Controlling What We Cannot Measure

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Simplification and the EU Dual-Use Regulation

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Summary

- The Commission's evaluation of Regulation (EU) 2021/821 investigates whether the EU's dual-use export control regime remains fit for purpose. One of the Regulation's articulated aims is to reduce the administrative burden on businesses; however, neither the Commission's 2024 annual report nor its nineteen supplementary data reports publish a single figure for licensing processing times, and the Regulation sets no statutory deadline for licensing decisions. No current public estimate of compliance cost per licence or per firm exists. The Commission has made only one quantified claim about exporters' costs: that EU General Export Authorisations would make compliance four times cheaper for companies. That claim has never been verified.

- This holds greater significance than it did previously. Throughout the twentieth century, advancements in military technology preceded civilian applications; however, the current dynamic has shifted, with commercial items such as drones, autonomous systems, sensors, and communication technologies, which are developed within months, now dictating contemporary warfare.

- A control regime designed for gradual, state-driven technological cycles now governs rapid, market-led ones, moving at the pace of the slower environment: roughly eleven months from a multilateral decision to binding EU law, plus a listing process that can take up to three years.

- This briefing argues that simplification is a security interest rather than a concession to industry. It proposes six procedural reforms: measurement, deadlines, broader general authorisations, a de-listing mechanism, Union-level rather than national-level control lists, and restraint on extraterritorial reach.

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The question the evaluation must answer

Regulation (EU) 2021/821 pursues several objectives simultaneously. It is intended to prevent the proliferation of weapons of mass destruction, to link export controls to human rights through controls on cyber-surveillance items, to enhance transparency, and, in the Commission's