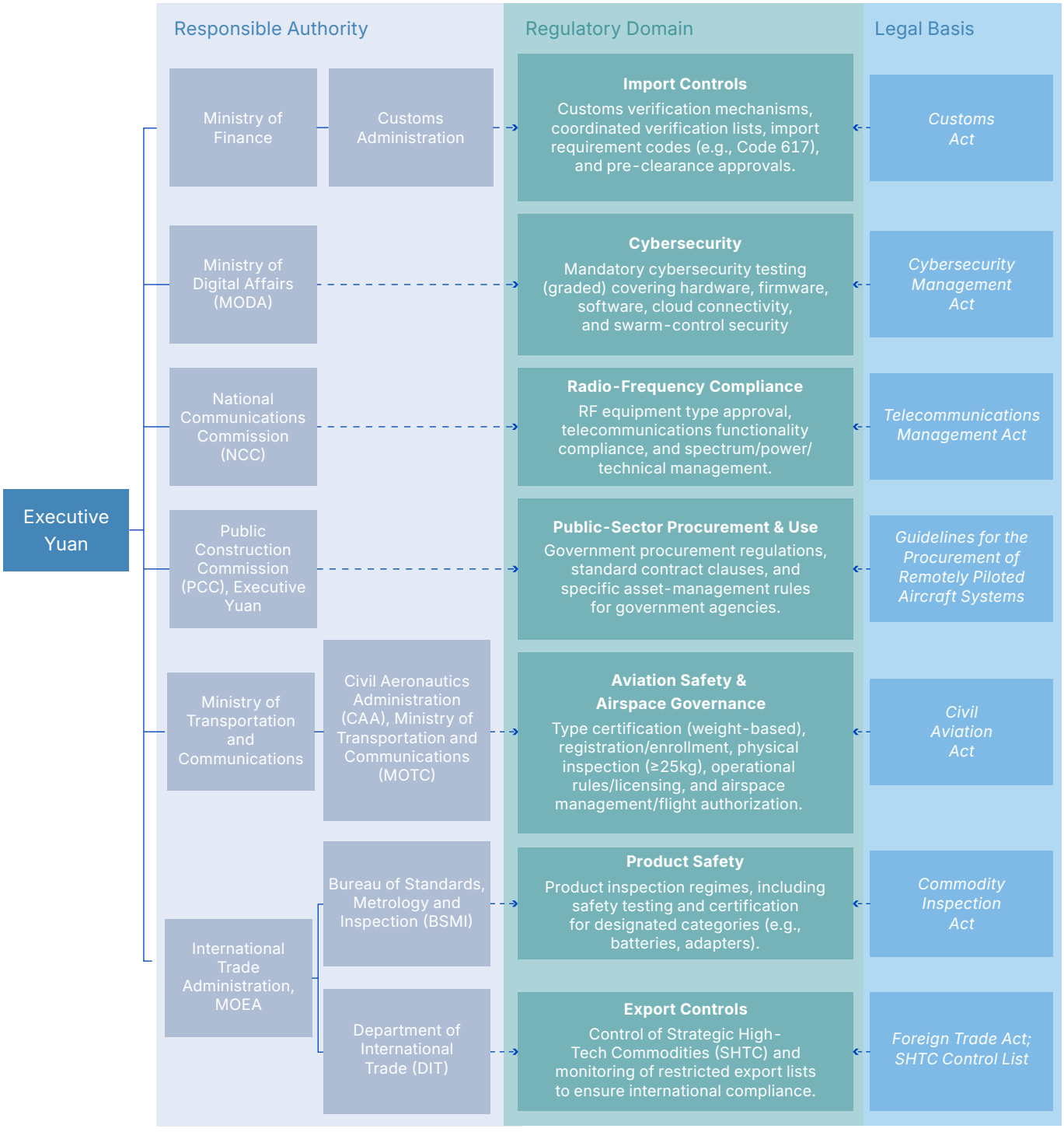
Distinctly, unlike CAA-certified commercial UAVs classified under HS Code 8807, the export of military-grade commercial UAV systems in Taiwan is formally subject to the Regulations Governing the Export of Strategic High-Tech Commodities, which require case-by-case export licensing review. In practice, however, Taiwan has not yet established a dedicated operational or procedural framework to enable such exports. This regulatory gap may be rooted in the historical structure of Taiwan's military UAV development, which was led predominantly by the National Chung-Shan Institute of Science and Technology (NCSIST) with comparatively limited participation from private manufacturers, thereby delaying the emergence of a civilian-industry-oriented export governance regime.

Regulatory tightening introduced in December 2025 has addressed only the import control dimension, mandating Ministry of National Defense (MND) authorization documentation for the importation of military remote-controlled UAVs, without establishing a corresponding export control architecture.

Responding to a legislative interpellation, Minister of National Defense Wellington Koo stated that the formulation of UAV export regulations should proceed through cross-ministerial coordination under the National Security Council (NSC).[62] The NSC is expected to issue strategic policy guidance, under which the MND, in coordination with the Ministry of Economic Affairs (MOEA), will develop the institutional and regulatory mechanisms necessary to govern military UAV exports. (For a complete breakdown of Taiwan's UAV governance, see Graph 3 and 4 below).

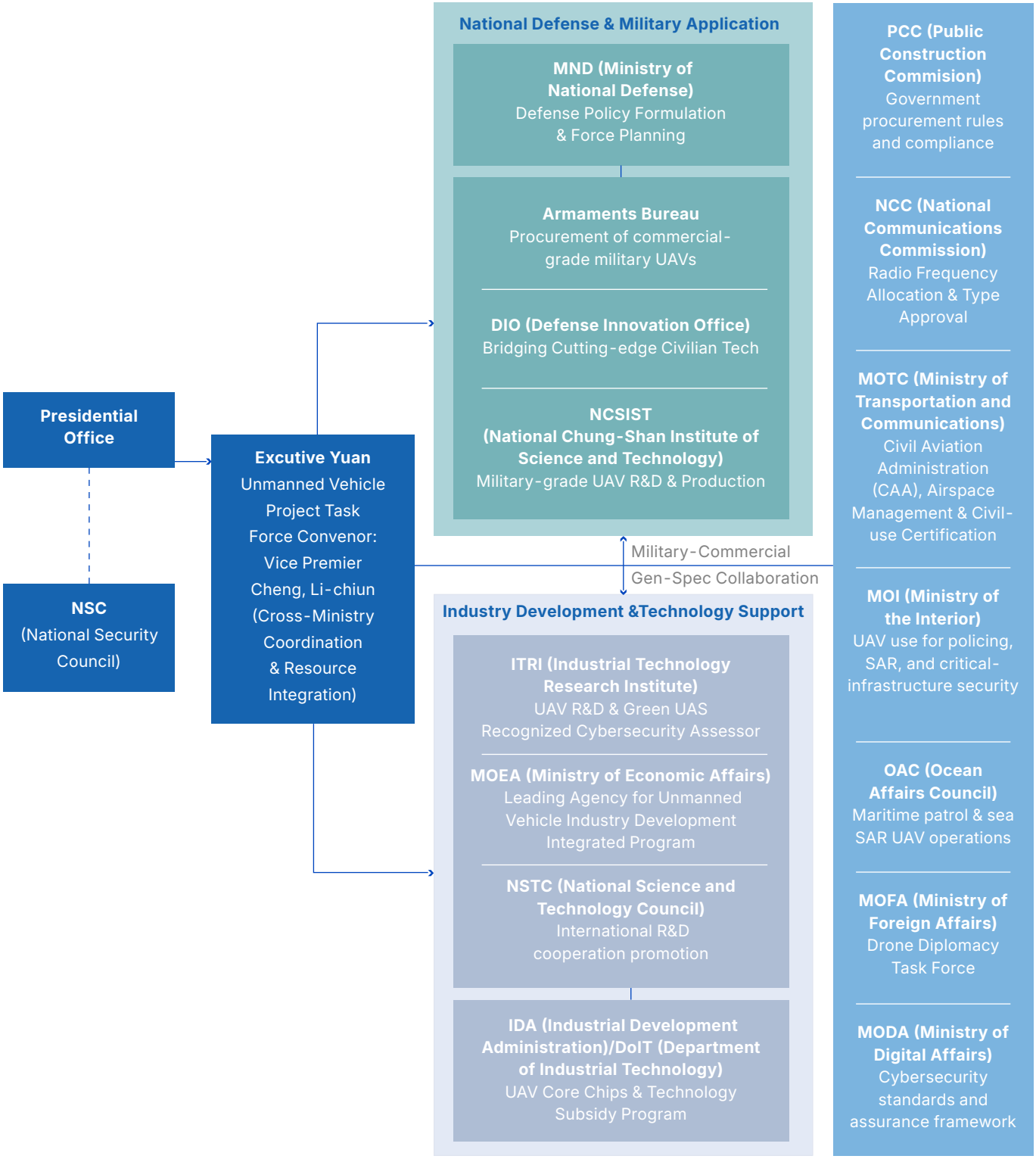
Graph 3: Taiwan's Regulatory Framework for Uncrewed Aerial Systems

(Official documents and public available information, complied by DSET)



Graph 4: Taiwan's Governance and Command Structure for Uncrewed Aerial Systems

(Source: government documents complied by DSET)



All progress considered, recent UAV policies are mostly directed towards import and export governance and aligning certification with trusted supply chain frameworks, such as Blue UAS.

Additionally, Taiwan has tightened trade controls by requiring prior authorization for importing drones with a maximum takeoff weight of 2 kilograms or more before customs clearance.[63] Regarding exports, both drones and related critical components are regulated under Taiwan's *Foreign Trade Act* and the Strategic High-Tech Commodities (SHTC) List. For the latter, in November 2025, an additional eighteen items were added, covering precision sensors, semiconductors, and specialty materials associated with advanced or autonomous drone systems.[64] Generally, restrictions have expanded since Russia's invasion of Ukraine to cover a wider range of dual-use items commonly used in drones.[65]

In the last year, Taiwan has taken giant strides towards establishing a more mature, self-reliant, and ‘non-red' drone ecosystem. This reflects a strategic shift towards the asymmetric employment of UAVs in Taiwan's national defense planning. As demonstrated by Ukraine, drones are now a prerequisite for security and managing conflict. By expanding domestic and international demand; fostering technological advancement and international cooperation; forming industry clusters and ecosystems; and improving regulatory frameworks for unmanned vehicles, Taiwan is positioning itself to meet an increasingly complex security environment. In conjunction, Taiwan's distinct defense needs and market economy will benefit.

Chapter 2.

Europe's Drone Policy and What It Means for Taiwan

Europe's Investment Surge in UAV & Counter-UAV Systems

Since the Russian-Ukrainian war began, many countries have increased defense investment in drones. European drone production and demand are being driven by three intertwined forces: Ukraine's enormous battlefield needs, the border defense needs of the EU and NATO territory against Russian drones, and a broader shift to embed drones and counter-drone systems in long-term defense readiness and industrial strategies.

A first driver of European demand is **military aid to Ukraine that is structured to boost domestic production at home**. For instance, the Drone Capability Coalition,[66] co-led by the UK and Latvia, runs competitions where European manufacturers bid to supply tens of thousands of FPV drones to Ukraine. In January 2025, the coalition placed contracts for 30,000 drones, including 12,000 Latvian-made systems worth €17 million (US$19.2 million) from two local firms.[67] Another example is that the Netherlands has announced a €400 million (US$452 million) "advanced drone development action plan" with Ukraine, with nearly half of the production taking place in the Netherlands.[68] In all these cases, aid orders are used as predictable pipelines to scale up domestic drone production lines, tooling and workforce.

A second driver is **the perceived need to protect EU and NATO airspace from Russian drones and other low-cost aerial threats**. Even before the full-scale invasion, Central and Eastern European states already formed the EU's forward line and NATO's eastern flank, as illustrated by the 2021 Belarus–EU border crisis, which EU institutions and frontline governments described as a form of "hybrid attack".[69] Building on that experience, Lithuania's interior minister in 2023 proposed a regional "drone wall" along borders with Russia and Belarus, later joined by Estonia, Latvia, Poland, Finland and Norway, yet their request for EU funding was rejected in early 2025.[70]

The idea of the drone wall resurfaced after a wave of Russian drone incursions from September 2025 onwards—including roughly 20 drones entering Polish airspace in one night and coordinated incursions over countries such as Denmark, Sweden, Lithuania, France, Germany and Belgium.[71] In response, the EU and NATO officials have revived the "drone wall" as part of a broader European Drone Defence Initiative, with the European Commission aiming to have a continent-wide counter-drone system fully operational by 2027.

Table 10: Europe's Investment in Drone & Counter-Drone Systems
(Source: News reports compiled by DSET.[72])

Country	Time period	Public UAS & Counter-UAS Investment
Estonia	2026–2029	Up to US$176.9 million for UAV and counter-UAV capabilities
Latvia	2024–2025 (several packages)	Invest US$23.6 million on UAS/C-UAS/glide munitions
Lithuania	2024–2030	About US$235.9 million for uncrewed systems by 2030; on average, €30 million a year.
Poland	Up to ~2027	Around US$347.9 million for MQ-9BSkyGuardian drones, plus a US$24.49 million contract for 52 FlyEye reconnaissance drones.

Czechia	–	**The defense budget does not specify drone spending allocation.** Czechia's state defense expenditure for 2025 is CZK 185 billion (US$8.73 billion), about 2.07% of GDP.
Germany	Reported in 2025	Around US$117.9 million for a national drone-defense package (interceptor drones, sensors, jammers).
France	By 2030	About US$5.9 billion for drones under the 2024–2030 Military Programming Law (LPM).
United Kingdom	Next 10 years	At least US$6.1 billion for uncrewed systems over the next decade.
Denmark	2024–2033	About US$400 million reserved for long-range Arctic drones and related air-defense assets.

A third driver is the decision to integrate UAVs into long-term defense planning and industrial policy, beyond short-term emergency purchases. Estonia's 2026–2029 defense development plan, for example, earmarks up to €150 million (US$170 million) specifically for drones as part of a €10 billion (US$11.3 billion) rearmament package.[73] Lithuania's multi-year plan for uncrewed systems sits alongside similar national programs in countries like France and Poland, while the UK's Defence Drone Strategy[74] commits at least £4.5 billion (US$5.9 billion) over the next decade to uncrewed systems across all services. At the EU level, Brussels has responded with instruments such as the European Defence Fund (EDF) and the new €1.5 billion (US$1.7 billion) European Defence Industry Programme (EDIP) to support industrial ramp-up and joint procurement of systems including drones and counter-drone capabilities.[75]

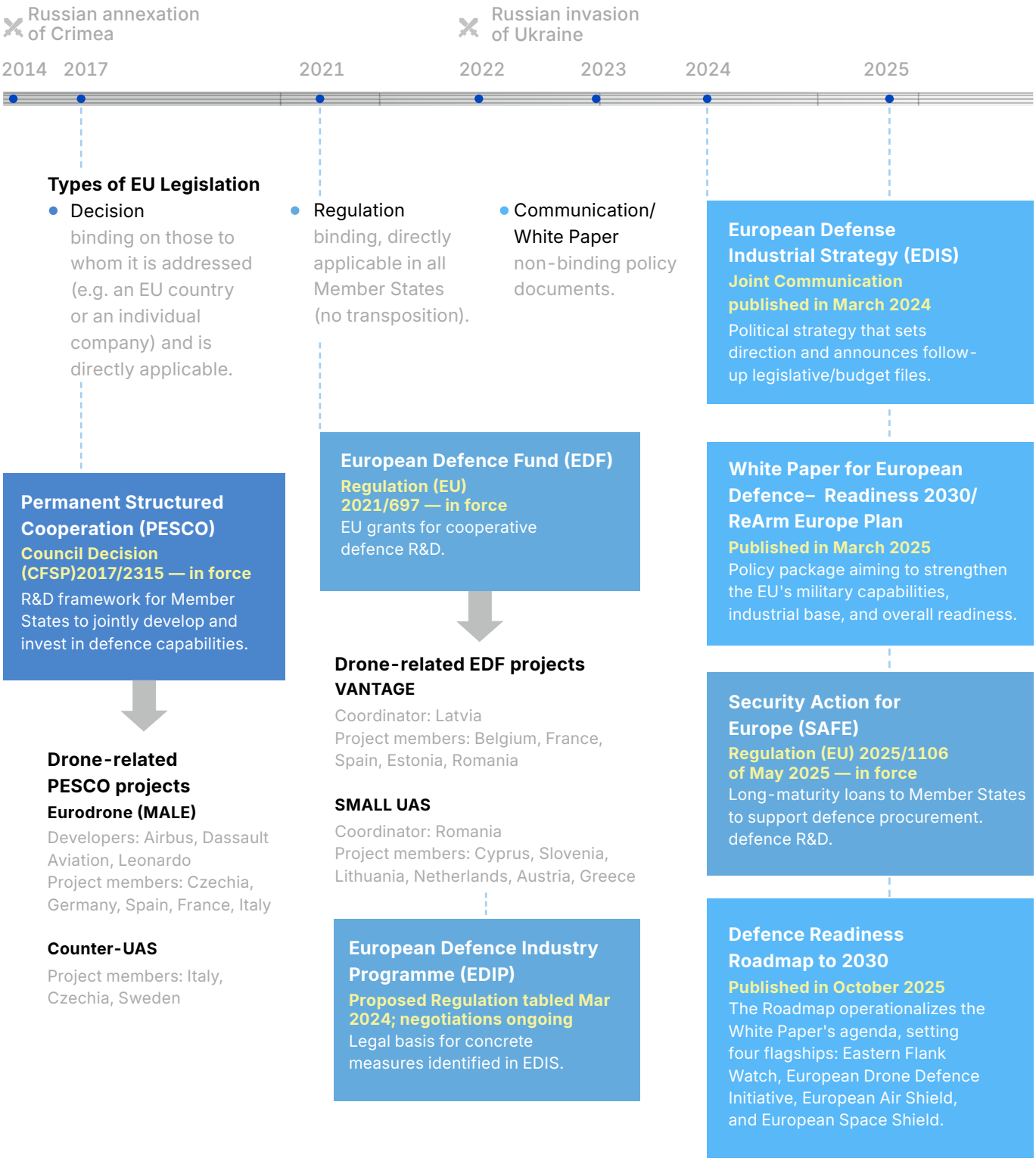
EU Drone Policy: "Invest European" and Limited Indo-Pacific Partner Inclusion

Although Taiwan is actively reaching out to cooperate with Europe, EU member states are divided over whether their defense industrial policy should explicitly work with "non-associated third countries."[76] In March 2024, the European Commission launched its first-ever defense-industrial strategy, the European Defence Industrial Strategy (EDIS).[77] The EDIS explicitly pledged to invest "more, better, together, and European," especially in drones. Citing the Drone Strategy 2.0 adopted in November 2022, the EDIS aims to develop a Strategic Drone Technology Roadmap to "reduce existing strategic dependencies."[78]

In the Drone Strategy 2.0, the Commission admitted that "European military drone capabilities remain less mature than in other regions of the world" and called for "synergies between civil, security, and military use of drones."[79] The EDIS builds on this by pledging to scaling up drone production within Europe and with Ukraine. In March 2025, the EU again committed to present a "European Armament Technological Roadmap" on investment into dual-use technological capabilities in 2025, according to the *White Paper for European Defence – Readiness 2030* (hereafter, the White Paper 2030).[80]

Graph 5: EU Defense Policy Development

(Source: European Commission)



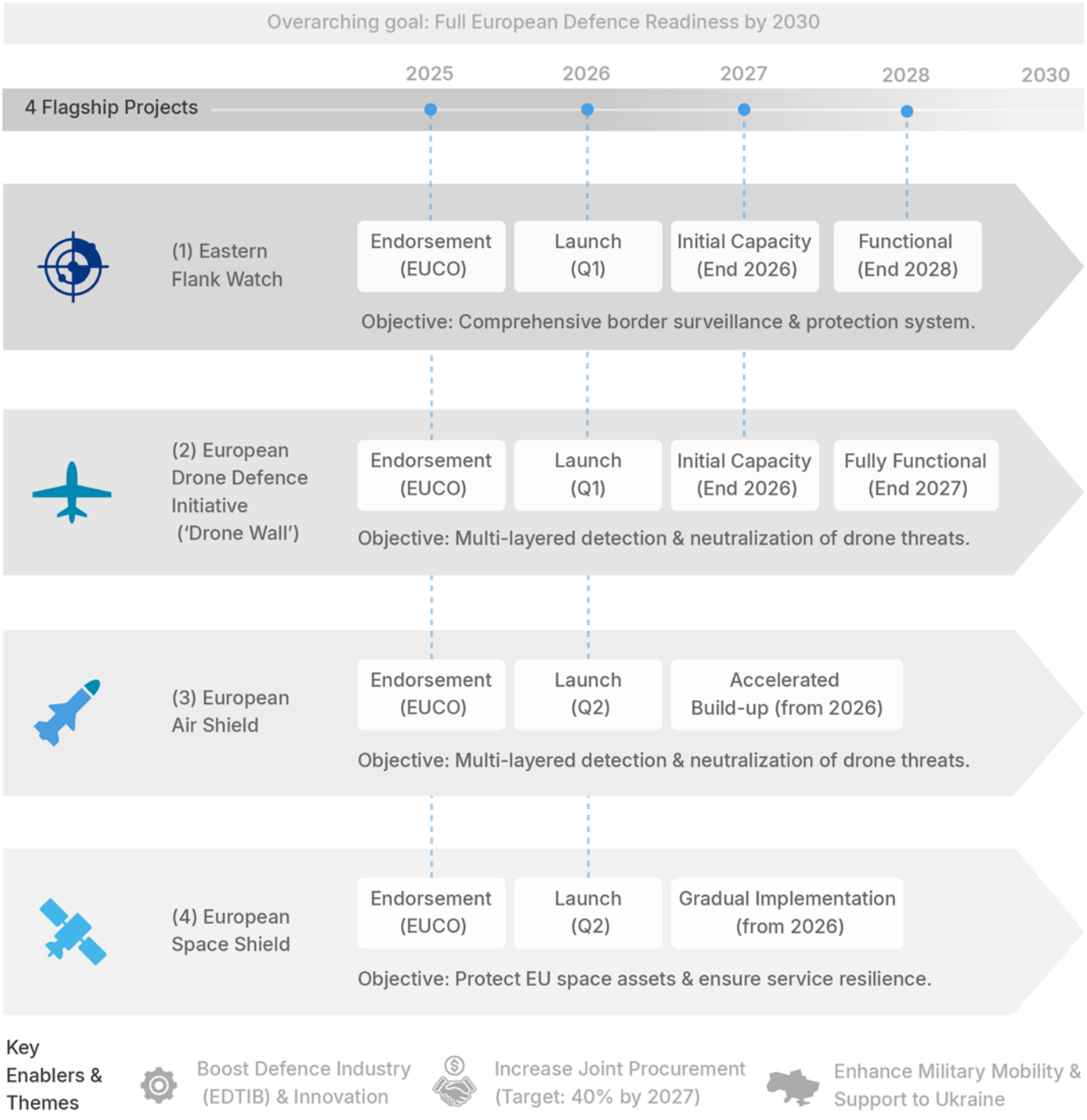
Currently, the EU's **Defence Readiness Roadmap to 2030** (hereafter, the Readiness Roadmap 2030), released on October 16, 2025, still stresses "invest European" (European Commission, 2025, p. 2).[81] While the strategy further emphasizes cooperation with partners including NATO, its Indo-Pacific focus is limited to Japan and potentially India, with no mention of Taiwan:

> ***Defence industrial cooperation is also at the centre of Defence Industrial Dialogues with Japan and, potentially in the future, with India. The EU should also deepen its security and defence partnership with Moldova. (European Commission, 2025, p. 10)***[82]

The Readiness Roadmap 2030 was launched immediately following the 2025 Russian drone breaches. The European Commission released it to translate the White Paper 2030 (released in March 2025) into a concrete plan, with clear goals to achieve defense readiness by 2030. The roadmap is built around four flagship projects—the Eastern Flank Watch, the European Drone Defence Initiative, the European Air Shield, and the European Space Shield (See Graph 7 below).

Graph 6: EU's Defence Readiness Roadmap to 2030

(Source: European Commission)



The **Eastern Flank Watch** is designed to integrate surveillance, air and missile defense, electronic warfare, internal security and counter-drone systems along the EU's eastern border from the Baltic to the Black Sea and the Black Sea maritime area, while the **European Drone Defence Initiative** provides a connected "drone wall" of sensors, jammers and interceptors for detecting, tracking and neutralizing hostile drones.[83] The two would harden the EU's eastern border against low-altitude drone and hybrid threats across land, sea and air.

The **European Air Shield** then aims to knit national air and missile defense systems into an integrated, multi-layered shield against aircraft, missiles and drones, and the **European Space Shield** is meant to protect European space-based assets and services, such as navigation, earth observation and secure communications, against jamming, spoofing and other hostile actions in orbit.

Together they protect wider European airspace and the space infrastructure that underpins it. The roadmap targets problems such as repeated airspace violations, hybrid operations, and threats to critical infrastructure and borders that can affect any Member State. Its proposed tools include connected, NATO-compatible counter-drone architectures; joint ecosystems that link R&D to production, drawing on lessons from Ukraine; joint procurement; and rapid financing through instruments such as Security Action for Europe (SAFE) and European Defence Industry Programme (EDIP).[84] The goals are to build an agile, interoperable European capability, reinforce the Eastern flank, and integrate civilian-military and dual-use applications.

Strategically, drones are treated as a priority capability area and a pillar of industrial and innovation policy. But member states still remain divided toward a drone wall at the Eastern Flank: frontline countries such as Poland, the Baltic states, and Finland see it as an urgent necessity, while states further from the Russian border—France, Italy, and Greece—question its cost, technical feasibility, and the risk that Brussels could encroach on national defense prerogatives.[85]

2026 Update: European Parliament Signal on Taiwan

In contrast to the Commission, where "invest European" remains the dominant logic in policy tools, the European Parliament introduced a new political signal that mentioned Taiwan in early 2026. On January 22, 2026, the European Parliament adopted a resolution on "drones and new systems of warfare," urging the EU to deepen drone cooperation with trusted partners, including Taiwan.[86] In its Indo-Pacific section, Parliament states that it:

> ***".....calls for enhancing security and defence cooperation and partnership with the EU's Indo-Pacific partners, including Taiwan, particularly in drone technology and relevant industries; stresses the importance of building secure, non-red supply chains underpinned by democratic values."*** *(European Parliament, 2026, para. 300)*[87]

This is a strong EU-level political signal on drone cooperation with Taiwan, but it remains non-binding. Parliament can nonetheless shape agenda-setting by spotlighting priorities, pressing the Commission through requests for proposals, and using own-initiative reports to create political momentum, even though the Commission is not legally required to follow and may respond by explaining why it will (or won't) act. Whether this resolution will translate into Commission proposals, funding choices, or procurement-relevant instruments warrants close attention.

This EU picture—only recent parliamentary signalling that names Taiwan—provides a clear contrast with the United States, where the US–Taiwan drone cooperation is explicitly mentioned in the U.S. policy and legislation. To clarify what "official strategic inclusion" looks like in practice, the following section briefly uses the United States as a benchmark, highlighting how explicit partner inclusion and a trusted certification and procurement system reduce uncertainty in ways the EU has not yet institutionalized.

The U.S. NDAA Identifies Taiwan as a Partner for Co-Development

At the strategic level, the United States has deepened drone cooperation with Taiwan: advancing concepts like Replicator and Hellscape since 2023, and inviting Taiwan into the Partnership for Indo-Pacific Industrial Resilience (PIPIR) in 2024.[88] On December 7 2025, The U.S. Congress released the National Defense Authorization Act (NDAA), which includes up to US$1 billion in funding for Taiwan Security Cooperation Initiative in fiscal year 2026. In Section 1237, the bill directs the U.S. Secretary of Defense to engage Taiwan by March 1, 2026 in a joint program to field "**uncrewed systems and counter-uncrewed systems**," including "co-development and co-production," for both the U.S. and Taiwan militaries.[89]

As for certification and procurement access, the U.S. has implemented a trusted UAV supply system: the Blue UAS list—a unified, non-red catalog that the Defense Innovation Unit (DIU) of the Department of War uses to certify UAV platforms for U.S. military and public safety use. Since President Trump's June 2025 executive order, "Unleashing American Drone Dominance" (hereafter, Drone Dominance), the U.S. has accelerated domestic drone production and steered procurement toward lower-cost systems.[90] Reinforcing that direction, Secretary of War Hegseth's "Unleashing U.S. Military Drone Dominance" memorandum again emphasized strengthening the U.S. industrial drone base.[91] Together, these efforts could bolster Taiwan's defense by enabling concepts such as Hellscape and Replicator, which envision deploying large numbers of drones to slow down cross-strait invasions.[92]

Taiwan's Thunder Tiger has said it intends to compete in the U.S. Drone Dominance gauntlet, and its 'Overkill FPV' was added to the Pentagon's Blue UAS Cleared List in September, making it the first Taiwanese company on the list and potentially qualifying it to compete for U.S. procurement pipelines.[93]

Europe, by contrast, has fewer EU-level mechanisms that non-European suppliers can target at scale. At the regulatory level, Europe hasn't developed a certification system for trusted UAV supply, making it difficult for foreign manufacturers, including those from Taiwan, to access European government procurement opportunities. While the Commission's Drone Strategy 2.0 in 2022 calls for criteria for a voluntary "European Trusted Drone" label with stricter cybersecurity requirements, yet as of April 2025, the label remains only at the pilot-project stage.[94]

On February 11, 2026, the European Commission unveiled an *Action Plan on Drone and Counter-Drone* Security, which targets completion of the EU Trusted Drone Label by Q4 2026—a timeline that, if met, could potentially begin to provide the kind of non-red supply chain certification framework that Taiwan-based manufacturers would need to access EU procurement market. However, the Action Plan is primarily a civilian security and cross-border coordination framework, and it remains unclear whether the Commission will act on the January 2026 European Parliament resolution that explicitly named Taiwan as a trusted drone partner.[95]

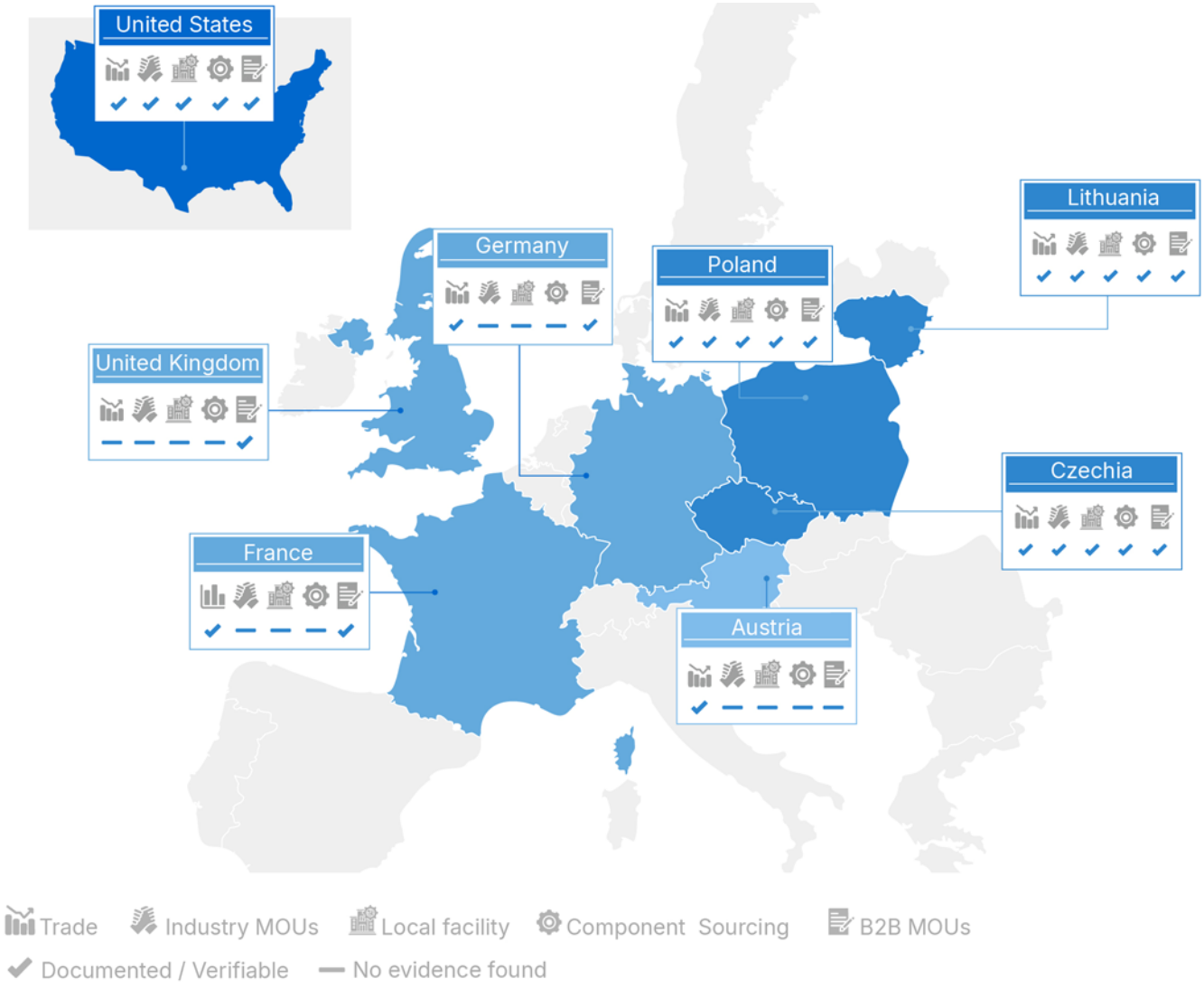
Furthermore, the U.S. has taken federal steps to restrict foreign-made drones and components that pose "unacceptable risks to the national security," including placing certain manufacturers on blacklists that bar them from selling in the US.[96] Europe, by contrast, has not adopted a comparably uniform, EU-wide restriction-and-certification model for drones across member states.

Chapter 3.

Progress in Taiwan–Europe Drone Cooperation

Taiwan's quasi-official drone cooperation in Europe is concentrated in Central and Eastern Europe, where security concerns are shaped by Russia and Belarus. To date, the Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA) has signed MoUs with industry associations in five European countries: Poland, Latvia, Lithuania, Czechia, and Estonia.[97] Because direct government-to-government (G2G) engagement with Taiwan can be politically sensitive, these agreements are typically routed through industry groups, though signing ceremonies often include local political representatives.

Graph 7: Taiwan's UAV Industry Engagement in Europe
(Source: News reports and interviews compiled by DSET.)



Analytical Framework: A Typology for Drone Cooperation

Poland, Lithuania, and Czechia have signed industry MoUs and demonstrated recorded drone trade with Taiwan, showing that cooperation is translating political alignment into tangible industrial partnerships. The most common form of cooperation is sourcing subsystems and components from Taiwan. Another group, such as Germany, France, and the UK, has shown interest mainly through private-sector channels but has not established formal industry cooperation MoUs. Other countries prioritize domestic or EU-centric industrial strategies and therefore show neither cooperation signals nor trade volumes with Taiwan.

This chapter introduces an analytical typology to map Taiwan's drone cooperation with European partners using interviews and publicly verifiable indicators, spanning policy-level signaling and market activity. Indicators include explicit cooperation language in official strategy and policy documents; quasi-official frameworks (e.g., association-level MoUs); technology sharing, co-development, or co-production initiatives; project-based or business-to-business (B2B) MoUs; and trade flows.

The typology is informed by a December 2025 report by the Central European Institute of Asian Studies (CEIAS), which frames Europe–Taiwan engagement as a recurring "symbolism–substance tension"—where practical cooperation can expand even when formal recognition and high-visibility political signaling remain constrained.[98] In the defense and security domain, however, symbolism is not merely cosmetic: public acknowledgment can function as diplomatic support and deterrent signaling, shaping whether substantive cooperation becomes politically feasible. For that reason, this typology treats official strategic inclusion as a distinct analytical category alongside material indicators of cooperation.

Below, Table 11A defines a channel-based typology for Taiwan's drone cooperation—i.e., the most visible pathway through which cooperation is organized (policy inclusion, sector channels, or case-by-case projects). Table 11B then operationalizes this typology into evidence layers, recording which signals are observable for each country. Drawing on these patterns,

Table 11C assigns each country to a typology category and summarizes the decision-rule rationale, alongside an assessment for evidence breadth.

Table 11A: Channel Typology for Taiwan's Drone Cooperation

Cooperation Type	Definition	Example(s)
1. Official Strategic Inclusion (policy-level channel)	Taiwan is explicitly named in national legislation or an official strategy/policy document using clear cooperation language (e.g., "co-development," "co-production"). This captures formal political acknowledgment and signaling; downstream industrial activity may or may not follow.	The US has codified "co-production" and "co-development" on uncrewed systems with Taiwan in the 2026 NDAA (joint-program provisions).
2. Quasi-Official Industry Framework (institutionalized sector channel)	Cooperation is institutionalized through a sector-level mechanism—typically via industry a ssociations, structured platforms, or recurring matchmaking/ exchange programs. This goes beyond one-off firm deals and creates an ongoing channel, but it is not full government-to-government cooperation.	Poland, Lithuania, and Czechia

3. Project-Based / Commercial Cooperation (case-by-case channel)	Cooperation occurs primarily through time-bounded projects or firm-/institution-led arrangements (e.g., integration packages, R&D contracts, component supply) without a standing sector framework or explicit strategic inclusion. Activities may be substantial but remain case-by-case in open records.	Germany, France, and the United Kingdom
4. No Publicly Disclosed Cooperation Channel	No publicly documented mechanism, agreement, or structured linkage for Taiwan–partner drone cooperation can be identified in open sources. Trade may still exist, but open-source evidence is insufficient to attribute it to targeted cooperation arrangements or sustained institutional coordination.	Austria

Table 11B: Evidence Layers for Taiwan–Partner UAV Cooperation

(Source: Government documents, international news reports, and anonymized interviews, compiled by DSET)

Evidence layer	Indicator	US	Poland	Lithuania	Czechia	France	Germany	UK	Austria
Layer A: Policy signals	**A1. Official Strategic Inclusion**	✓	—	—	—	—	—	—	—
Layer B: Institutional channel signals	**B1. Quasi-Official Industry Frameworks** (e.g., association-level MoUs)	✓	✓	✓	✓	—	—	—	—
Layer C: Operational cooperation	**C1. Co-Development / Co-Production Initiatives** (incl. technology sharing)	✓	—	—	—	—	—	—	—
	C2. Foreign government purchases (contracts to Taiwanese vendors)	✓	—	—	—	—	—	—	—
	C3. Certification alignment	✓	—	—	—	—	—	—	—

	C4. R&D Cooperation (institutional or firm-level)	✓	—	—	✓	✓	—	—	—
	C5. Component / Subsystem Sourcing	✓	✓	✓	✓	—	—	—	—
	C6. Local Investment / Facilities (assembly, manufacturing, service hubs)	✓	✓	✓	—	—	—	—	—
	C7. Firm-Level Project Deals (B2B MoUs, integration packages, project contracts)	✓	✓	✓	✓	✓	✓	✓	—
Layer D: Market Signals	**D1. Recorded Trade Flows** (official statistics)	✓	✓	✓	✓	✓	✓	✓	✓

Legend
✓ = Documented / Verifiable
— = No Evidence Found

Table 11C: Country Mapping: Cooperation Channel and Evidence Breadth

Country	Evidence Breadth (visibility)	Mapped Category	Mapping Logic
US	Broad	1) Official Strategic Inclusion (policy-level commitment)	Taiwan is explicitly named in publicly available legislative/ strategy language using clear cooperation terms, and multiple downstream layers are also visible in open sources (e.g., initiative-/program-level signals and market-facing indicators) and interviews.
Poland	Broad	2) Quasi-Official Industry Framework (institutionalized sector channel)	Mapped to Category 2 because a sector-level channel (e.g., association/ platform mechanism) is publicly documented, and the cooperation extends beyond one-off deals into additional observable layers (project/B2B activity, sourcing/investment signals, and trade visibility).
Lithuania	Broad	2) Quasi-Official Industry Framework (institutionalized sector channel)	Mapped to Category 2 because a sector-level channel is publicly documented and reinforced by interviews and trade data, including procurement participation and market indicators captured in open records.

Czechia	Moderate–Broad	2) Quasi-Official Industry Framework (institutionalized sector channel)	Mapped to Category 2 because a sector-level channel is publicly documented, but observable follow-on activity is more concentrated in project/B2B cooperation and trade visibility than policy inclusion or procurement.
France	Moderate	3) Project-Based / Commercial Cooperation	Mapped to Category 3 because publicly visible cooperation is primarily project-based and organization-led (integration/R&D and firm-to-firm or institution-to-institution engagement), with no open-source evidence of sector cooperation framework.
Germany	Moderate	3) Project-Based / Commercial Cooperation	Mapped to Category 3 because cooperation signals are mainly institution-to-institution and firm-to-firm partnerships (integration/ certification-facing collaboration, project activity, and trade visibility), with no open-source evidence of sector cooperation framework.

United Kingdom	Limited	3) Project-Based / Commercial Cooperation	Mapped to Category 3 because only scattered, low-profile project/B2B signals are publicly visible; there is no open-source evidence of sector cooperation framework or policy-level inclusion.
Austria	Minimal	4) No Publicly Disclosed Cooperation	Mapped to Category 4 because open records show trade visibility, but no publicly documented frameworks, agreements, or project-level cooperation mechanisms that can be attributed to structured Taiwan–Austria drone cooperation.

Legend
Broad: Evidence present across **3 or more** layers (e.g., Policy + Institutional + Market).
Moderate: Evidence present in **2** layers (e.g., Project + Market).
Limited: Evidence confined to **1** layer or fewer signals.

Note: "Evidence Breadth" describes how many layers of verifiable signals are visible in open sources and interviews. It is not a score of overall cooperation intensity, and it does not capture most non-public cooperation.

Although the typology review surveys a wider set of European countries, the country case studies in this chapter focus on a smaller subset chosen by a consistent evidence rule: **what can be publicly observed and verified, and what can be strengthened through interviews.** Poland, Lithuania, Czechia, France, and Germany offer the clearest mix of (1) documented cooperation signals (e.g., MoUs, partnerships, tenders, policy statements), (2) OSINT-traceable industry activity, and (3) trade or market indicators that can be triangulated across sources. The UK is included for a different but analytically useful reason: it illustrates a "low-visibility" end of the spectrum, where stated interest exists but cooperation and trade evidence remains thin. These cases also reflect practical access: DSET secured expert interviews in each, allowing the analysis to pair open-source records with de-identified stakeholder insights rather than making inferences from countries where the evidence base is weaker.

Poland: Gateway into the Ukraine Battlefield

Poland is one of Taiwan's most visible drone partners in Europe, with cooperation ranging from quasi-official industry channels, B2B MoUs, to supply-chain activities. Even though Taiwan–Poland cooperation scores relatively high on observed Evidence Breadth, it is still concentrated mainly in component sourcing.[99] While Poland is Taiwan's second-largest export market, Taiwan accounts for a meaningful but not dominant share of Poland's complete-drone imports.

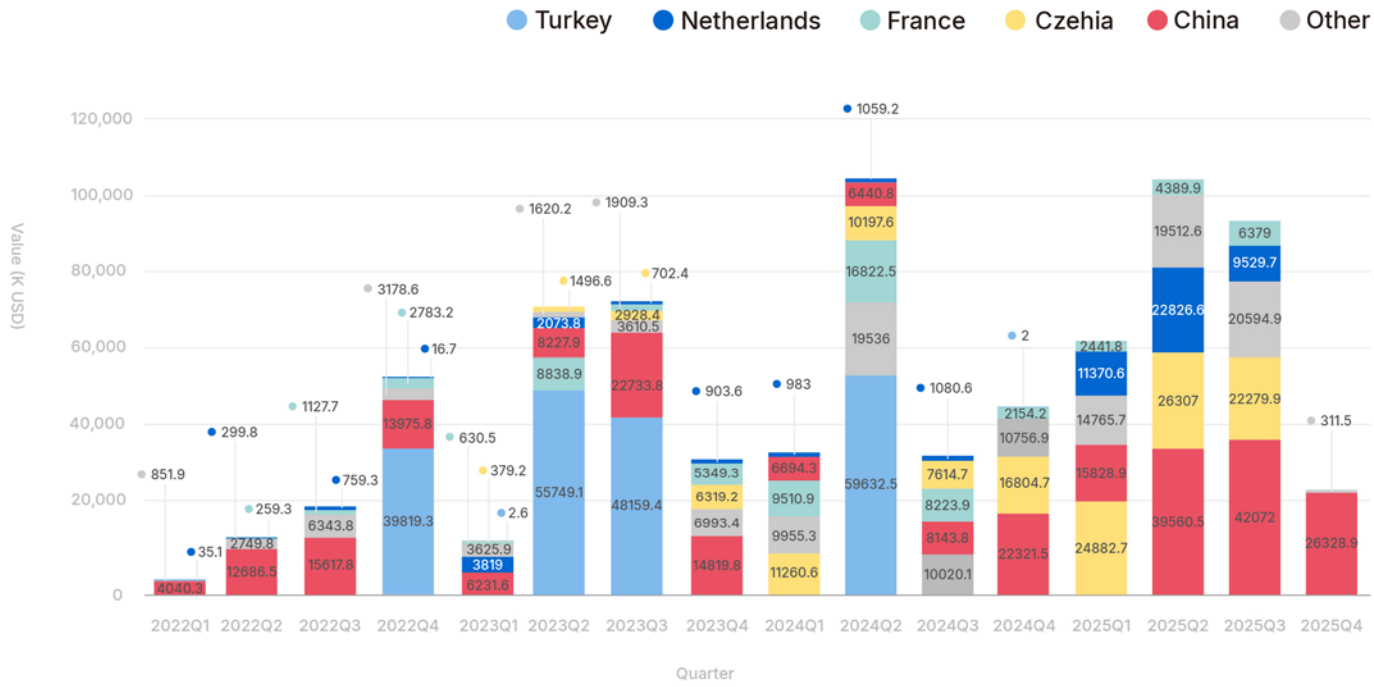
In September 2025, Poland and Taiwan signed a drone industry MoU between Taiwan's TEDIBOA and Poland's Taiwan-Poland Chamber of Commerce.[100] Some Taiwanese companies also formed business-to-business (B2B) partnerships with Polish firms. In December, Taiwan's Minister of Foreign Affairs revealed that Taiwan and Poland "already have a joint venture," but did not clearly specify whether it concerns drones or supply-chain components.[101]

Among publicly known B2B collaborations, at least three Taiwanese companies—Ahamani Advanced and Jiin Ming Industry, and Thunder Tiger—have disclosed their cooperation plans in Poland. Ahamani Advanced has had three initiatives in Poland: (1) it signed a B2B MoU with the Farada Group to supply motors and batteries for Farada's products; (2) it is planning to build a factory in Poland; and (3) WB Electronics has a contract with Ahamani yet does not specify what types of drones or components they are working on together.[102] Another Taiwanese company, Jiin Ming Industry, signed a MoU with PolTaiw Apex covering UAV subsystems, including motors, batteries, gimbals, propellers, electronic speed controllers (ESCs), and flight-control systems. In addition, Thunder Tiger is planning to build a factory in Poland.[103]

Furthermore, compared with 2024, Taiwan's exports of complete drones to Poland increased by approximately 18.9-fold in 2025 by units. According to Taiwan Customs data for 2025, Taiwan exported 31,711 drones to Poland worth US$21.5 million.[104] However, this apparent surge on the Taiwan side is not reflected in Poland's Eurostat import series; this may be due to the "Rotterdam effect," meaning Poland may be serving as a transshipment and consolidation hub for Ukraine rather than the final destination.[105]

In Q1–Q3 2025, Eurostat data show that Poland imported higher values of complete drones from China (US$123.7 million), Czechia (US$73.4 million), and the Netherlands (US$43.7 million), followed by France (US$13.2 million), Denmark (US$12.4 million), and Germany (US$12.2 million).[106] Cross-checking Taiwan Customs and Eurostat, Taiwan (US$21.5 million) would rank fourth by import value in Poland's Q1–Q3 2025 data.

Graph 8: Poland's Imports 2022-2025
(Source: Eurostat, compiled by DSET)

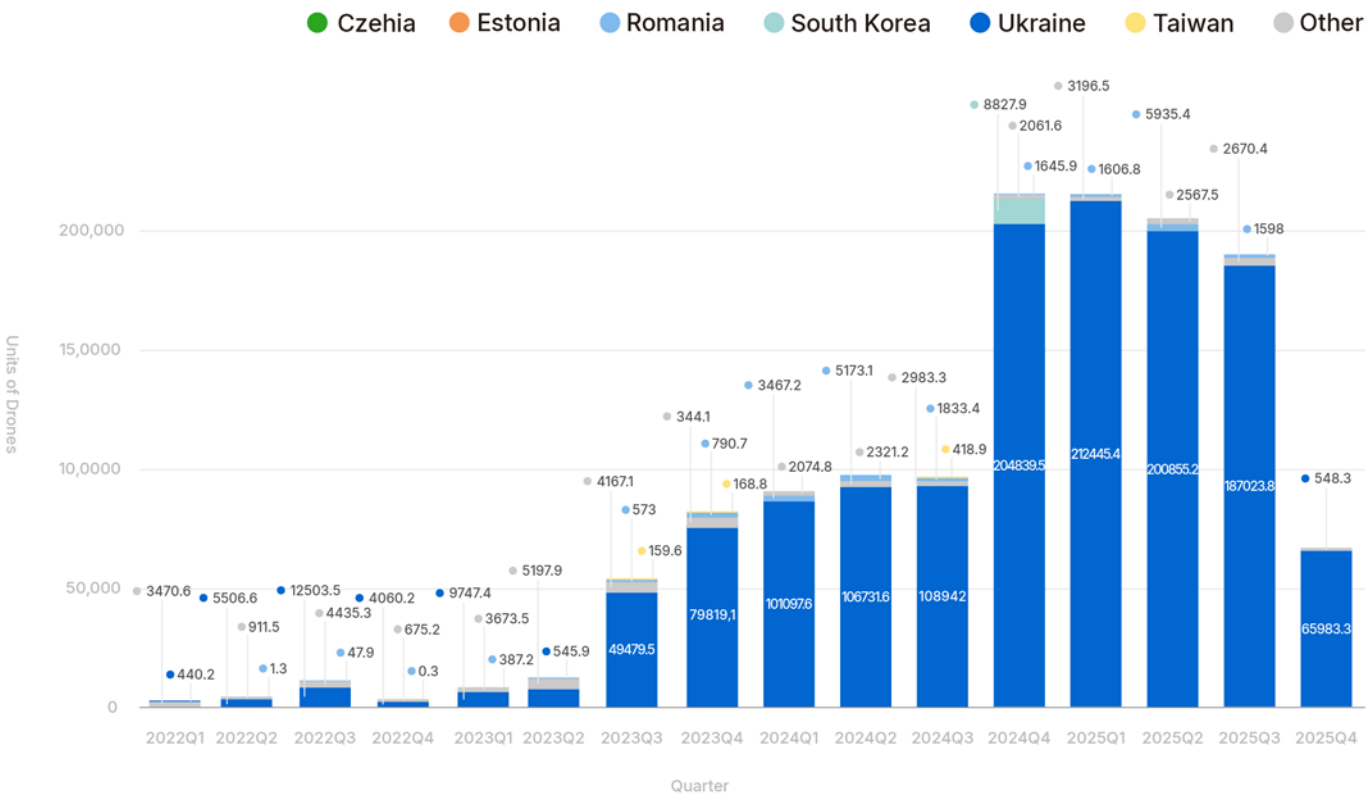


Overall, the data depict Poland as a major European importer of drones from Turkey, China and key EU partners, and as a primary export hub supplying Ukraine and neighboring frontline states with complete drones. Poland's rapid rearmament and large onward flows to Ukraine helps explain why Taiwan's exports to Poland have risen sharply.[107] Whether this surge reflects a short-term wartime spike or a durable, long-term market will require further observation over subsequent procurement cycles and future trade trends.

Poland has emerged as a European hub for the war economy, creating substantial opportunities to expand production capacity, according to DSET's interviews with Taiwanese drone manufacturers planning investments in Poland. Taiwanese manufacturers describe Poland as the place where drones, components, batteries, consumables and counter-drone systems are consolidated before being moved onward to Ukraine,

Graph 9: Poland's Exports 2022-2025

(Source: Eurostat, compiled by DSET)



giving it a dual role as both a transit hub and a forward assembly base.[108] As Polish companies often operate as intermediaries in a re-export chain, Taiwanese or other Western firms ship components and sub-assemblies to Poland, and Polish partners then integrate or package these into kits and move them on to Ukraine. Final handover, training and field testing near the front lines are usually handled by the Polish side, which has closer access to Ukrainian units and logistics.[109]

However, Poland's procurement rules could potentially hinder Taiwanese manufacturers from entering the Polish military procurement market. In October 2025, the Ministry of National Defence introduced origin restrictions through Decision 123/MON of 12 September 2025.[110] This decision created a special fast-track procedure for evaluating and acquiring "uncrewed aerial weapons systems" outside the standard armaments procurement process, and drones bought under this fast track

must be manufactured in EU or NATO member states. Although this new origin requirement applies only to specific tenders issued under Decision 123/MON—rather than as a general law covering all drone acquisitions—it may still constrain Taiwan-made complete drones from competing in Polish military tenders.

Overall, in Poland's military procurement market, Taiwanese manufacturers face competition on two fronts: in the MALE segment, they must compete with established foreign suppliers such as the U.S. and Turkey; in the small- and medium-UAV segment, they compete primarily with Poland's domestic industry. Recent acquisitions include MALE platforms bought abroad: Turkey's Bayraktar TB2 and the U.S. MQ-9B, and smaller domestically-procured UAVs and loitering munitions, such as WB Group's Gladius, FlyEye, and Warmate, as well as the PGZ-led Wizjer.[111]

Table 12: Poland's defense UAV procurements in recent years

Year	Program / System	Scope / Quantity	Approx. Value	Prime Contractor
2021–24	Bayraktar TB2 armed UAVs	24 aircraft (4 sets of 6)	~US$ 270 million	Baykar (Turkey)
2022	Gladius reconnaissance-strike system	Several artillery "modules" / batteries	≈ PLN 2 billion (≈ US$ 547 million)	WB Group (Poland)
2021–24	Wizjer mini-UAS program	25 sets (100 aircraft) + training & logistics	N/A (not publicly detailed)	PGZ-led consortium (Poland)
2023–	FlyEye framework agreement	Up to ~1,600 airframes (multiple execution contracts)	N/A (framework value not public)	WB Group (Poland)
2025	Warmate loitering munitions	Framework for nearly 10,000 systems	N/A	WB Group (Poland)
Ongoing	MQ-9A/MQ-9B (leased / planned)	Small number of MALE UAVs for ISR	N/A	General Atomics (U.S.)

These procurement patterns were part of a broader modernization and reorganization of Poland's force structure around uncrewed systems. In January 2025, an Inspectorate for uncrewed Weapon Systems was established within the General Command of the Polish Armed Forces as the core of this new formation, responsible for doctrine, training, and the integration of uncrewed platforms into land, air, and maritime operations.[112]

Poland's UAV sector is led by WB Group and the state-owned Polish Armaments Group (PGZ). The Ministry of National Defence presents WB Group as one of the world's major producers of uncrewed systems, responsible for the Gladius reconnaissance-strike system, the FlyEye and FT-5 reconnaissance UAVs, and the Warmate loitering-munitions family—all based on its own designs and already in Polish service. PGZ leads the Wizjer mini-UAS program, and provides design, production, modernization and maintenance for UAVs. Around them, a growing ecosystem of smaller firms and start-ups is emerging in short-range drones and specialized subsystems.[113]

In the broader public-safety market, Taiwanese manufacturers face stiff competition not only from Polish firms but also from Chinese drones. Poland does not apply a formal "non-red" policy to all government drone purchases, and local emergency services and other public agencies continue to rely on commercially available Chinese platforms, especially DJI quadcopters, for search-and-rescue, firefighting, and inspection tasks.[114]

Poland's deepening defense ties with South Korea **are also noteworthy and offer a useful reference for how Poland builds defense-industrial partnerships with Indo-Pacific allies.** Although this cooperation is not shown on the data and centers on a wider defense-industrial partnership, Seoul has been willing to move fast, redirecting equipment from its own army's production lines, to supply Poland. South Korean combat systems are modern but competitively priced, and Seoul's openness to technology transfer and local production in Poland has triggered a series of major

Polish purchases. South Korea is also considering using Poland as a maintenance and support hub for Korean platforms sold elsewhere in Europe.[115]

These conditions are likely to **push Taiwanese firms toward market entry via local co-production, component supply, or other indirect pathways to reduce regulatory risk and political friction in cross-border defense exports.** Given Taiwan's geopolitical sensitivities, Taiwan–Poland cooperation is unlikely to mirror the highly visible Poland–Korea model of mutual military procurement or large-scale co-development and co-production.

A more feasible pathway may be to build a one-stop workflow in Poland for Taiwanese drone components—covering procurement, assembly, and maintenance and support—**which could be key to scaling Taiwan's drone business in Poland and the wider European market.** Whether Taiwan–Poland drone cooperation can be sustained amid intensifying competition remains to be seen.

Lithuania: Like-Minded Partner, Low-Profile Drone Cooperation

Taiwan–Lithuania drone cooperation has materialized through localized manufacturing and co-production. For Taiwanese firms, Lithuania offers a practical manufacturing and export gateway into the European and Ukrainian market.[116] Similar to Taiwan–Poland cooperation, Taiwanese companies are starting with local component production in Lithuania and may expand to assembling complete systems later. Trade flow of complete drones only shows modest, on-and-off volume from Taiwan to Lithuania, according to Eurostat data.[117]

Compared with Poland, Taiwan–Lithuania cooperation differs in three key ways. First, Lithuania is the only EU member state with a representative office named "Taiwan," rather than "Taipei." While ties can fluctuate with

Lithuanian domestic politics, Lithuania remains one of Taiwan's most publicly forward-leaning partners in Europe.[118] Second, **Lithuania is among the few countries to legislate "non-red" rules**, restricting the origin of drone components and banning procurement from "unreliable entities"; this reduces competition from "red" supply chains and lowers barriers for non-Chinese suppliers.[119]

Third, Lithuania's drone sector is more start-up driven: most local producers are small and medium-sized enterprises (SMEs) emerging after the Ukrainian war, unlike Poland's mature defense-industrial base dominated by state-owned groups and large private primes.[120] **With limited large-scale electronics and mechanical manufacturing but a strong software industry and battlefield-tested experience, Lithuania is highly complementary to Taiwan's hardware and manufacturing strengths**.[121]

Since 2023, Taiwan and Lithuania have been advancing the "Democratic Resilience Initiative" to strengthen bilateral industry cooperation.[122] In November 2024, the Lithuanian Defence and Security Industries Association signed an industry-to-industry MoU with the Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA).[123] Following this agreement, **Taiwanese firms are investing in local facilities for drone components.** For instance, Taiwanese UAV component maker Ahamani Advanced has planned to invest €8 million (US$8.66 million) in a factory for small-drone parts and has already signed B2B MoUs with local Lithuanian partners, Tech Kultas and UAB.[124]

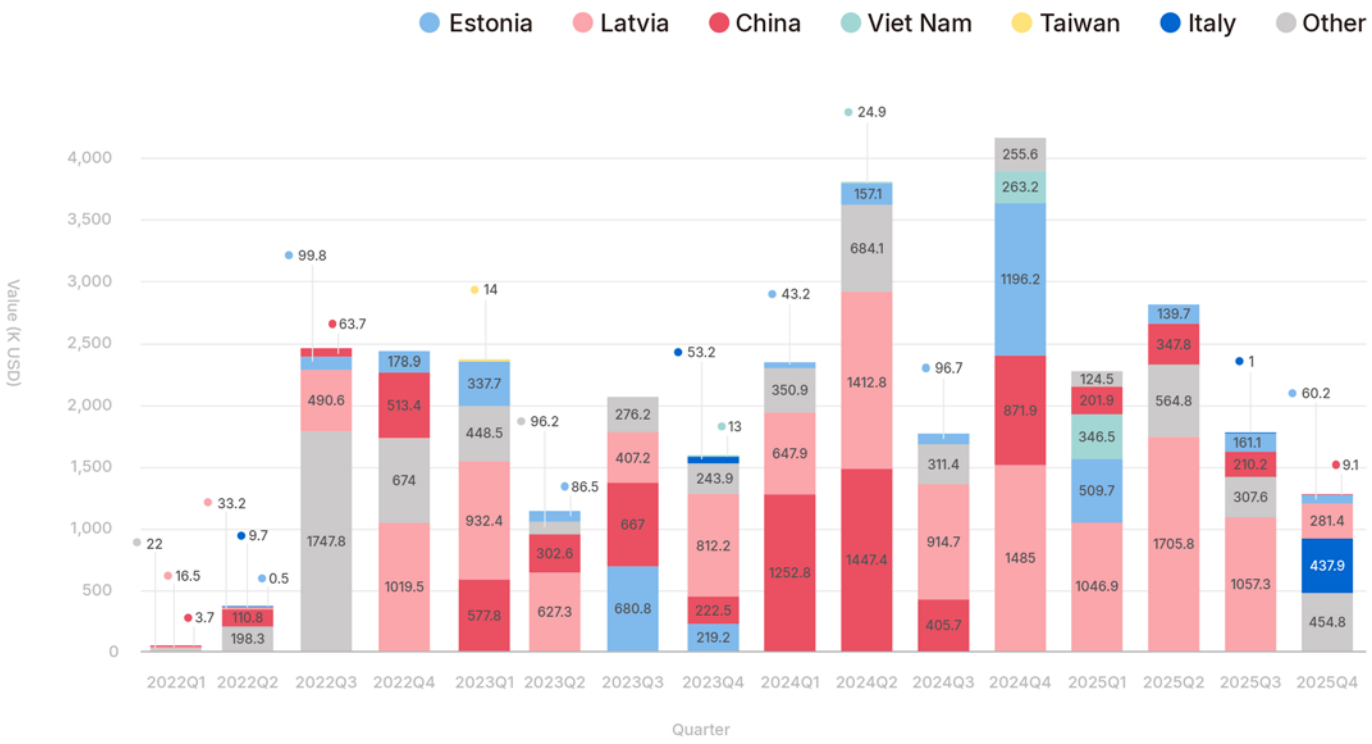
According to DSET's interviews, Taiwanese component and subsystem suppliers are already present and visible in Lithuania's drone market. To mitigate the prevalence of Chinese counterfeit goods and long maritime shipping lead times, these Taiwanese firms establish local entities, building a rapid-response, in-country supply chain in Lithuania.[125] Another key model of Taiwan–Lithuania cooperation is **hardware co-production with localized manufacturing**, often through close partnerships, to

reduce import barriers. Local partners help connect Taiwanese systems to Lithuanian defense networks and to handle military certification processes.[126] In parallel, Lithuanian drone manufacturers have shown growing interest in partnering with Taiwanese companies to explore access to Taiwan's government procurement market.[127]

Lithuania is one of the few countries that legislates "non-red" rules and restrictions on the country of origin of drone components. In March 2022, the Lithuanian government passed amendments to the Public Procurement Law, prohibiting the acquisition of unreliable communications technology equipment, personnel, and services in state institutions and sectors critical to national security. The "list of unreliable countries and regions" includes entities from China, Russia, and Belarus. In July 2025, the Lithuanian Ministry of Defense announced that public and military drone procurement must be manufactured and assembled in Lithuania, with cloud infrastructure located in EU or NATO member states. Non-compliant procurement will face criminal investigation and liability.[128]

Although Taiwan Customs does not show export data to Lithuania, Eurostat shows Lithuania's trade records with Taiwan. In 2023, Lithuania imported about €13,000 (US$14,100) worth of complete drones from Taiwan, but this did not continue into 2024 and 2025. From 2022 to 2025, Lithuania's imports of complete drones doubled: from €4.9 million (US$5.16 million) to €10.0 million (US$11.3 million). This rise likely reflects the wartime demand from Ukraine. The countries of origin remain highly concentrated, with the same four countries consistently supplying 60–90% of total imports each year. Latvia, China, Estonia, and Poland consistently rank among Lithuania's top five importers throughout this period. Notably, China's market share has grown, making it the primary source by 2024.[129]

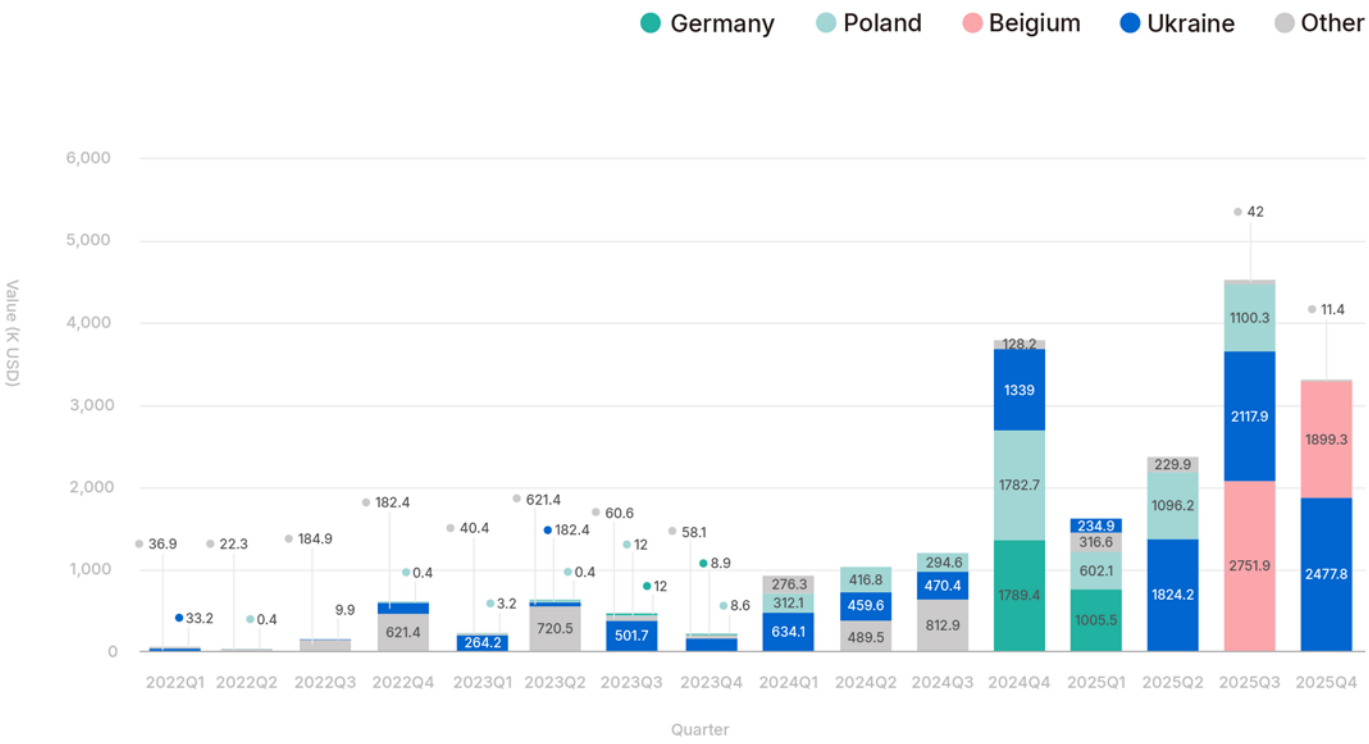
Graph 10: Lithuania's Imports 2022-2025
(Source: Eurostat, compiled by DSET)



Lithuania's recent defense drone procurements amount to several thousand systems, supplying both its own armed forces and Ukraine.[130] Just as Poland, Lithuania is strengthening its defense resilience through a mix of domestic procurement and Ukraine-linked demand, but with smaller volume coming from neighboring Baltic countries and domestic manufacturers. In July 2024, Lithuania's Ministry of National Defence said it plans to spend about €200 million (US$216 million) on uncrewed systems by 2030, roughly €30 million (US$32 million) a year.[131]

Meanwhile, the ministry announced €36 million (US$39 million) in contracts for reconnaissance and micro-class drones with Baltic contractors—small-class systems from Edge Autonomy (Latvia), mini-class from Threod Systems (Estonia), and micro-class quadcopters from

Graph 11: Lithuania's Exports 2022-2025
(Source: Eurostat, compiled by DSET)



Deftools (Lithuania).[132] Later in August 2024, the Lithuanian Defence Resources Agency placed an €8 million (US$8.66 million) order with five **Lithuanian FPV manufacturers—Dangolakis, RSI Europe, LTmiltech, Granta Autonomy, and uncrewed Defense Systems**—to deliver more than 2,300 drones for the Lithuanian Army and about 4,500 for Ukraine by the end of 2024.[133]

Overall, Taiwan–Lithuania drone cooperation focuses more on hardware co-production and localized manufacturing, less on complete drone trade flows.[134] Taiwan and Lithuania face similar structural constraints that could either help or hinder cooperation: both are frontline democracies with small domestic markets, both are actively seeking partners to secure international drone market share, and both have niche strengths alongside

supply-chain gaps.[135] Taken together, these conditions create real complementarity. Yet both sides also aim to build resilient drone supply chains and boost domestic industry through foreign orders, goals that can generate frictions and interest conflicts, similar to dynamics observed in Taiwan–Czechia cooperation.[136]

According to DSET interviews, one friction point in Taiwan–Lithuania drone cooperation is that, while investment plans exist, Taiwan's industrial presence in Central and Eastern Europe is still at an early stage.[137] One obstacle is access to loans and financing for Taiwanese companies. The Lithuanian interviewee noted that, despite support from Taiwanese government funds on the ground, Taiwanese firms still face difficulties securing bank financing in the relatively unfamiliar Eastern European market to implement plant construction projects.[138]

In parallel, some Lithuanian firms have expressed interest in participating in Taiwan's procurement tenders through partnerships with local companies, but have also raised questions about how foreign–local teaming is treated in practice and whether tender structures create additional hurdles for non-domestic participants.[139]

Czechia: Component-Led Cooperation

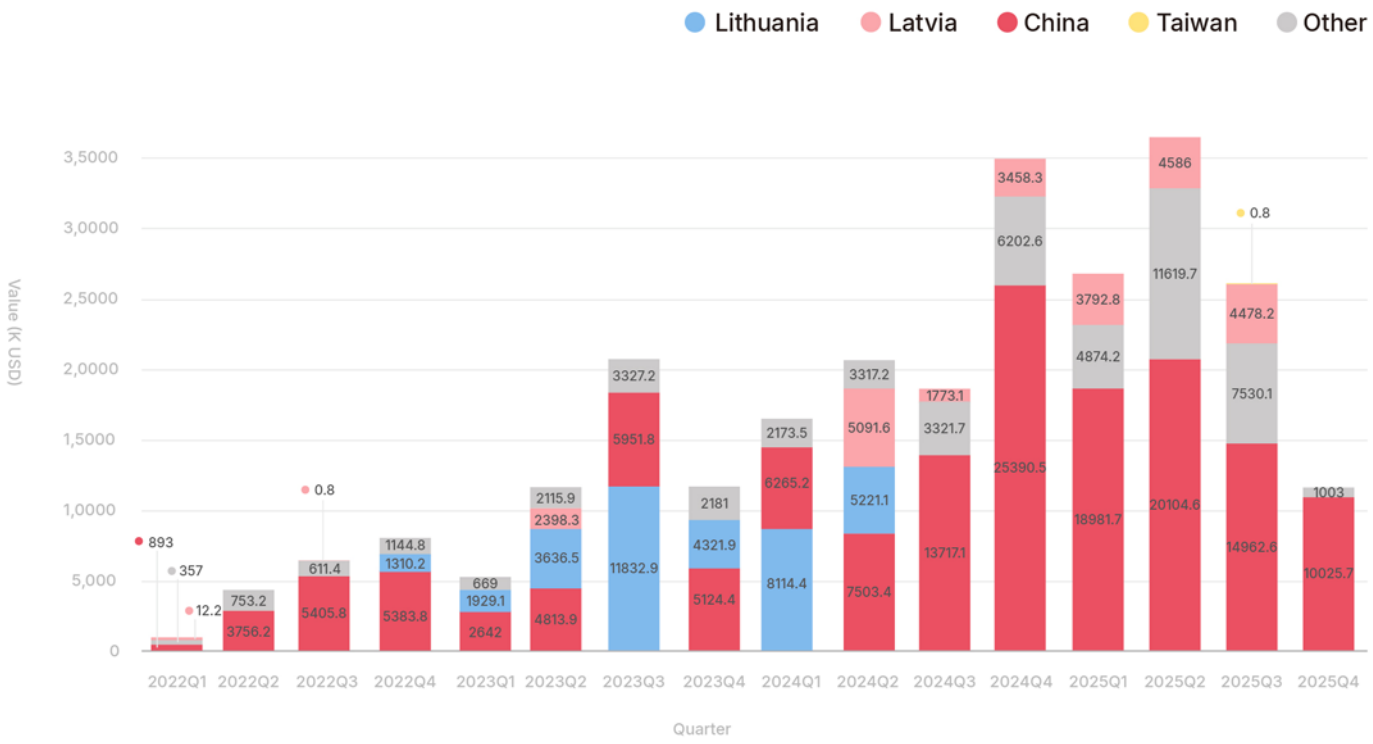
With a bilateral UAV industry MoU in place, Czechia and Taiwan primarily cooperate at the component and subsystem level; large-scale, structured programs are still limited. Czechia is one of Taiwan's Central and Eastern European partners that have been strengthening partnerships in semiconductors and drones through the "Democratic Resilience Initiative" since 2023.[140] In February 2025, TEDIBOA and its Czech counterpart, the Czech-Taiwanese Business Chamber (CTBC), signed the drone industry MoU.[141] Firms on both sides are mainly exploring opportunities; despite active mutual interest, there is little revenue-generating business between Taiwanese and Czech companies. Most existing bilateral collaborations are long-term R&D projects.[142]

Just like the Polish and Lithuanian markets, **Taiwanese firms mainly established their presence in Czechia as component suppliers.** For example, Taiwanese firm C-Tech has been locally supplying drone-specific lithium batteries to European customers from its base in Czechia.[143] While Taiwan's drone sector is expanding rapidly and Czechia has a strong aerospace legacy, **both sides tend to expect the other to purchase complete drone solutions.** For security and political reasons, direct sales of full military systems to each other's armed forces are considered unlikely. The Czech UAV industry stakeholders also suggest skepticism about Taiwan's ability to scale production and field combat-proven systems.[144]

In recent years, **Czech defense procurement focused on rapidly scaling small tactical drones rather than pursuing large, long-range strike UAVs.** In 2023, the Czech army explicitly prioritized procurement to buy 200+ smaller systems first while postponing medium tactical drones, in order to equip frontline brigades sooner. New tenders started in 2025 continue to emphasize mini VTOL reconnaissance-class capability.[145] Since both the Czech and Taiwanese governments are strengthening their domestic industries by procuring domestically produced small drones; if the two sides pursue cooperation, this overlapping development trajectory will require careful coordination.

Furthermore, **Czechia's domestic market for military and public-safety drones remains limited, largely because industry–government communication is difficult and procurement cycles are slow**, according to Czech manufacturers. Czech manufacturers argue that Czechia has seen little investment to date in large UAVs for domestic military use.[146] Without Poland's deeper defense-industrial base and legacy, Czech capacity for medium-to-large strike UAVs (wingspan larger than 1 meter; flight range over 500 kilometers; building-destructive warheads) is limited—around 10–20 units per day by estimate, versus Poland's roughly 5–7 times higher output.[147]

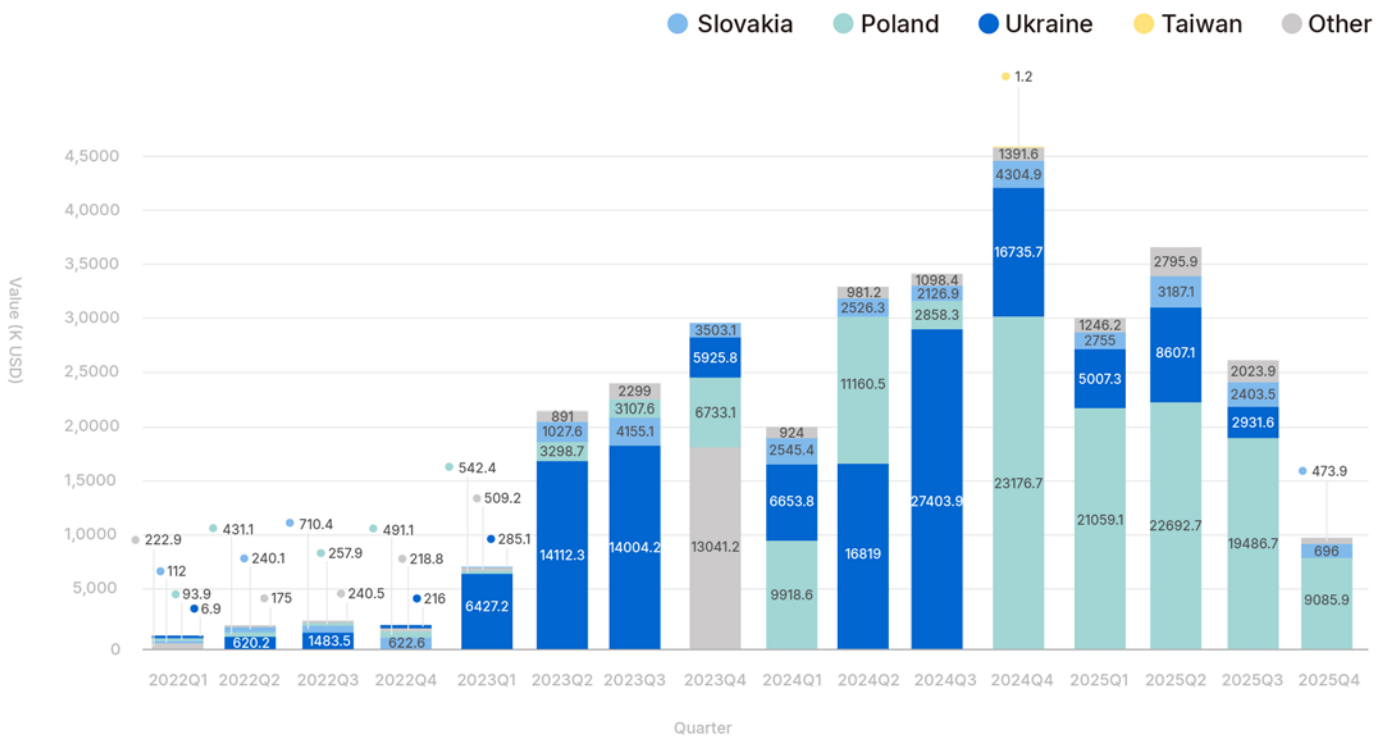
Graph 12: Czechia's Imports 2022-2025
(Source: Eurostat, compiled by DSET)



Czechia does not have Lithuania-style, drone-specific "non-red" statutory procurement restrictions tied to country-of-origin. In the policy paper, according to the ***Concept for Defence Applied R&D 2023–2029***, the Czech Ministry of Defence explicitly highlights unmanned systems (UAV/UGV) as a priority application area.[148] Publicly disclosed cases suggest there are both **domestic and US-made systems in service**, such as the Czech-made Vážka A and the US-made Wasp AE, Raven and Puma 3AE from AeroVironment.[149]

Graph 13: Czechia's Exports 2022-2025

(Source: Eurostat, compiled by DSET)



Though the figures are inconsistent between the Eurostat and Taiwan customs datasets, bilateral trade between Czechia and Taiwan is clearly present in both sources. According to Taiwan customs, in Q4 2025 alone, Czechia surpassed Poland and became Taiwan's largest export destination, totaling 68,060 units worth US$52.7 million. Yet this notable surge on the Taiwan side is not reflected in Czechia's Eurostat import series; the reason may mirror the Taiwan–Poland discrepancy, stemming from a Rotterdam effect in which Czechia served as a transshipment point. Although the companies behind this spike remain unidentified, the Czech industry interviewee suggested that these are small drones and are likely being routed via Czechia onward to Ukraine.[150]

Overall, there are three observations concluded by the Czech interviewee engaged with Taiwanese firms:[151]

1. Czechia as a niche ecosystem with fast-iteration capabilities
Czech industry interviewee described Czechia as a "niche" drone ecosystem: it has certain specialized capabilities that Poland and Lithuania may not, and these niche strengths could gain value through cooperation with Taiwan. In the small FPV space, development is often led by SMEs that can bring systems directly to the front line for rapid unit-level testing. For larger military drones, systems must be co-developed with military users and updated continuously, almost "monthly." Czech larger-drone production today is aimed mainly at Ukraine and often proceeds through joint ventures or co-development with Ukrainian firms.

2. Limited scale constrains deeper cooperation between Taiwan and Czechia
The Czech interviewee assessed that deeper Taiwan–Czechia drone cooperation is difficult because expectations are misaligned. The two sides do not fully share the same view of what future drone warfare will require, and both currently lack the scale to produce enough medium-to-large UAVs for wartime demand. Small FPV development alone cannot close that gap in either quantity or performance. They also argued that cooperation is unlikely to take the form of mutual purchases of complete military drones, which is politically and security-wise unrealistic.

3. More feasible models: technology partnerships, modular co-development, and an SME coordination mechanism
The Czech interviewee advocated opening cooperation at the SME level, beyond official MoUs, by creating a joint Taiwan–Czech platform or coordination hub with a regular mechanism for matching partners, even without building a physical factory. The goal should be deep integration: **Czech airframe/hardware design combined with Taiwan's electronics, chips, and communications**, not simple component trading.

The Czech interviewee also stressed that SMEs need stable, strategic production planning, rather than a boom-and-bust demand pattern, to make long-term capacity cooperation viable. More feasible models would

be **joint ventures or long-term partnerships on key technologies and components**, and **co-development of national variants that share core modules while meeting each country's specific requirements.**

France: Localization-First Integration Project

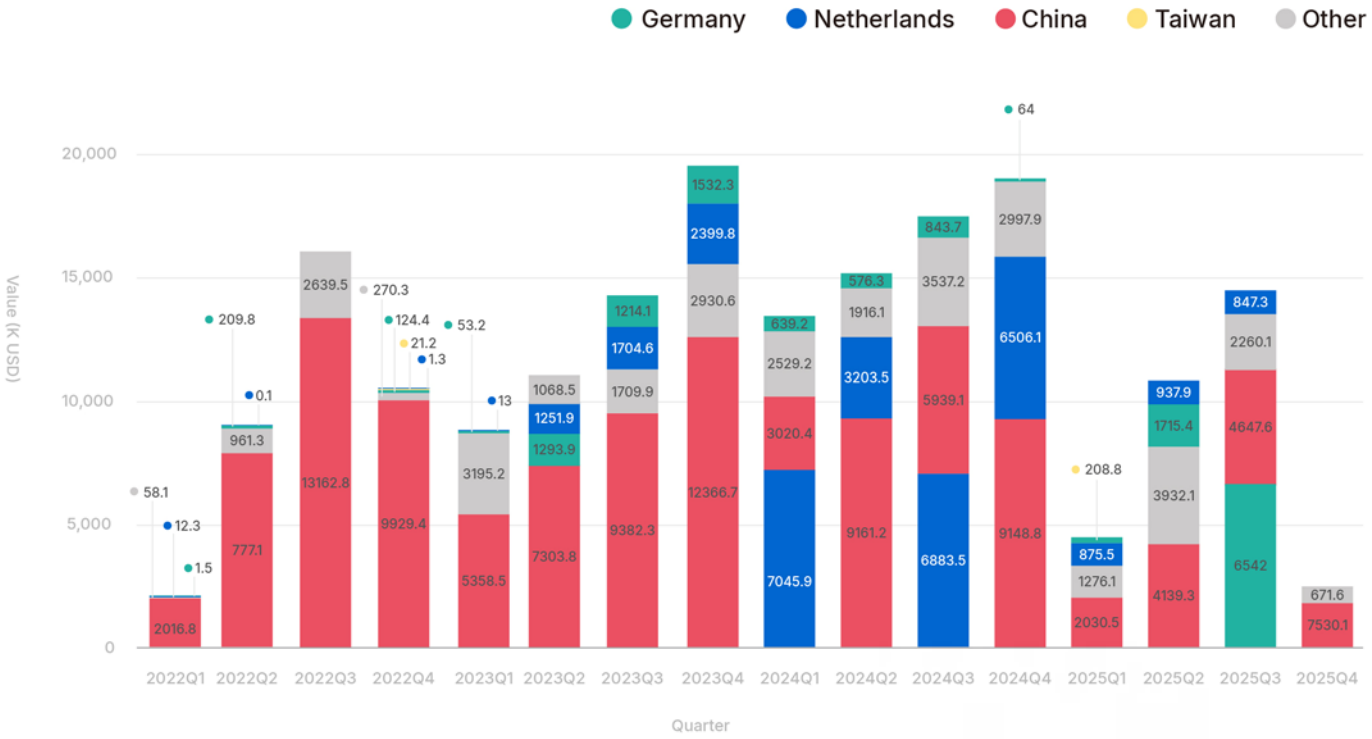
Taiwan–France cooperation in uncrewed systems is limited, but the disclosed ones could be described as dual-track cooperation. The first track is a long-term cooperation project between Taiwan's national R&D institution, Industrial Technology Research Institute (ITRI), and Parrot, a French drone manufacturer, aimed at localizing key modules and validating endurance and reliability in real-world applications including inspection, logistics, energy infrastructure, and monitoring.[152]

The second is project-based integration: a French firm provides an all-in-one avionics-and-sensor package (such as autopilot, camera and payload integration, and supporting software), while Taiwanese partners provide the air vehicle (airframe, propulsion, and manufacturing).[153] Overall, these activities reflect institution-to-institution and firm-to-firm cooperation, rather than an institutionalized bilateral program or a high-volume co-production program.

Instead of exporting complete platforms at scale, the French manufacturer's engagement with Taiwan centers on **enabling Taiwanese airframes with modular subsystems and software-defined capabilities**, especially for ISR missions and resilience in contested electromagnetic environments. The French interviewee described a preference for time-bounded, delivery-oriented projects (roughly 8–12 months) and working primarily through private-sector partners.[154] The French industry interviewee noted that, unlike other foreign partners, the company works with Taiwanese partners solely to supply key modules rather than participate in defense bids. As a result, it can collaborate with a broader range of partners instead of competing with Taiwanese companies for Ministry of National Defense (MND) contracts. The interviewee also flagging a recurring barrier: tender specifications can be insufficiently transparent or specific, making it difficult to match systems to real mission needs and to price integration work.[155]

Graph 14: France's Imports 2022-2025

(Source: Eurostat, compiled by DSET)

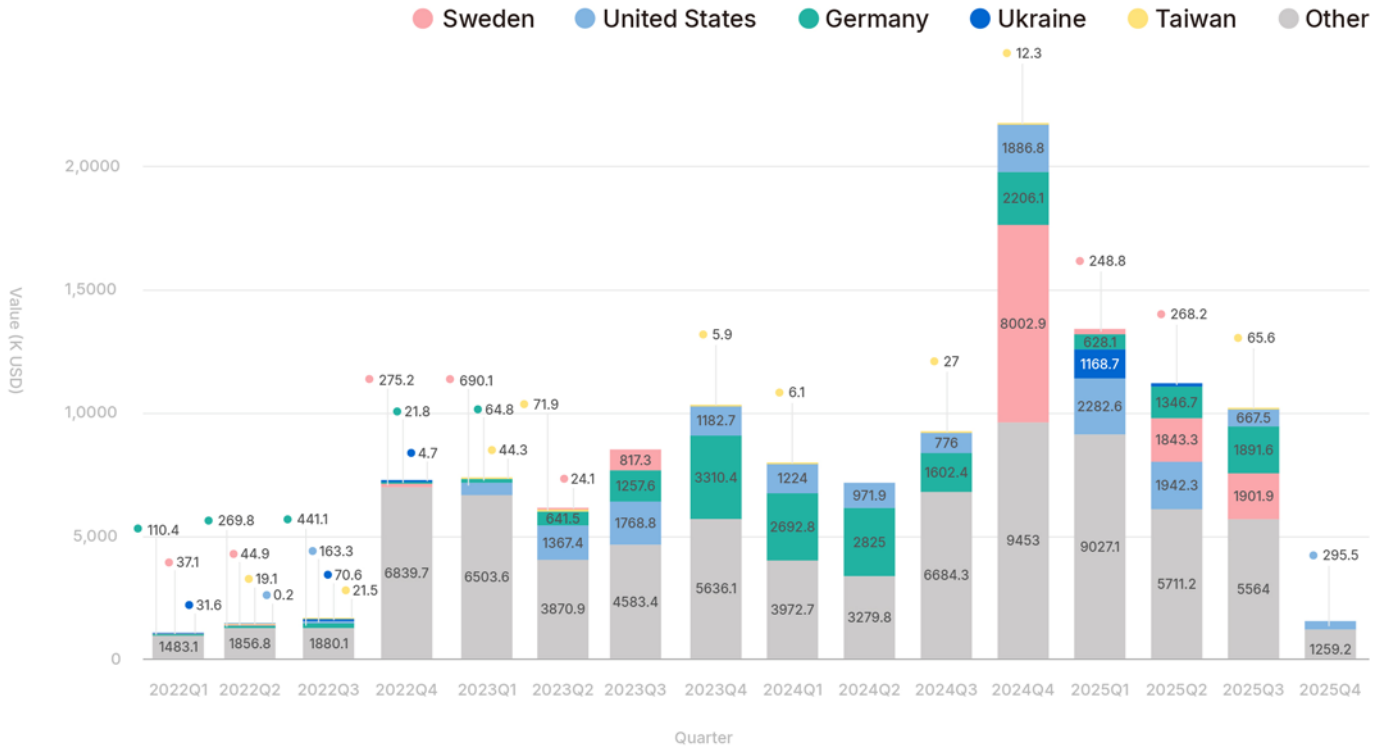


This approach shifts cooperation away from politically sensitive full-system transfers and toward subsystem integration, where Taiwan can iterate faster, diversify airframes, and retain greater control over production. The French interviewee also emphasized data control and adaptability as key advantages: an open, developer-friendly architecture (e.g., a software development kit and widely used programming tools) allows end users to tailor mission applications without routing sensitive operational data back to the vendor, an attribute that aligns with Taiwan's security and sovereignty concerns.[156]

On the trade side, although Taiwan Customs shows no export flows to France, Eurostat data indicates that France imported a small quantity of complete drones from Taiwan in Q1 2024 (totaling only about US$1,000), and exported small quantities to Taiwan between Q1 2023 and Q1 2024 (ranging from US$5,900 to US$71,900).[157]

Graph 15: France's Exports 2022-2025

(Source: Eurostat, compiled by DSET)



Finally, DSET's interviews with the French manufacturer highlight why **localization**, and its limits, will shape any scalable Taiwan–France pathway. The French interviewee suggested that if Taiwan's public sector demands higher supply chain resilience, it may push foreign suppliers toward localized assembly and deeper local sourcing. Yet they also stressed practical constraints: **some critical components (illustratively, high-performance thermal imaging) are difficult to substitute at the required performance levels**, and certain specialized materials present bottlenecks. They also noted **Taiwan's technological gaps in software, adding more challenges for Taiwan–France cooperation.**[158]

In other words, "localization" is feasible only up to the point where Taiwan can reliably supply key parts at scale and with consistent quality. Thus, the most realistic near-term trajectory is integration and selective localization—

building partnerships around modules, software-enabled capability, and manufacturing—rather than immediate, large-scale transfer of complete systems or fully localized supply chains.[159]

Germany: B2B Partnerships Led by Integration and Certification

Without any publicly disclosed state-level bilateral framework, Taiwan–Germany cooperation in uncrewed systems is currently driven by **institution-to-institution and firm-to-firm partnerships with modest but continuous trade flows.**

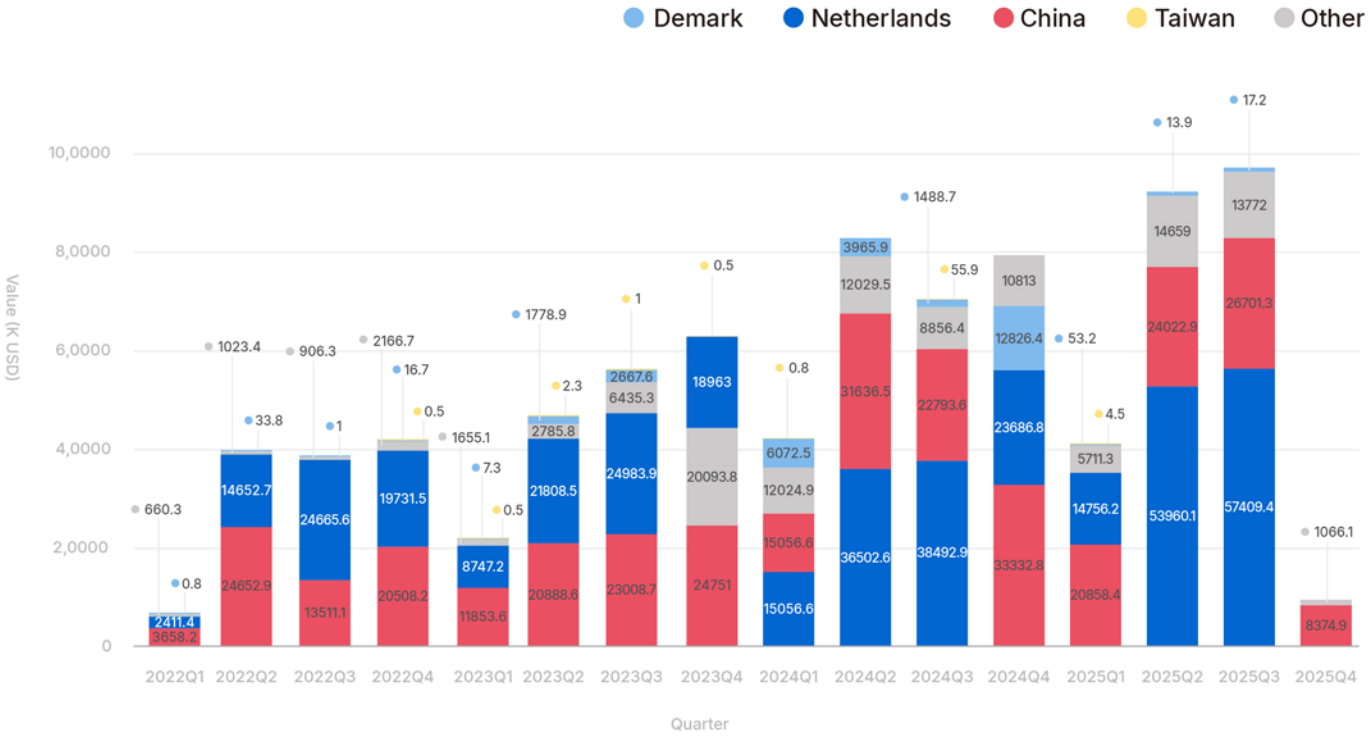
In cooperation, Taiwan's Ministry of National Defense R&D arm, the National Chungshan Institute of Science and Technology (NCSIST), has formed a strategic partnership with Auterion (a US–German autonomy software company).[160] Taiwan's Asia UAV AI Innovation Application R&D Center has also signed a four-party MoU with TÜV Rheinland and STMicroelectronics.[161] Thunder Tiger, Taiwan's first and currently only drone company on the Blue UAS list, signed an MoU with US–German company Auterion to integrate its AI autonomy stack across its air, ground, and maritime uncrewed platforms.[162] In addition, German drone firm Quantum Systems has announced a partnership with Taiwanese company Sysgration.[163]

Taiwan–Germany trade in complete drones is visible but small. Germany's drone imports are dominated by China, at roughly €25–32 million per year (US$26.3–34.6 million) in 2022–2024. On the export side, Germany's drone exports go mostly to Ukraine—about €40.0 million (US$43.3 million) in 2023 and €127.9 million (US$138.4 million) in 2024—remaining the top destination through 2025 Q1–Q3.[164]

Taken together, the evidence suggests Taiwan–Germany cooperation is less about platform trade and more about autonomy and software integration, certification-facing partnerships, and subsystem-level collaboration.

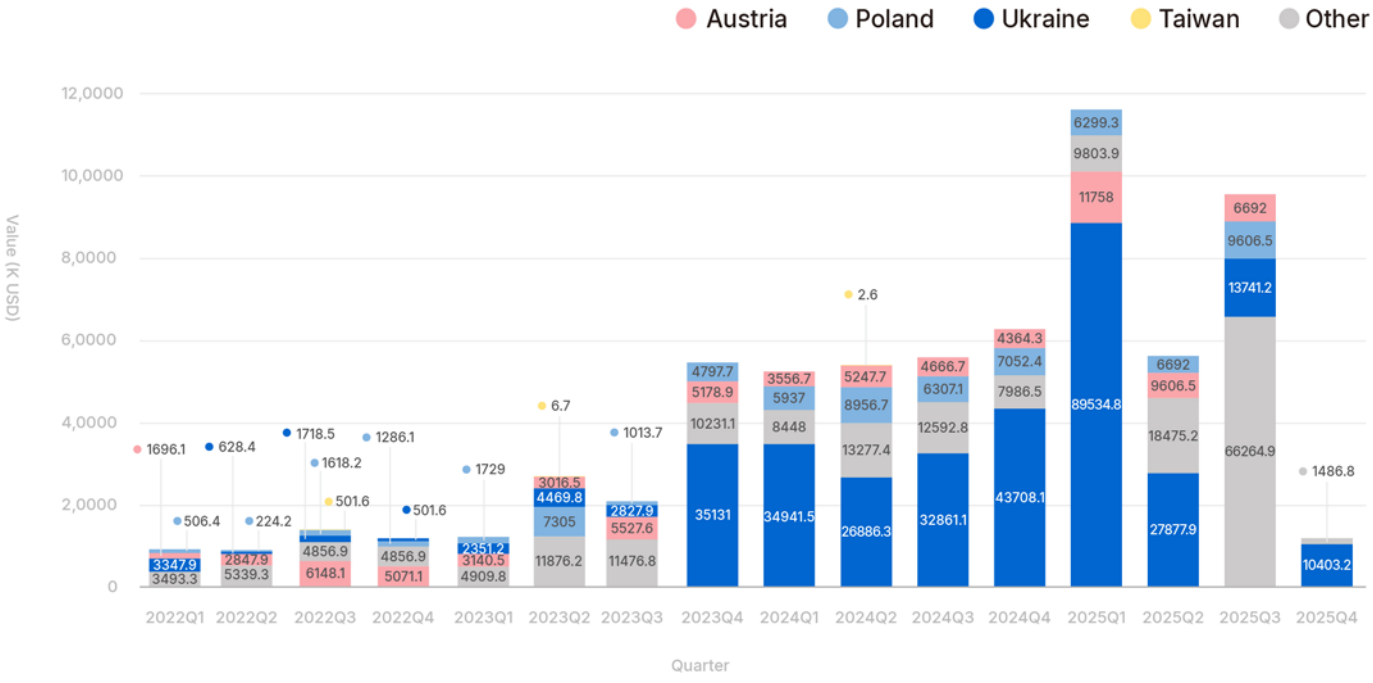
Graph 16: Germany's Imports 2022-2025

(Source: Eurostat, compiled by DSET)



Graph 17: Germany's Exports 2022-2025

(Source: Eurostat, compiled by DSET)



United Kingdom: Expressed Interest, Limited Follow-Through

At the open-source level, DSET's mapping finds only **a handful of concrete touchpoints** so far. One is that Taiwanese drone company EJAT collaborates with the UK firm I-Red; another is that some UK firms signaled interest in participating in Taiwan MND's tenders, based on DSET's field interview at Taipei Aerospace & Defense Technology Exhibition (TADTE) in September 2025.[165] Beyond drones, BAE Systems signed an MOU with Taiwan's Champion Auto at TADTE on logistics support and maintenance for Taiwan's military equipment.[166] Though both Taiwan and the UK government have expressed interest in drone cooperation, beyond these scattered indicators, there's no publicly disclosed UK–Taiwan drone cooperation or a structured bilateral program.[167]

The UK interviewees also stressed a key political limitation: **the UK restricts defense-related exports to Taiwan and assesses license applications on a case-by-case basis; thus, any Taiwan–UK cooperation pathway is structurally harder to formalize.** However, they also noted that because many drone technologies are dual-use, collaboration can be reframed around non-lethal payloads (e.g., ISR). In practice, bilateral cooperation can work in lower-profile, dual-use domains rather than complete military systems transfers.[168]

Consistent with that logic, the UK interviewees point to a set of plausible **low-profile dual-use collaboration themes** that could support Taiwan's defense needs in uncrewed systems: sensing and data fusion, passive sensor networks, maritime target recognition, supply-chain assurance, and scalable manufacturing.[169] The UK interviewees further recommend using Track 1.5 workshops (think tanks convening MOD-adjacent voices and industry) as a practical mechanism to assemble stakeholders and translate shared operational problems into concrete technology and industrial cooperation pathways, without requiring a formal G2G framework.[170]

Taken together, the current evidence supports a cautious assessment: Taiwan–UK drone cooperation is still at a "signals and options" stage, with interest visible, but institutional channels thin and politically bounded. The most realistic near-term trajectory is therefore incremental, enabling-technology cooperation, rather than large-scale co-production programs or direct procurement of complete armed UAV systems.

Chapter 4.

Challenges in Taiwan–Europe Drone Cooperation

Taiwan–Europe drone cooperation is expanding, but it faces structural constraints. Most importantly, **Europe lacks EU-wide or national-level "strategic inclusion"**: explicit, high-visibility policy language that names Taiwan as a defense-industrial partner for co-development or co-production. Unlike the United States, where clear NDAA legislation, dedicated funding, and trusted procurement pathways reduce uncertainty, Taiwan–Europe cooperation has grown with **limited institutionalization.**

In this report, "institutionalization" refers to the reusability of cooperation channels, rather than the frequency of recurring B2B orders. In most sectors, market-driven B2B ties—because they move faster, remain low-profile, and are less exposed to electoral turnover or diplomatic symbolism—can be more resilient than overt government-to-government procurement. Bottom-up deals between firms and industry associations therefore matter for Taiwan–Europe drone cooperation: they generate early proof-of-demand and keep collaboration alive when political contexts become cautious.

But in defense and dual-use markets, B2B rarely stays purely commercial. Defense markets are dominated by governments as both regulators and primary customers, and transactions are constrained by export controls, end-use and retransfer conditions, and national-security review, constraints that can delay or block transfers regardless of buyer–seller willingness.[171] Therefore, it is crucial to have an institutionalized framework to translate B2B momentum into compliant Taiwan–Europe cooperation, lowering marginal costs and political friction for future collaboration via structural infrastructure, including cybersecurity validation protocols, joint testing standards, and "trusted entity" whitelists. This kind of framework enables companies to engage in ongoing, scalable exchanges without renegotiating terms for every engagement.

A second constraint is **Europe's fragmented market architecture.** Unlike the U.S. model, where a clearer national security procurement logic and a recognizable trusted certification pathway "Blue UAS" can create a common baseline, Europe's drone ecosystem is split by national

procurement cultures, tender practices, and certification pathways, and these vary sharply between ministries, services, and civilian agencies. Even when demand exists, firms face high transaction costs: unclear requirements, inconsistent disclosure, and limited repeatability across countries. Where "origin" or supplier restrictions do exist, they are often set tender-by-tender rather than system-wide, creating uncertainty for suppliers about what business models will remain viable.

Third, **logistics bottlenecks and geographical distance** also constrain Taiwan's ability to scale timely support in Europe. Shipping from Taiwan to Poland by sea—typically routed via the Malacca Strait, Singapore, and Rotterdam—can take roughly **2.5 to 3.5 months**. By contrast, China's overland Belt and Road routes to Poland can deliver in around **seven days**. This delay makes it difficult for Taiwanese suppliers to meet Ukraine-linked wartime demand, where buyers often expect delivery within **one month**.

Fourth, **political sensitivities** continue to bound the ceiling of cooperation. Several European actors prefer low-profile engagement to avoid political costs from China, which limits formal recognition, public signaling, and government-to-government framing. In some cases, domestic rules and risk tolerance also constrain cooperation on lethal applications. This does not eliminate cooperation because many drone technologies are dual-use, but it pushes partnerships toward non-lethal payloads, enabling technologies, and indirect market entry (components, integration, local assembly), rather than direct transfers of complete military systems.

Fifth, the cooperation landscape is **uneven within Europe**. Central and Eastern European partners that face direct security threats have shown a more visible, quasi-official cooperation pattern, such as association-level MoUs and localization pathways, while much of Western Europe remains dominated by project-based collaboration and B2B deals without sector-level channels.

Sixth, there are **industrial and capability constraints on both sides**. Europe needs speed, volume, and resilient "non-red" supply options, but still struggles with fragmentation and scaling. Taiwan has world-class electronics and manufacturing strengths, but scaling complete systems at wartime pace and demonstrating resilience under contested conditions remains challenging. Localization, often necessary for procurement eligibility and resilience, also runs into bottlenecks: some critical components and materials are difficult to substitute at required performance levels, and software and firmware capability gaps can slow iteration.

Chapter 5.

Conclusion and Policy Recommendations

The evidence across country cases points to a consistent overall picture: **Taiwan–Europe drone cooperation is real, growing, and increasingly visible—but it remains uneven, deal-driven, and structurally constrained.** Europe has not, at the EU level, matched the U.S. in openly and institutionally including Taiwan in defense-industrial drone cooperation.

Within Europe, cooperation takes different forms: Central and Eastern Europe (CEE) shows "quasi-official" cooperation patterns with relatively higher visibility—industry frameworks and early localization—while Western Europe tends to engage through low-profile B2B deals and project-based integration. In this environment, the most feasible short-term pathway is unlikely to be direct procurement of complete armed UAV systems. Instead, the practical growth track is **components, integration, localization, and enabling technologies,** paired with mechanisms that reduce Europe's fragmentation costs and Taiwan's scaling and validation risks.

Recommendations for Taiwan

Taiwan's immediate priority is to make cooperation easier to evaluate and lower-risk for European partners. Taiwan should:

1. Build a trusted, one-stop component procurement mechanism.
The Taiwanese government should facilitate the domestic drone industry in creating a Europe-facing "one-stop" procurement interface for vetted UAV components and subsystems: motors, batteries, avionics, communications modules, payload interfaces, paired with traceability, documentation, and supplier verification. This reduces search and trust costs for European SMEs and primes while giving Taiwanese suppliers a clear route to market.

2. Build a Europe-based "dual-function hub."
Some Taiwanese firms have begun building Europe-based "dual-function hubs" that combine material stockpiles with technical support, reducing upgrade and repair turnaround times to about two weeks, a cadence better suited to rapid wartime iteration.

3. Strengthen credibility through validation and documentation.
European buyers care about reliability, scaling, and proof under contested conditions. Taiwan should invest in standardized testing, quality assurance, and transparent performance documentation, and use joint validation with European partners to build confidence.

4. Close software and iteration gaps.
Since drone warfare demands rapid iteration cycles, Taiwan's software and firmware capacity is strategically crucial. Targeted investment in flight control stacks, secure communications, integration middleware, and update pipelines will increase the value of Taiwan's manufacturing strengths.

Cross-Cutting Recommendations for the EU and European Partners

At the EU level, the core objective is to reduce fragmentation costs and enable scaling. European defense-industrial planners should:

1. Develop an EU-level defense certification lab for the "trusted UAS" pathway.
The EU should create an interoperable assurance baseline for government and security users—covering procurement security, data governance, and supply-chain risk—so vendors do not face a different trust regime in every country. Without overriding national defense authority, an EU-level certification lab could define risk tiers for drone components and set common verification procedures.

In practice, the lab could distinguish **security sensitivity** (e.g.,

communications modules and other active electronics with higher backdoor and malware exposure) from **supply chain risk** (e.g., batteries or rare-earth inputs such as neodymium magnets with heavy China dependency), while treating low-risk passive components differently. It could also develop UAS-specific test tracks and publish standardized documentation and testing protocols. A shared certification pathway would reduce compliance burden, speed qualification, and make cross-border scaling more feasible.

2. Move from ad hoc sourcing to strategic supply chain inclusion.
The European Commission and the High Representative, in the EU *Defence Industry Readiness Roadmap 2030* and its drone-related flagships, should explicitly identify Taiwan as a like-minded partner for drone supply chain resilience. This political signal should be operationalized by integrating qualified Taiwanese firms into EU-level and member-state vendor qualification channels for non-red subsystems and scalable manufacturing capacity, supported by clear export-control, licensing, and end-use conditions. The European Parliament's own-initiative report "Drones and new systems of warfare" (22 Jan 2026) provides a basis for such inclusion, and the U.S. 2026 NDAA offers a practical benchmark for institutionalizing partner participation in defense-industrial drone cooperation.[172]

3. Institutionalize dual-use cooperation with clear export-control rules.
Since many drone-related technologies are dual-use, European partners can focus cooperation on non-lethal enabling capabilities while establishing clear export-control, licensing, and end-use conditions that reduce political and export-control friction.

For CEE partners, the objective is to bridge symbolism and substance by institutionalizing practical cooperation models:

Recommendations for Central and Eastern European Partners

1. Co-develop joint testing and validation pipelines with Taiwan.
Given CEE partners' proximity to Ukraine, Taiwan and CEE partners should establish joint testing and validation pipelines (ranges, exercises, and evaluation teams) that generate rapid, grounded feedback and validated performance data. This would allow Taiwanese manufacturers to demonstrate reliability and resilience under realistic conditions, while enabling European users and procurement authorities to shorten qualification timelines and reduce adoption risk.

2. Institutionalize local assembly and component supply.
Where origin requirements constrain imports of complete drones, European partners should standardize local assembly models, including kit-based assembly, local integration, joint ventures, and certified in-country maintenance. This approach can lower political and regulatory friction while preserving delivery speed and enabling sustained component supply. Lithuania already illustrates this pathway: following an industry-to-industry MoU between Taiwan and Lithuania, Taiwanese UAV manufacturer Ahamani Advanced announced plans to invest €8 million (US$8.66 million) in a small-drone parts factory and signed B2B MoUs with Lithuanian partners.

Recommendations for Western European Partners

For Western European partners, the central goal is to expand practical cooperation while managing political sensitivity, by focusing on enabling capabilities and integration pathways that can scale. Western European partners should:

1. Prioritize enabling technologies over trading complete platforms.
Where formal cooperation is politically bounded, focus on areas that still advance Taiwan's defense needs and Europe's industrial interests: sensing and data fusion, maritime target recognition, electronic warfare (EW) resilience, secure communications modules, supply-chain assurance, and scalable manufacturing processes.

2. Use Track 1.5 diplomacy as a practical cooperation starting point. Convene meetings that combine think tanks, Ministry of Defense-adjacent experts, and industry from both sides that can translate shared operational problems into concrete pilot projects without requiring a formal bilateral defense framework.

3. Invest in modular integration pathways. Western European firms that can provide integration-ready subsystems, such as avionics packages, payload stacks, and software toolchains, should pair them with Taiwanese airframes and manufacturing capacity, and pursue selective localization of module production in Taiwan where feasible to improve commercial viability and reduce integration burdens. A France–Taiwan example already points to this model: the ITRI–Parrot cooperation focuses on localizing key modules and validating endurance and reliability, and interviews describe a French firm providing an all-in-one avionics-and-sensor package while Taiwanese partners provide the air vehicle and manufacturing.

Taken together, these steps aim to solve the core bottleneck revealed across cases: **Europe's fragmentation and political caution prevent cooperation from scaling, even when mutual needs and industrial complementarity are strong.** The fastest route to scale is therefore not a single grand framework, but a layered approach, building trusted procurement channels, harmonizing certification, and institutionalizing joint testing and localization pathways that can grow cooperation from deal-by-deal into long-term capacity.

Table 13. Interviewee Appendix

Interviewee	Role	Sector
A	European drone manufacturer	Industry
B	European drone manufacturer; partnering with Taiwanese drone manufacturers	Industry
C	Taiwanese drone subsystem manufacturer; participant in a government-supported subsidy program; supplier of foreign defense tech manufacturers	Industry
D	Taiwanese drone subsystem manufacturer; supplier of foreign defense tech manufacturers; investing in local facilities in Europe.	Industry
E	Taiwanese drone subsystem manufacturer; investing in local facilities in Europe.	Industry
F	CEO of a European firm and president of association supporting Taiwan–Europe industry links	Industry
G	European defense and security industry association	Industry

H	Taiwanese government-affiliated R&D institute	Government
I	Representative of a Taiwan defense tech industry development association	Industry
J	European drones policy advocacy organization	Civil organization
K	European diplomatic representative to Taiwan	Political
L	European university-based scholar with defense and security expertise	Academia

References

1. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Trade statistics database / Statistics database query [Data set]. Retrieved February 17, 2026, from https://portal.sw.nat.gov.tw/APGA/GA30E

2. This is a **hypothetical rank** that maps Taiwan Customs–reported exports onto Eurostat's import-source distribution. For the report's method for deriving this cross-dataset rank using mirror data, see the **Methodology** section in the Introduction.

3. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Trade statistics database / Statistics database query [Data set]. Retrieved February 17, 2026, from https://portal.sw.nat.gov.tw/APGA/GA30E;
Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

4. European Commission, & High Representative of the Union for Foreign Affairs and Security Policy. (2025, October 16). *Preserving peace: Defence readiness roadmap 2030* (JOIN(2025) 27 final) . https://defence-industry-space.ec.europa.eu/document/download/9db42c04-15c2-42e1-8364-60afb0073e68_en?filename=Joint-Communication%20_Defence-Readiness-Roadmap-2030.pdf

5. U.S. Congress. (n.d.). *S.2296 (119th Congress): Bill text. Congress.gov. Retrieved March 3, 2026, from* https://www.congress.gov/bill/119th-congress/senate-bill/2296/tex

6. Defense Contract Management Agency. (n.d.). Blue UAS: Cleared list. Retrieved March 3, 2026, from https://bluelist.appsplatformportals.us/UAS-Cleared-List/

7. Ministry of National Defence of Lithuania. (2024, June 5). *Lists of states posing a threat to national security and the most sensitive IT equipment and services [Vyriausybė nustatė grėsmę nacionaliniam saugumui keliančių valstybių bei jautriausių informacinių technologijų įrangos bei paslaugų sąrašus].* Retrieved March 3, 2026, from https://kam.lt/vyriausybe-nustate-gresme-nacionaliniam-saugumui-kelianciu-valstybiu-bei-jautriausiu-informaciniu-technologiju-irangos-bei-paslaugu-sarasus/

8. European Parliament. (2026, January 22). Drones and new systems of warfare – the EU's need to adapt to be fit for today's security challenges. European Parliament. https://www.europarl.europa.eu/doceo/document/TA-10-2026-0020_EN.htm

9. Ministry of National Defence of Poland. (2022, October 20). MQ-9B SkyGuardian unmanned aerial vehicles [Bezzałogowce MQ-9B SkyGuardian]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/bezzalogowce-mq-9b-skyguardian; Ministry of National Defence of Poland. (2021, May 22). Bayraktar TB2 unmanned aerial vehicles [Bezzałogowce Bayraktar TB2]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/bezzalogowce-bayraktar-tb2

10. Ministry of National Defence of Poland. (2023). Announcement No. 2 for the acquisition of technical solutions in the domain of unmanned aerial combat systems. Government of Poland. https://www.gov.pl/web/national-defence/announcement-no-2-for-the-acquisition-of-technicalsolutions-in-the-domain-of-unmanned-aerial-combatsystems; Ministry of National Defence of Poland. (2022, May 6). Artillery regiments will receive Gladius drones [Pułki artylerii otrzymają drony Gladius]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/pulki-artylerii-otrzymaja-drony-gladius; Ministry of National Defence of Poland. (2023, December 15). By the end of the year, the army will receive the latest versions of FlyEye drones [Do końca roku wojsko otrzyma najnowsze wersje bezzałogowców FlyEye]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/do-konca-roku-wojsko-otrzyma-najnowsze-wersje-bezzalogowcow-flyeye; Ministry of National Defence of Poland. (2022, April 29). Warmate loitering ammunition for the Polish Army [Amunicja krążąca WARMATE dla Wojska Polskiego]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/amunicja-krazaca-warmate-dla-wojska-polskiego2.

11. Mazowieckie Voivodeship Office. (2023). Presentation of drones for the State Fire Service [Prezentacja dronów Państwowej Straży Pożarnej]. Government of Poland. https://www.gov.pl/web/uw-mazowiecki/prezentacja-dronow-panstwowej-strazy-pozarnej;

District Headquarters of the State Fire Service in Czarnków. (2023). Handover of a drone to OSP Trzcianka [Przekazanie drona do OSP Trzcianka]. Government of Poland. https://www.gov.pl/web/kppsp-czarnkow/przekazanie-drona-do-osp-trzcianka;
Municipal Headquarters of the State Fire Service in Wałbrzych. (2023). Modern drones for Wałbrzych firefighters [Nowoczesne drony dla wałbrzyskich strażaków]. Government of Poland. https://www.gov.pl/web/kmpsp-walbrzych/nowoczesne-drony-dla-walbrzyskich-strazakow;
District Headquarters of the State Fire Service in Strzelce Krajeńskie. (2024). New operational and preventive vehicle equipped with an unmanned aerial vehicle for the KP PSP in Strzelce Krajeńskie [Nowy samochód do celów operacyjno-prewencyjnych wyposażony w bezzałogowy statek powietrzny z osprzętem dla Komendy Powiatowej PSP w Strzelcach Krajeńskich]. Government of Poland. https://www.gov.pl/web/kppsp-strzelce-krajenskie/nowy-samochod-do-celow-operacyjno---prewencyjnych-wyposazony-w-bezzalogowy-statek-powietrzny-z-osprzetem-dla-komendy-powiatowej-psp-w-strzelce-krajenskie.

12. DSET interview with D and E.

13. DSET interview with A.

14. DSET interview with A.

15. DSET interview with F.

16. DSET interview with B.

17. Taipei Times. (2025, June 18). Sysgration, Quantum Systems to partner. Taipei Times. https://www.taipeitimes.com/News/taiwan/archives/2025/06/18/2003838809;
Central News Agency. (2025, June 25). *Sysgration partners with Germany's Quantum Systems to produce mid-to-large drones* [系統電與德國無人機巨頭 Quantum Systems 結盟 生產中大型無人機]. https://www.cna.com.tw/news/afe/202506250397.aspx;
Quantum Systems. (2025, June 18). *Quantum Systems partners with Sysgration for local manufacturing in Taiwan.* https://quantum-systems.com/news/quantum-systems-partners-with-sysgration/.

18. DSET interview with L.

Table 1. Summary of Taiwan–Europe Cooperation

Table 2. Summary of US and Europe Comparison

Introduction

19. European Commission & High Representative. (2025, October 16). Preserving peace: Defence readiness roadmap 2030 (JOIN(2025) 27 final).

20. Wolff, G., A. Steinbach and J. Zettelmeyer (2025) 'The governance and funding of European rearmament' , Policy Brief 15/2025, Bruegel. https://www.bruegel.org/policy-brief/governance-and-funding-european-rearmament.

21. Tiunn, H.-I., et al. (2025, June). Drones for Democracy: U.S.-Taiwan Cooperation in Building a Resilient and China-Free UAV Supply Chain. Research Institute for Democracy, Society and Emerging Technology (DSET). https://dset.tw/en/research/drones-for-democracy-the-strategic-imperative-for-u-s-taiwan-uav-cooperation/.

22. United Nations Statistics Division. (n.d.). UN Comtrade Data Explorer: About. Retrieved January 12, 2026, from https://comtrade.un.org/labs/data-explorer/About.html; Eurostat. (n.d.). International trade statistics – background. Statistics Explained. Retrieved January 12, 2026, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_trade_statistics_-_background

> **Rotterdam effect:** the statistical distortion in which extra-EU imports are recorded in the EU Member State where goods clear customs (often a major hub like Rotterdam), while onward shipment to the final destination is recorded as intra-EU trade rather than an import by that destination country.
>
> Take Poland as an example, a plausible explanation is that Taiwan's "exports to Poland" reflects routing and customs treatment rather than final destination in Poland. Under Eurostat's trade-in-goods methodology, goods in simple transit are excluded, and goods placed in customs warehouses are not recorded as imports unless they are later released

for free circulation. If some batches moved through Poland mainly for onward delivery (e.g., to Ukraine) under transit or warehousing regimes, they may not appear in Poland's extra-EU import series. The same logic can also help explain why the Netherlands ranks unusually high in Poland's import statistics (see the import graph in Poland section, Chapter 2).

23. Observatory of Economic Complexity. (n.d.). *Mirror data.* Retrieved March 3, 2026, from https://oec.world/en/blog/mirror-data.

24. Executive Yuan (Taiwan). (2025, October 29). Developing the drone industry. https://english.ey.gov.tw/News3/9E5540D592A5FECD/07bcbd8d-3929-416e-8bfd-c2f17847cad5.

25. Tiunn et al. (2025, June). Drones for Democracy.

26. Tiunn et al. (2025, June). Drones for Democracy.

27. Ministry of National Defense, Armaments Bureau, Production and Manufacturing Center. (2025, July 22). *依採購法第 34 條第 1 項公開徵求廠商提供參考資料：無人機 (甲式) 等 5 項 (標案案號 JB15042L) [Public call for vendors to provide reference information under Article 34(1) of the Government Procurement Act: Five items including UAV (Type A) (Tender No. JB15042L)].* Government e-Procurement System (Taiwan). https://web.pcc.gov.tw/tps/tp/common/TpAppeal/query/getInitialAppealView?pkTA=NzAwNzMyNTU=.

28. Liberty Times. (2025, November 24). 國軍明年起大買 5 款 48750 架無人機有進度！軍備局 27 日辦徵商說明會 [Progress on the military's planned purchase of 48,750 drones across five types starting next year; Armaments Bureau to hold a vendor briefing on Nov. 27]. Liberty Times Net (Military Channel). https://def.ltn.com.tw/article/breakingnews/5256086; Ministry of National Defense, Armaments Bureau. (2025, July 22). Public call for vendors to provide reference information (Tender No. JB15042L); Military News Agency. (2025, August 14). 國防線上一國防自主軍備研製：打造更堅韌有力的防衛力量 [Video]. YouTube. https://www.youtube.com/watch?v=dlVGvdZUelA&t=202s.

29. Public Television Service (PTS) News. (2025, November 27). 政院拍板 1.25 兆國防特別預算草案 7 大戰備升級目標一次看 . PTS News. https://news.pts.org.tw/article/783228

30. Ministry of Economic Affairs (Taiwan). (2025, October 16). 行政院通過無人載具產業發展統籌型計畫 打造無人機之民主供應鏈 [*Executive Yuan approves a coordinated plan for uncrewed vehicle industry development, building a democratic supply chain for drones*]. https://www.moea.gov.tw/MNS/populace/news/News.aspx?kind=1&menu_id=40&news_id=120787;
Chung, L.-h., & Younger, H. (2025, October 17). Ministry pushes NT$44.2 billion drone development. Taipei Times. https://www.taipeitimes.com/News/front/archives/2025/10/17/2003845611.

31. Chung, L.-h., & Younger, H. (2025, October 17). Ministry pushes NT$44.2 billion drone development. Taipei Times. https://www.taipeitimes.com/News/front/archives/2025/10/17/2003845611

32. Tu, C.-M. (2025, November 4). *獨家》國軍擬買 635 套可攜式無人機反制系統 計畫動用 96 億特別預算 . Liberty Times.* https://def.ltn.com.tw/article/breakingnews/5234129; Ministry of Economic Affairs (Taiwan). (2025, October 16). Executive Yuan approves coordinated plan for uncrewed vehicle industry development.

33. Fang, W.-l. (2026, January 22) 國防部：採購 20 餘萬架無人機 國產優先 . Liberty Times Net (Military Channel). https://def.ltn.com.tw/article/breakingnews/5318422.

34. Huang, C.-h. (2026, January 27). Defense budget delay could stall upgrades: Koo. Taipei Times. https://www.taipeitimes.com/News/front/archives/2026/01/27/2003851276

35. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Statistics graphs and tables. Customs Administration, Ministry of Finance, Taiwan. https://web.customs.gov.tw/en/htmlList/49c3daec218f4d658aa8e76e918e3fe4

36. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Statistics graphs and tables. Customs Administration, Ministry of Finance, Taiwan. https://web.customs.gov.tw/en/htmlList/49c3daec218f4d658aa8e76e918e3fe4

37. Tiunn et al. (2025, June). Drones for Democracy; Japan UAS Industrial Development Association (JUIDA). (2025, June 4). JUIDA and TEDIBOA sign MOU at Japan Drone 2025 – Advancing peaceful use of drones and Japan–Taiwan industrial collaboration. JUIDA.

https://uas-japan.org/information/36562/; Militarnyi. (2025, September 6). Industrial associations from Ukraine and Taiwan agree on drone industry cooperation. Militarnyi. https://militarnyi.com/en/news/industrial-associations-from-ukraine-and-taiwan-agree-on-drone-industry-cooperation/; Wu, J., & Lee, C.-y. (2025, December 12). Taiwan, Poland sign drone industry MOU to build non-China supply chain. Focus Taiwan. https://focustaiwan.tw/society/202512120005/

38. Duerr, S., & Lin, T.-W. (2025, October 14). [DSET Drone Newsletter] Taipei Aerospace & Defense Technology Exhibition (TADTE) spotlights new drone partnerships; Thunder Tiger debuts into Blue UAS & NATO spurred into action, October 14, 2025. Research Institute for Democracy, Society and Emerging Technology (DSET). https://dset.tw/en/research/dset-drone-newsletter-eng1/

39. Office of the President, Republic of China (Taiwan). (2024, December 9). President Lai meets delegation led by Oklahoma Governor Kevin Stitt. Office of the President, Republic of China (Taiwan). https://english.president.gov.tw/News/6869#:~:text=Today%2C%20he%20stated%2C%20he%20is,the%20critical%20mineral%20supply%20chain

40. Liberty Times. (2025, December 13).《獨家》不只簽MOU 林佳龍證實台灣已與波蘭「合資」無人機產業 . Liberty Times. https://news.ltn.com.tw/news/politics/breakingnews/5277746

41. Wu, J.-F. (2025, September 16). 台灣無人機盛世來臨！6 家台廠搶國際訂單取代中國製造只差一個弱點？ CommonWealth Magazine. https://www.cw.com.tw/article/5137378

42. Taiwan Excellence Drone International Business Opportunities Alliance. (n.d.). About TEDIBOA. Retrieved January 13, 2026, from https://www.tediboa.com.tw/en/About

43. Lin, S. (2025, October 22). Taiwan to launch 'drone diplomacy' initiative to aid allies. Focus Taiwan. https://focustaiwan.tw/politics/202510220025

44. Basilio, K. C. L. (2025, December 28). Taiwan open to drone cooperation with PHL amid regional tensions. BusinessWorld Online. https://www.bworldonline.com/the-nation/2025/12/28/721378/taiwan-open-to-drone-cooperation-with-phl-amid-regional-tensions/#google_vignette

45. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Statistics graphs and tables. Customs Administration, Ministry of Finance, Taiwan. https://web.customs.gov.tw/en/htmlList/49c3daec218f4d658aa8e76e918e3fe4

46. Yu, H.-M. (2026, January 25). 無人機全非紅鏈 明年落實…鄭麗君訂出新目標 . 經濟日報 . https://udn.com/news/story/7238/9286856

47. Ministry of Economic Affairs (MOEA). (2025, November 20). Current status and promotion strategies of the UAV industry [Conference presentation]. Development Briefing for the Minxiong Aerospace and UAV Industrial Park, Taiwan.

48. Ministry of Economic Affairs (Taiwan). (2025, September 23). 經濟部推動「無人機關鍵晶片及模組自主開發研發補助計畫」7 家廠商共獲 3.26 億補助 加速 AI 影像晶片及飛控系統國產化 [MOEA promotes an R&D *subsidy program for indigenous development of key drone chips and modules; seven firms receive NT$326 million to accelerate localization of AI imaging chips and flight control systems*]. https://www.moea.gov.tw/MNS/Populace/news/News.aspx?kind=1&menu_id=40&news_id=120531

49. National Science and Technology Council (NSTC). (2025, January 7). 〖補助公告〗「無人機關鍵晶片及模組自主開發研發補助計畫」申請事項 . 晶創臺灣推動辦公室 . https://cbi.nstc.gov.tw/Page/2D59ED09564CB593/18cea46c-551c-4141-8ea4-deba98c0645b; Ministry of Economic Affairs (Taiwan). (2025, September 23). 經濟部推動「無人機關鍵晶片及模組自主開發研發補助計畫」7 家廠商共獲 3.26 億補助 加速 AI 影像晶片及飛控系統國產化 [MOEA promotes an R&D subsidy program for indigenous development of key drone chips and modules; seven firms receive NT$326 million to accelerate localization of AI imaging chips and flight control systems]. Ministry of Economic Affairs (MOEA). https://www.moea.gov.tw/Mns/populace/news/News.aspx?kind=1&menu_id=40&news_id=120531; Industrial Development Administration, Ministry of Economic Affairs (Taiwan). (2025, December 30). 公告「產業升級創新平台輔導計畫」主題式研發計畫－驅動國內 IC 設計業者先進發展補助計畫 . 經濟部產業發展署 . https://www.ida.gov.tw/ctlr?PRO=policy.PolicyView&id=12031; National Science and Technology Council (NSTC). (2026, January 6).

〖補助公告〗「IC 設計攻頂補助計畫」115 年度申請事項 . 晶創臺灣推動辦公室 . https://cbi.nstc.gov.tw/Page/2D59ED09564CB593/7f701fe2-1e22-4b07-8996-55aabd813057;
Ministry of Economic Affairs (Taiwan). (2026, January 30). 公告本部「無人機前瞻技術研發與國際商機加速補助計畫」115 年度計畫申請事項 . Ministry of Economic Affairs (MOEA). https://www.moea.gov.tw/MNS/Populace/news/News.aspx?kind=2&menu_id=41&news_id=121771; Industrial Innovation Platform Program Office, Industrial Development Administration (Taiwan). (2026, March 3).
〖公告〗主題式一軍民通用無人機能量籌建計畫 . 產業升級創新平台輔導計畫 (TIIP) . https://eii.nat.gov.tw/tiip/news_page.php?m=1&pk=1131

50. Duerr, S., & Lin, T.-W. (2025, October 14). [DSET Drone Newsletter] Taipei Aerospace & Defense Technology Exhibition (TADTE) spotlights new drone partnerships; Thunder Tiger debuts into Blue UAS & NATO spurred into action. Research Institute for Democracy, Society and Emerging Technology (DSET). https://dset.tw/en/research/dset-drone-newsletter-eng1/

51. Auterion. (2025, June 17). *Auterion and Taiwan's NCSIST announce strategic partnership to power next-generation defense drones.* https://auterion.com/auterion-and-taiwans-ncsist-announce-strategic-partnership-to-power-next-generation-defense-drones/; Digitimes. (2025, June 26). *Taiwan's Thunder Tiger joins forces with US Auterion to bring AI smarts to drones and unmanned vehicles across air, land, and sea. Digitimes Asia.* https://www.digitimes.com/news/a20250626PD237/thunder-tiger-defense-strategic-partnership-taiwan-2025.html;
Sysgration. (n.d.). *Sysgration partners with Vantage Robotics to advance smart drone applications in inspection and public safety.* AMD Sysgration. https://amd.sysgration.com/en/news-events/newsletter/334-sysgration-partners-with-vantage-robotics-to-advance-smart-drone-applications-in-inspection-and-public-safety;
中央社 [Central News Agency]. (2025, September 3). *台灣與波蘭、烏克蘭業者簽 MOU 深化無人機合作* [Taiwan signs MOU with Polish and Ukrainian firms to deepen drone cooperation]. CNA. https://www.cna.com.tw/news/aipl/202509030309.aspx;
Shield AI. (2025, September 11). *Shield AI and AIDC sign teaming agreement to advance Taiwan's defense capabilities.* https://shield.ai/shield-ai-and-aidc-sign-teaming-agreement-to-advance-taiwans-defense-capabilities/;

Quantum Systems. (2025, September 10). *Quantum Systems partners with Sysgration.* https://quantum-systems.com/news/quantum-systems-partners-with-sysgration/;
Tekever. (2025, September 26). *TEKEVER and Apex partner to deliver advanced ISR drone capabilities to Taiwan.* https://www.tekever.com/news/tekever-and-apex-partner-to-deliver-advanced-isr-drone-capabilities-to-taiwan/;
聯合報 [United Daily News]. (2025, September 18). *益捷 打造國產無人機完整供應鏈* . 經濟日報 [Economic Daily News]. https://money.udn.com/money/story/11799/9011937;
聯合報 [United Daily News]. (2025, September 18). *方案諮詢 全球無人機產業最佳合作夥伴* . 經濟日報 [Economic Daily News]. https://money.udn.com/money/story/11799/9011811;
AeroVironment. (2025, September 18).
AV signs strategic partnership with Taiwan's National Chung-Shan Institute of Science and Technology. https://www.avinc.com/resources/press-releases/view/av-signs-strategic-partnership-with-taiwans-national-chung-shan-institute-of-science-and-technology;
Anduril. (2025, August 5). Anduril expands commitment to Taiwan with new capabilities, partnerships and local investment. https://www.anduril.com/article/anduril-expands-commitment-to-taiwan-with-new-capabilities-partnerships-and-local-investment/;
Focus Taiwan. (2025, September 19). *NCSIST signs defense deals with six foreign firms.* https://focustaiwan.tw/politics/202509190009; Northrop Grumman. (2025, September 18). *Northrop Grumman and NCSIST sign MOU to collaborate on air and missile defense capabilities.* https://news.northropgrumman.com/partnerships/Northrop-Grumman-and-NCSIST-Sign-MOU-to-Collaborate-on-Air-and-Missile-Defense-Capabilities;
Northrop Grumman. (2025, September 19). Northrop Grumman teams with industry partners to deliver advanced radar to Taiwan. https://news.northropgrumman.com/partnerships/Northrop-Grumman-Teams-with-Industry-Partners-to-Deliver-Advanced-Radar-to-Taiwan;
中央社 [Central News Agency]. (2025, September 19). *漢翔結盟美國 MAXAR　提升無人機精準飛行 CNA*. https://www.cna.com.tw/news/afe/202509190219.aspx;
Abonmax. (2025, September 18). *【航太展搶先報】銘旺科技引領無人系統新紀元 邁向國際* . https://www.abonmax.com.tw/index.php?route=news/news_detail&news_id=52;
聯合報 [United Daily News]. (2025, September 20).. 經濟日報 [Economic Daily News]. https://money.udn.com/money/story/5635/9017722;
AIDC [Aerospace Industrial Development Corporation]. (2025, September 20). https://www.aidc.com.tw/tw/news/623;

豐兆航太聯手美廠　共創無人機系統新時代 . https://money.udn.com/money/story/5635/9017722;
錦明實業 [Jiin Ming Industry Co., Ltd.]. (2025, September 19). *產業領袖見證，錦明實業簽署國際合作 MOU* [Industry leaders witness Jiin Ming Industry sign international cooperation MOU]. https://jmg.com.tw/%e7%94%a2%e6%a5%ad%e9%a0%98%e8%a2%96%e8%a6%8b%e8%ad%89-%e9%8c%a6%e6%98%8e%e5%af%a6%e6%a5%ad%e7%b0%bd%e7%bd%b2%e5%9c%8b%e9%9a%9b%e5%90%88%e4%bd%9c-mou/;
PISB [Polska Izba Systemów Bezzałogowych / Polish Chamber of Unmanned Systems]. (2025, September). *Memorandum of understanding between companies from Poland and Taiwan*. https://pisb.pl/en/memorandum-of-understanding-between-companies-from-poland-and-taiwan/; Space Chiayi. (2025, September 19). *台北航太展四方簽署 MOU 德國萊因助台無人機飛歐洲市場* . https://spacechiayi.tw/?p=3066;
錦明實業 [Jiin Ming Industry Co., Ltd.]. (2025, September 21). *錦明實業拓展歐洲版圖，攜手波蘭 Poltaiw Apex* [Jiin Ming Industry expands European territory, partners with Poland's Poltaiw Apex]. https://jmg.com.tw/%e9%8c%a6%e6%98%8e%e5%af%a6%e6%a5%ad%e6%8b%93%e5%b1%95%e6%ad%90%e6%b4%b2%e7%89%88%e5%9c%96-%e6%94%9c%e6%89%8b%e6%b3%a2%e8%98%ad-poltaiw-apex/

52. Lin, S. (2025, October 22). Taiwan to launch 'drone diplomacy' initiative to aid allies. Focus Taiwan. https://focustaiwan.tw/politics/202510220025

53. Lin, S. (2025, October 22). Taiwan to launch 'drone diplomacy' initiative to aid allies. Focus Taiwan.

54. Auterion. (2025, June 17). Auterion and Taiwan's NCSIST *announce strategic partnership to power next-generation defense drones* [Press release]. https://auterion.com/auterion-and-taiwans-ncsist-announce-strategic-partnership-to-power-next-generation-defense-drones/;
AeroVironment, Inc. (2025, September 18). *AV signs strategic partnership with Taiwan's National Chung-Shan Institute of Science and Technology*. https://www.avinc.com/resources/press-releases/view/av-signs-strategic-partnership-with-taiwans-national-chung-shan-institute-of-science-and-technology;

Central News Agency. (2025, September 18). *美評台灣 18 個月可建置遊蕩彈藥供應鏈 韓國 24 個月* [U.S. assessment: Taiwan could build a loitering-munitions supply chain in 18 months; South Korea in 24 months]. Central News Agency (CNA). https://www.cna.com.tw/news/aipl/202509180285.aspx;
Liberty Times. (2025, September 18). *中科院、MARTAC 簽合作 MoU M18/T18 無人艇有望引進台灣* [NCSIST signs an MoU with MARTAC; M18/T18 unmanned surface vessels may be introduced to Taiwan]. Liberty Times Net (Military Channel). https://def.ltn.com.tw/article/breakingnews/5182580;
Liberty Times. (2025, December 9). *攻擊範圍可達 1000 公里 「勁蜂四號」無人機明年一月在美測試* [Attack range up to 1,000 km; "Mighty Hornet IV" UAV to be tested in the U.S. in January next year]. Liberty Times Net (Military Channel). https://def.ltn.com.tw/article/breakingnews/5272171;
游凱翔 . (2025, September 18). *中科院導入彩帶火箭彈結合反無人機系統 年底九鵬驗證* [NCSIST introduces "Interceptor UX" streamer rockets integrated with a counter-drone system; verification at Jiupeng by year-end]. Central News Agency (CNA). https://www.cna.com.tw/news/aipl/202509180273.aspx;
Wu, J.-h. (2025, December 12). 台灣無人機聯盟推動與波蘭合作 打造非紅供應鏈 . 經濟日報 . https://money.udn.com/money/story/5612/9198589;
Space Chia Yi. (2025, September 19). 台北航太展四方簽署 MOU 德國萊因助台無人機飛歐洲市場 . 亞洲無人機 AI 創新應用研發中心 . https://spacechiayi.tw/?p=3066; Economic Daily News. (2025, June 4). 台灣無人機聯盟與日產業協會簽備忘錄整合供應鏈 . 經濟日報 . https://money.udn.com/money/story/5612/8784826;
Taiwan Excellence Drone International Business Opportunities Alliance (TEDIBOA). (2025, March 25). 經濟部指導工研院促成台日合作 台灣無人機聯盟跨入日本市場 . TEDIBOA. https://www.tediboa.com.tw/News/Article/49;
Militarnyi. (2025, September 6). Industrial associations from Ukraine and Taiwan agree on drone industry cooperation. Militarnyi. https://militarnyi.com/en/news/industrial-associations-from-ukraine-and-taiwan-agree-on-drone-industry-cooperation/

55. 蔡智明 . (2025, October 20). *推動無人機產業發展 嘉縣將成研發與製造中心* [Promoting drone industry development; Chiayi County to become an R&D and manufacturing hub]. Central News Agency (CNA). https://www.cna.com.tw/news/aipl/202510200074.aspx

56. 方瑋立 . (2024, October 23). *民雄園區 2026 年投產軍規無人機 用 AI 算力、氫儲能電網向產業招手* [Minxiong park to start producing military-grade drones in 2026, offering AI compute and hydrogen energy storage microgrid to attract industry]. Liberty Times Net (Military Channel). https://def.ltn.com.tw/article/breakingnews/4839851

57. 潘智義 . (2025, September 22). *雷虎自殺無人機獲美 Blue UAS 認證 搶攻國內外標案* [Thunder Tiger's FPV loitering munition receives U.S. Blue UAS certification, targeting domestic and overseas tenders]. Central News Agency (CNA). https://www.cna.com.tw/news/afe/202509220039.aspx;
Defense Contract Management Agency. (n.d.). Blue UAS cleared and select lists (Retrieved January 13, 2026). https://bluelist.appsplatformportals.us/Cleared-List/

58. Association for Uncrewed Vehicle Systems International. (2026, January 28). AUVSI and Taiwan's ITRI sign agreement in Washington, DC as ITRI joins Green UAS program as recognized cybersecurity assessor. AUVSI. https://www.auvsi.org/news/auvsi-and-taiwans-itri-sign-agreement-in-washington-dc-as-itri-joins-green-uas-program-as-recognized-cybersecurity-assessor/;
Association for Uncrewed Vehicle Systems International. (n.d.). Green UAS. AUVSI. https://www.auvsi.org/certification-training/green-uas/

59. Association for Uncrewed Vehicle Systems International. (n.d.). Green UAS. AUVSI. https://www.auvsi.org/certification-training/green-uas/

60. Federal Communications Commission. (2026, January 7). FCC updates covered list to exempt certain drones from restrictions, releases additional FAQs. Federal Communications Commission. https://www.fcc.gov/document/fcc-updates-covered-list-exempt-certain-drones-and-releases-faqs

61. 陳儷方 . (2025, May 29). *漢翔成為台灣首家獲得美國防部 CMMC Level2 認證廠商* [AIDC becomes Taiwan's first firm to obtain U.S. DoD CMMC Level 2 certification]. Economic Daily News. https://money.udn.com/money/story/5612/8773540;
U.S. Department of Defense, Office of the Chief Information Officer. (n.d.). *Cybersecurity Maturity Model Certification (CMMC): Model* (Retrieved January 13, 2026). https://dodcio.defense.gov/CMMC/Model/

62. 王敬 . (2025, December 1). 軍用商規無人機「這原因」無法出口 顧立雄：國安會應進行跨部會協調 ["Because of this reason," military-grade commercial-spec drones cannot be exported; Wellington Koo: The National Security Council should coordinate across ministries]. 上報 . https://www.upmedia.mg/tw/focus/politics/246156

63. Yu, H., & Thompson, J. (2025, November 30). *New rules for Taiwanese drone sellers, importers to take effect Monday.* Focus Taiwan. https://focustaiwan.tw/society/202511300017

64. Central News Agency. (2025, November 17). *經部修正出口管制清單 新增先進半導體設備等 3 類* [MOEA revises export control list, adding three categories including advanced semiconductor equipment]. Central News Agency (CNA). https://www.cna.com.tw/news/afe/202511170111.aspx

65. Central News Agency. (2023, December 26). *防家電類晶片變武器 經部擴大管制 45 項貨品銷往兩俄* [To prevent household-type chips from becoming weapons, MOEA expands controls on 45 items exported to Russia and Belarus]. Central News Agency (CNA). https://www.cna.com.tw/news/ahel/202312260364.aspx

66. Ministry of Defence (United Kingdom). (2024, February 15). *UK and Latvia launch industry competition to provide thousands of drones for Ukraine*. GOV.UK. https://www.gov.uk/government/news/uk-and-latvia-launch-industry-competition-to-provide-thousands-of-drones-for-ukraine

67. Ministry of Defence (United Kingdom). (2025, January 10). *30,000 new drones for Ukraine in boost to European security. GOV.UK.* https://www.gov.uk/government/news/30000-new-drones-for-ukraine-in-boost-to-european-security;
Public Broadcasting of Latvia (LSM). (2025, January 10). *Drone coalition led by Latvia and UK to send 30,000 drones to Ukraine. LSM.lv.* https://eng.lsm.lv/article/society/defense/10.01.2025-drone-coalition-led-by-latvia-and-uk-to-send-30000-drones-to-ukraine.a583244/

68. Government of the Netherlands. (2025, November 20). *Minister Brekelmans announces new drone action plan for Ukraine.* Netherlandsandyou.nl. https://www.netherlandsandyou.nl/web/ukraine/w/minister-brekelmans-announces-new-drone-action-plan-for-ukraine

69. North Atlantic Treaty Organization (NATO). (n.d.). *Strengthening NATO's eastern flank.* Retrieved January 13, 2026, from https://www.nato.int/en/what-we-do/deterrence-and-defence/strengthening-natos-eastern-flank;
Pancevski, B. (2021, November 9). *Europe weighs border walls as migrants mass in Belarus at Poland's frontier. The Wall Street Journal.* https://www.wsj.com/world/europe/europe-weighs-border-walls-as-migrants-mass-in-belarus-at-polands-frontier-11636649364

70. Radio Free Europe/Radio Liberty. (2024, January 5). *Baltic countries plan 'drone wall' as part of NATO border security.* https://www.rferl.org/a/drones-baltics-nato-wall-security-bilotaite/32962679.html;
LRT English. (2024, May 29). *Baltic states denied EU funding for 'drone wall' to protect border.* Lithuanian National Radio and Television (LRT). https://www.lrt.lt/en/news-in-english/19/2530388/baltic-states-denied-eu-funding-for-drone-wall-to-protect-border

71. Desmarais, A. (2025, September 30). Which countries in Europe have spotted suspicious drones in their airspace? Euronews. https://www.euronews.com/next/2025/09/30/which-countries-in-europe-have-spotted-suspicious-drones-in-their-airspace

72. Ministry of Defence of the Republic of Estonia. (2024, November 28). *Estonia to invest over €10 billion in defence from 2026 to 2029.* https://www.kaitseministeerium.ee/en/news/estonia-invest-over-eu10-billion-defence-2026-2029;
Ministry of Defence of the Republic of Latvia. (2025, May 7). *€20 million defence investment for the development of drone capability.* https://www.mod.gov.lv/en/news/20-million-defence-investment-development-drone-capability;

Ministry of National Defence of the Republic of Lithuania. (2025, June 19). *Ministry of National Defence purchases different types of unmanned aerial vehicles.* https://kam.lt/en/ministry-of-national-defence-purchases-different-types-of-unmanned-aerial-vehicles/;
TVN24. (2025, February 27). Poland buys American MQ-9B SkyGuardian drones for PLN 1.2 billion. https://tvn24.pl/tvn24-news-in-english/poland-buys-american-mq-9b-skyguardian-drones-for-pln-1-2-bn-st8219965;
Czech Fiscal Council. (2025, September 17). *Statement of the Czech Fiscal Council on the current and expected work on the state budget for 2026 – the process of its preparation and the outlook for public finances in the coming years.* https://www.rozpoctovarada.cz/en/publikace/statement-of-the-czech-fiscal-council-on-the-current-and-expected-work-on-the-state-budget-for-2026-the-process-of-its-preparation-and-the-outlook-for-public-finances-in-the-coming-years/;
Ukrainian National News (UNN). (2025, August 13). *Germany invests €100 million in drone defense technologies.* https://unn.ua/en/news/germany-invests-euro100-million-in-drone-defense-technologies;
Ministère des Armées (France). (2023, April 6). *Loi de programmation militaire 2024-2030 : grandes orientations [Military Programming Law 2024-2030: Main orientations].* https://www.defense.gouv.fr/ministere/politique-defense/loi-programmation-militaire-2024-2030/loi-programmation-militaire-2024-2030-grandes;
Ministry of Defence (United Kingdom). (2024, November 20). *New UK strategy to deliver drones to the armed forces.* GOV.UK. https://www.gov.uk/government/news/new-uk-strategy-to-deliver-drones-to-armed-forces;
Reuters. (2024, January 19). *Denmark sets aside $400 million for drone surveillance in the Arctic and North Atlantic. Reuters.* https://www.reuters.com/world/europe/denmark-sets-aside-400-mln-drone-surveillance-arctic-north-atlantic-2024-01-19/

73. Ministry of Defence of the Republic of Estonia. (2024, November 28). *Estonia to invest over €10 billion in defence from 2026 to 2029.* https://www.kaitseministeerium.ee/en/news/estonia-invest-over-eu10-billion-defence-2026-2029

74. Ministry of Defence (United Kingdom). (2024, November 20). *New UK strategy to deliver drones to the armed forces. GOV.UK*. https://www.gov.uk/government/news/new-uk-strategy-to-deliver-drones-to-armed-forces

75. Defence Industry Europe. (2025, April 24). European Union agrees on €1.5 billion defence industry programme to support readiness and Ukraine. *Defence Industry Europe*. https://defence-industry.eu/european-union-agrees-on-e1-5-billion-defence-industry-programme-to-support-readiness-and-ukraine/?utm_source=chatgpt.com

76. Institut de Relations Internationales et Stratégiques (IRIS). (2024). *The involvement of third-country entities in EU defence industrial policies and the European Design Authority concept.* https://www.iris-france.org/en/the-involvement-of-third-country-entities-in-eu-defence-industrial-policies-and-the-european-design-authority-concept/

77. European Commission. (2024, March 5). *First-ever European Defence Industrial Strategy to enhance Europe's readiness and security.* https://commission.europa.eu/news-and-media/news/first-ever-european-defence-industrial-strategy-enhance-europes-readiness-and-security-2024-03-05_en; European Commission, & High Representative of the Union for Foreign Affairs and Security Policy. (2024). *Joint communication on the European Defence Industrial Strategy (EDIS).* https://defence-industry-space.ec.europa.eu/edis-joint-communication_en

78. European Commission. (2022, November 29). *A Drone Strategy 2.0 for Europe to foster sustainable and smart mobility*. Retrieved January 13, 2026, from https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13046-A-Drone-strategy-20-for-Europe-to-foster-sustainable-and-smart-mobility_en

79. European Commission. (2022, November 29). *A Drone Strategy 2.0 for Europe to foster sustainable and smart mobility.*

80. European Commission. (2025, March 12). *Introducing the White Paper for European Defence and the ReArm Europe Plan/Readiness 2030.* Defence Industry and Space. https://defence-industry-space.ec.europa.eu/eu-defence-industry/white-paper-european-defence-readiness-2030_en

81. European Commission, & High Representative of the Union for Foreign Affairs and Security Policy. (2025, October 16). Preserving peace: Defence readiness roadmap 2030 (JOIN(2025) 27 final). https://defence-industry-space.ec.europa.eu/document/download/9db42c04-15c2-42e1-8364-60afb0073e68_en?filename=Joint-Communication%20_Defence-Readiness-Roadmap-2030.pdf

82. European Commission, & High Representative of the Union for Foreign Affairs and Security Policy. (2025, October 16). Preserving peace: Defence readiness roadmap 2030 (JOIN(2025) 27 final).

83. European Parliamentary Research Service (EPRS). (2025). *EU defence industrial strategy and defence industrial readiness* (Briefing No. ATA(2025)777962). European Parliament. https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2025)777962

84. European Commission. (2025, May 27). *SAFE: Security Action for Europe*. Retrieved January 13, 2026, from https://defence-industry-space.ec.europa.eu/eu-defence-industry/safe-security-action-europe_en;
European Commission. (n.d.). *European Defence Industry Programme (EDIP)*. Retrieved January 13, 2026, from https://defence-industry-space.ec.europa.eu/eu-defence-industry/edip-dedicated-programme-defence_en

85. Tamma, P. (2024, April 3). *Ursula von der Leyen's "drone wall" plan crashes into EU reality. Politico Europe*. https://www.politico.eu/article/ursula-von-der-leyen-drone-wall-plan-crash-eu-reality/

86. European Parliament. (2026, January 22). Drones and new systems of warfare – the EU's need to adapt to be fit for today's security challenges. European Parliament. https://www.europarl.europa.eu/doceo/document/TA-10-2026-0020_EN.html

87. European Parliament. (2026, January 22). Drones and new systems of warfare – the EU's need to adapt to be fit for today's security challenges.

88. Focus Taiwan. (2024, September 24). *Taiwan to join U.S.-led initiative to tackle weapons supply constraints. Focus Taiwan.* https://focustaiwan.tw/politics/202409240023

89. U.S. Congress. (2025). *S.2296 – 119th Congress: A bill to enhance U.S. unmanned* systems capabilities. https://www.congress.gov/bill/119th-congress/senate-bill/1071/text

90. The White House. (2025, June 6). *Unleashing American drone dominance.* https://www.whitehouse.gov/presidential-actions/2025/06/unleashing-american-drone-dominance/

91. U.S. Department of Defense. (2025, July 10). *Unleashing U.S. military drone dominance* [PDF]. https://media.defense.gov/2025/Jul/10/2003752117/-1/-1/1/UNLEASHING-U.S.-MILITARY-DRONE-DOMINANCE.PDF

92. Ignatius, D. (2024, June 10). *A U.S. military plan for turning Taiwan into a "hellscape" to deter China. The Washington Post.* https://www.washingtonpost.com/opinions/2024/06/10/taiwan-china-hellscape-military-plan/

93. Liberty Times. (2025, December 8). 雷虎:參與美無人機優勢計畫 10 億美元標案 [Thunder Tiger: Participating in a US$1 billion U.S. drone advantage program tender]. *Liberty Times Net (Business).* https://ec.ltn.com.tw/article/breakingnews/5271149;
Defense Contract Management Agency. (n.d.). Blue UAS cleared and select lists (Retrieved January 13, 2026). https://bluelist.appsplatformportals.us/Cleared-List/

94. European Commission. (2025). *Commission Implementing Decision C(2025) 2264* [PDF]. https://transport.ec.europa.eu/document/download/a34a879c-2201-4f71-b12a-8b1a3b7f6ba2_en?filename=C(2025)2264.pdf

95. European Commission. (2026, February 11). Action Plan on Drone and Counter Drone Security. Shaping Europe's digital future. https://digital-strategy.ec.europa.eu/en/library/action-plan-drone-and-counter-drone-security;
European Parliament. (2026, January 22). Drones and new systems of warfare – the EU's need to adapt to be fit for today's security challenges. European Parliament.

96. Federal Communications Commission. (2025). *DA 25-1086: Authorization related to unmanned aircraft systems* [PDF].
https://docs.fcc.gov/public/attachments/DA-25-1086A1.pdf

97. Central European Times. (2024, November 25). Poland, Latvia, Lithuania ink drone MOUs with Taiwan. Central European Times. https://centraleuropeantimes.com/poland-latvia-lithuania-ink-drone-mous-with-taiwan/;
Staff writer, with CNA. (2024, November 21). Taiwan, Latvia sign MOU on drone industry cooperation. Taipei Times.
https://www.taipeitimes.com/News/taiwan/archives/2024/11/21/2003827272;
BNS. (2024, November 21). Lithuanians and Taiwanese eye joint opportunities to develop drone tech. LRT. https://www.lrt.lt/en/news-in-english/19/2419773/lithuanians-and-taiwanese-eye-joint-opportunities-to-develop-drone-tech;
Focus Taiwan. (2025, February 22). Taiwan to team up with Czechia, Poland in drone production. *Focus Taiwan*. https://focustaiwan.tw/business/202502220006;
Focus Taiwan. (2025, May 8). Taiwan, Estonia sign MOUs on aerospace, defense collaboration. Focus Taiwan. https://focustaiwan.tw/politics/202505080007

98. Šimalčík, M. (2024). *Partners in need, partners indeed: Europe-Taiwan relations*. Central European Institute of Asian Studies (CEIAS).
https://ceias.eu/partners-in-need-partners-indeed-europe-taiwan-relations/

99. DSET interview with C, D, and I.

100. Focus Taiwan.(2025, September 3). Taiwan signs MOU on drone cooperation with Poland, Ukraine. *Focus Taiwan*.

101. Chiu, Y. (2024, November 18). Exclusive: Not just an MOU—Lin Chia-lung confirms Taiwan and Poland have established a drone industry joint venture [獨家／不只簽 MOU！林佳龍證實台灣已與波蘭「合資」無人機產業]. Yahoo News Taiwan. https://tw.news.yahoo.com/%E7%8D%A8%E5%AE%B6-%E4%B8%8D%E5%8F%AA%E7%B0%BDmou-%E6%9E%97%E4%BD%B3%E9%BE%8D%E8%AD%89%E5%AF%A6%E5%8F%B0%E7%81%A3%E5%B7%B2%E8%88%87%E6%B3%A2%E8%98%AD-%E5%90%88%E8%B3%87-%E7%84%A1%E4%BA%BA%E6%A9%9F%E7%94%A2%E6%A5%AD-041652715.html

102. Focus Taiwan. (2025, February 22). Taiwan to team up with Czechia, Poland in drone production. Focus Taiwan. https://focustaiwan.tw/business/202502220006;
Liberty Times. (2024, November 17). 彭博：波蘭避免用中國製零件 成為台灣無人機最大買家 [Bloomberg: Poland avoids China-made parts, becomes Taiwan's biggest drone buyer]. *Liberty Times Net (Military Channel)*. https://def.ltn.com.tw/article/breakingnews/5190868;
Taipei Times. (2025, September 26). Poland becomes biggest buyer of Taiwan drones. Taipei Times. https://www.taipeitimes.com/News/taiwan/archives/2025/09/26/2003844456

103. J-Max. (2024, November 17). J-Max expands European footprint, partners with Poland's Pol-Taiwan and APEX [錦明實業拓展歐洲版圖 攜手波蘭 PolTaiwan、APEX]. J-Max Group. https://jmg.com.tw/%e9%8c%a6%e6%98%8e%e5%af%a6%e6%a5%ad%e6%8b%93%e5%b1%95%e6%ad%90%e6%b4%b2%e7%89%88%e5%9c%96-%e6%94%9c%e6%89%8b%e6%b3%a2%e8%98%ad-poltaiw-apex/;
The Economist. (2026, March 12). Taiwan's bid to export drones free of Chinese parts is taking off. The Economist. https://www.economist.com/asia/2026/03/12/taiwans-bid-to-export-drones-free-of-chinese-parts-is-taking-off

104. Customs Administration, Ministry of Finance, Taiwan. (n.d.). Trade statistics database / Statistics database query [Data set]. Retrieved February 17, 2026, from https://portal.sw.nat.gov.tw/APGA/GA30E

105. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database; Eurostat. (n.d.). *International trade in goods statistics—Frequently asked questions* [PDF]. European Commission. https://ec.europa.eu/eurostat/comext/newxtweb/downloadobject.do?disposition=attachment&filenameOut=International+trade+in+goods+statistics+_+FAQ.pdf&keepsessionkey=true&mimeType=application%2Fpdf&objectID=507839809&objectType=LOB

106. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

107. Duerr, Samara. (2026, April). Drone Superpower: *Ukraine's UAV Success and Where Taiwan-Ukraine Cooperation Fits In*. Research Institute for Democracy, Society and Emerging Technology (DSET); DSET interview with D and E.

108. DSET interview with D and E.

109. DSET interview with D and E.

110. Ministry of National Defence of Poland. (2023). Announcement No. 2 for the acquisition of technical solutions in the domain of unmanned aerial combat systems. Government of Poland. https://www.gov.pl/web/national-defence/announcement-no-2-for-the-acquisition-of-technicalsolutions-in-the-domain-of-unmanned-aerial-combatsystems

111. Ministry of National Defence of Poland. (2021, May 22). Bayraktar TB2 unmanned aerial vehicles [Bezzałogowce Bayraktar TB2]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/bezzalogowce-bayraktar-tb2; Ministry of National Defence of Poland. (2022, October 20). MQ-9B SkyGuardian unmanned aerial vehicles [Bezzałogowce MQ-9B SkyGuardian]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/bezzalogowce-mq-9b-skyguardian; Ministry of National Defence of Poland. (2022, May 6). Artillery regiments will receive Gladius drones [Pułki artylerii otrzymają drony Gladius]. Government of Poland.

https://www.gov.pl/web/obrona-narodowa/pulki-artylerii-otrzymaja-drony-gladius;
Ministry of National Defence of Poland. (2023, December 15). By the end of the year, the army will receive the latest versions of FlyEye drones [Do końca roku wojsko otrzyma najnowsze wersje bezzałogowców FlyEye]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/do-konca-roku-wojsko-otrzyma-najnowsze-wersje-bezzalogowcow-flyeye;
Ministry of National Defence of Poland. (2022, April 29). Warmate loitering ammunition for the Polish Army [Amunicja krążąca WARMATE dla Wojska Polskiego]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/amunicja-krazaca-warmate-dla-wojska-polskiego2; Ministry of National Defence of Poland. (2024, September 5). More drones for Polish Army soldiers [Kolejne drony dla żołnierzy Wojska Polskiego]. Government of Poland. https://www.gov.pl/web/obrona-narodowa/kolejne-drony-dla-zolnierzy-wojska-polskiego

112. Shatz, H. J. (2024). The Polish defense sector and the development of the Polish industrial base. RAND Corporation. https://www.rand.org/pubs/research_reports/RRA2971-1.html;
International Trade Administration. (2024, May 14). Poland aerospace and defense: Military drone force established. U.S. Department of Commerce. https://www.trade.gov/market-intelligence/poland-aerospace-and-defense-military-drone-force-established

113. Sillero Illanes, C., Rogalski, T., De Cubber, G., & Kowalik, M. (2025). Case study of the drone ecosystem of Podkarpackie (Poland) (JRC143402; EUR 40566). Publications Office of the European Union. https://publications.jrc.ec.europa.eu/repository/handle/JRC143402

114. Mazowieckie Voivodeship Office. (2023). Presentation of drones for the State Fire Service [Prezentacja dronów Państwowej Straży Pożarnej]. Government of Poland. https://www.gov.pl/web/uw-mazowiecki/prezentacja-dronow-panstwowej-strazy-pozarnej;
District Headquarters of the State Fire Service in Czarnków. (2023). Handover of a drone to OSP Trzcianka [Przekazanie drona do OSP Trzcianka]. Government of Poland. https://www.gov.pl/web/kppsp-czarnkow/przekazanie-drona-do-osp-trzcianka;

Municipal Headquarters of the State Fire Service in Wałbrzych. (2023). Modern drones for Wałbrzych firefighters [Nowoczesne drony dla wałbrzyskich strażaków]. Government of Poland. https://www.gov.pl/web/kmpsp-walbrzych/nowoczesne-drony-dla-walbrzyskich-strazakow;
District Headquarters of the State Fire Service in Strzelce Krajeńskie. (2024). New operational and preventive vehicle equipped with an unmanned aerial vehicle for the KP PSP in Strzelce Krajeńskie [Nowy samochód do celów operacyjno-prewencyjnych wyposażony w bezzałogowy statek powietrzny z osprzętem dla Komendy Powiatowej PSP w Strzelcach Krajeńskich]. Government of Poland. https://www.gov.pl/web/kppsp-strzelce-krajenskie/nowy-samochod-do-celow-operacyjno---prewencyjnych-wyposazony-w-bezzalogowy-statek-powietrzny-z-osprzetem-dla-komendy-powiatowej-psp-w-strzelce-krajenskie

115. Shatz, H. J. (2025, September 24). Missiles, markets, and mutual interests: Poland and South Korea's defense partnership. RAND Blog. https://www.rand.org/pubs/commentary/2025/09/missiles-markets-and-mutual-interests-poland-and-south.html

116. DSET interview with D and E.

117. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

118. Šimalčík, M. (2024). *Partners in need, partners indeed: Europe-Taiwan relations*. Central European Institute of Asian Studies (CEIAS).

119. Ministry of National Defence of Lithuania. (2024, May 22). The Government approved draft Law on Defence and Security Industry. Government of Lithuania. https://kam.lt/en/the-government-approved-draft-law-on-defence-and-security-industry/;

Ministry of National Defence of Lithuania. (2024, June 5). The Government established lists of states posing a threat to national security and the most sensitive IT equipment and services [Vyriausybė nustatė grėsmę nacionaliniam saugumui keliančių valstybių bei jautriausių informacinių technologijų įrangos bei paslaugų sąrašus].
Government of Lithuania.
https://kam.lt/vyriausybe-nustate-gresme-nacionaliniam-saugumui-kelianciu-valstybiu-bei-jautriausiu-informaciniu-technologiju-irangos-bei-paslaugu-sarasus/

120. DSET interview with A.

121. DSET interview with A and K.

122. Legislative Yuan. (2024). Bill details: Draft amendment to Article 26 of the Defense Industry Development Act [草案案號：311103189340000；國防產業發展條例第二十六條條文修正草案]. Legislative Yuan, Republic of China (Taiwan).
https://ppg.ly.gov.tw/ppg/bills/311103189340000/details

123. LRT English. (2024, November 25). Lithuanians and Taiwanese eye joint opportunities to develop drone tech. Lithuanian National Radio and Television.
https://www.lrt.lt/en/news-in-english/19/2419773/lithuanians-and-taiwanese-eye-joint-opportunities-to-develop-drone-tech

124. Kazlų Rūda Municipality. (2024, June 17). 8 million Euro investment in drone parts factory in Kazlų Rūda [Kazlų Rūdoje – 8 mln. investicija į dronų dalių gamyklą].
https://www.kazluruda.lt/gyventojams/naujienos/2/kazlu-rudoje-8-mln.-investicija-i-dronu-daliu-gamykla:2089;
Aerospace Industrial Development Corporation (AIDC). (2024, October 21). AIDC and Lithuania's RSI Europe sign MOU to collaborate on FPV drone technology [漢翔與立陶宛 RSI Europe 公司簽署 MOU 展開無人機合作]. https://www.aidc.com.tw/tw/news/603

125. DSET interview with E.

126. DSET interview with D and E.

127. DSET interview with A.

128. Public Procurement Office of Lithuania. (2024). Unreliable suppliers list [Nepatikimi tiekėjai]. Government of Lithuania. https://vpt.lrv.lt/lt/nuorodos/kiti-duomenys/powerbi/nepatikimi-tiekejai-1/;
Ministry of National Defence of Lithuania. (2024, September 18). Lithuanian-made military equipment to serve the needs of Lithuania and Ukraine. Government of Lithuania. https://kam.lt/en/lithuanian-made-military-equipment-to-serve-the-needs-of-lithuania-and-ukraine/;
Ministry of National Defence of Lithuania. (2024, October 10). Pre-trial investigation initiated by the Ministry of National Defence regarding the acquisition of non-compliant drones [Krašto apsaugos ministerijos iniciatyva pradėtas ikiteisminis tyrimas dėl reikalavimų neatitinkančių dronų įsigijimo]. Government of Lithuania. https://kam.lt/krasto-apsaugos-ministerijos-iniciatyva-pradetas-ikiteisminis-tyrimas-del-reikalavimu-neatitinkanciu-dronu-isigijimo/

129. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

130. Ministry of National Defence of Lithuania. (2024, September 18). Drones produced in Lithuania will strengthen the capabilities of the Lithuanian and Ukrainian armies [Lietuvos ir Ukrainos kariuomenių pajėgumus stiprins Lietuvoje gaminti dronai]. Government of Lithuania. https://kam.lt/lietuvos-ir-ukrainos-kariuomeniu-pajegumus-stiprins-lietuvoje-gaminti-dronai/

131. Ministry of National Defence of Lithuania. (2024, July 2). The Ministry of National Defence is purchasing various types of drones [Krašto apsaugos ministerija perka įvairių tipų dronų]. Government of Lithuania. https://kam.lt/krasto-apsaugos-ministerija-perka-ivairiu-tipu-dronu/

132. Ministry of National Defence of Lithuania. (2024, July 2). The Ministry of National Defence is purchasing various types of drones [Krašto apsaugos ministerija perka įvairių tipų dronų]. Government of Lithuania.

133. Ministry of National Defence of Lithuania. (2024, September 18). Drones produced in Lithuania will strengthen the capabilities of the Lithuanian and Ukrainian armies [Lietuvos ir Ukrainos kariuomenių pajėgumus stiprins Lietuvoje gaminti dronai]. Government of Lithuania. https://kam.lt/lietuvos-ir-ukrainos-kariuomeniu-pajegumus-stiprins-lietuvoje-gaminti-dronai/

134. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved February 15, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

135. DSET interview with A.

136. DSET interview with F and K.

137. DSET interview with D and E.

138. DSET interview with K.

139. DSET interview with K.

140. National Science and Technology Council (NSTC). (2025, May 22). *Taiwan and Czechia launch call for joint R&D projects.* Government of the Republic of China (Taiwan). https://www.nstc.gov.tw/czech/en/detail/b89089e0-b577-4d10-a835-3e9362f77293; Legislative Yuan. (2024). *Bill details: Draft amendment to Article 26 of the Defense Industry Development Act* [草案案號：311103189340000；國防產業發展條例第二十六條條文修正草案]. Legislative Yuan, Republic of China (Taiwan). https://ppg.ly.gov.tw/ppg/bills/311103189340000/details; Focus Taiwan. (2025, February 22). Taiwan to team up with Czechia, Poland in drone production [台灣將與捷克、波蘭合作無人機生產]. Focus Taiwan. https://focustaiwan.tw/business/202502220006

141. Focus Taiwan. (2025, February 22). Taiwan to team up with Czechia, Poland in drone production [台灣將與捷克、波蘭合作無人機生產]. Focus Taiwan.

142. DSET interview with F.

143. Wu, K.-C. (2025, September 16). 西勝捷克子公司開幕 搶攻歐洲電動自行車與無人機電池商機 [C-Tech's Czech subsidiary opens, targeting European e-bike and drone battery opportunities]. Economic Daily News. https://money.udn.com/money/story/11074/9006817

144. DSET interview with F.

145. Ministry of Defence of the Czechia. (2023, June 5). *The Army will prioritize the needs of tactical units: It will first buy 200 smaller drones, then medium ones* [Armáda upřednostní potřeby taktických jednotek: Nejdříve nakoupí 200 menších dronů, až pak střední]. https://acr.mo.gov.cz/informacni-servis/zpravodajstvi/armada-uprednostni-potreby-taktickych-jednotek:-nejdrive-nakoupi-200-mensich-dronu--az-pak-stredni--244103/;
National Electronic Tool for Public Procurement (NEN). (2025). Public contract detail: Unmanned aerial systems for the Army of the Czechia [Detail zakázky: Bezzpilotní systémy pro AČR]. Ministry of Regional Development of the Czechia. https://nen.nipez.cz/en/verejne-zakazky/detail-zakazky/N006-25-V00035334/casti

146. DSET interview with F.

147. DSET interview with F.

148. Ministry of Defence of the Czechia. (2023). *Research, development and innovation concept of the Ministry of Defence 2023–2029* [Koncepce výzkumu, vývoje a inovací v rezortu Ministerstva obrany 2023–2029]. https://vyzkum.mo.gov.cz/sites/vyzkum/files/2023-12/Koncepce_VaV_2023-2029_MO.pdf

149. Ministry of Defence of the Czechia. (2023, June 5). The Army will prioritize the needs of tactical units: It will first buy 200 smaller drones, then medium ones [Armáda upřednostní potřeby taktických jednotek: It will first buy 200 smaller drones, then medium ones]. Ministry of Defence of the Czechia. https://acr.mo.gov.cz/informacni-servis/zpravodajstvi/armada-uprednostni-potreby-taktickych-jednotek:-nejdrive-nakoupi-200-mensich-dronu--az-pak-stredni--244103/

150. DSET interview with F.

151. DSET interview with F.

152. Industrial Technology Research Institute (ITRI). (2025). 工研院「機器人與無人機產業創新論壇」登場　打造大南方產業鏈與示範場域　加速技術落地與產業升級 . https://www.itri.org.tw/ListStyle.aspx?DisplayStyle=01_content&SiteID=1&MmmID=1036276263153520257&MGID=114091912175504787

153. DSET interview with B.

154. DSET interview with B.

155. DSET interview with B.

156. DSET interview with B.

157. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved March 9, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

158. DSET interview with B.

159. DSET interview with B.

160. Taipei Times. (2025, June 18). Sysgration, Quantum Systems to partner. Taipei Times. https://www.taipeitimes.com/News/taiwan/archives/2025/06/18/2003838809

161. Invest Taiwan. (2025, September 19). 亞創中心、亞創廠商協進會、德國萊因、意法半導體四方簽署 MOU. Invest Taiwan（投資臺灣入口網）. https://investtaiwan.nat.gov.tw/newsPage98684cht?lang=cht&search=98684

162. 潘智義 . (2025, June 25). AI 淨零／雷虎與美國 Auterion 簽 MOU 全系列無人載具導入 AI [AI net zero: Thunder Tiger signs an MOU with U.S. Auterion; AI to be integrated across its full line of unmanned vehicles]. Central News Agency. https://www.cna.com.tw/news/afe/202506250397.aspx

163. Quantum Systems. (2025, June 18). *Quantum Systems partners with Sysgration for local manufacturing in Taiwan.* https://quantum-systems.com/news/quantum-systems-partners-with-sysgration/

164. Eurostat. (n.d.). International trade in goods (ITG) database (Comext) [Data set]. European Commission. Retrieved March 9, 2026, from https://ec.europa.eu/eurostat/web/international-trade-in-goods/database

165. My People News. (2025, September 16). *Taiwan-UK drone cooperation: Enhancing supply chain resilience* [台英無人機合作 提升供應鏈韌性]. https://news.pchome.com.tw/living/mypeople/20250916/index-75799117812249219009.html

166. Teng, P. (2025, September 19). Taoyuan firm, BAE Systems sign military equipment support MOU. *Focus Taiwan.* https://focustaiwan.tw/politics/202509190014

167. Central News Agency. (2025, June 30). *U.K. business delegation visits Taiwan's drone hub to explore manufacturing potential* [英國經貿訪問團參訪台灣無人機產業園區 尋求代工契機]. https://www.cna.com.tw/news/afe/202506300324.aspx;
UK Parliament. (2024, November 19). Arms trade: Taiwan (HL2652) [Written question]. UK Parliament. https://questions-statements.parliament.uk/written-questions/detail/2024-11-19/HL2652

168. DSET interview with L.

169. DSET interview with L.

170. DSET interview with L.

171. European Commission. (n.d.). *Exporting dual-use items*. Directorate-General for Trade. Retrieved January 13, 2026, from https://policy.trade.ec.europa.eu/help-exporters-and-importers/exporting-dual-use-items_en

172. European Parliament. (2026, January 22). Drones and new systems of warfare – the EU's need to adapt to be fit for today's security challenges. European Parliament. https://www.europarl.europa.eu/doceo/document/TA-10-2026-0020_EN.htm;
U.S. Congress. (n.d.). *S.2296 (119th Congress): Bill text*. Congress.gov. Retrieved March 3, 2026, from https://www.congress.gov/bill/119th-congress/senate-bill/2296/tex

The Invisible Drone Wall

Taiwan's Quiet Support for a China-Free European Drone Supply Chain

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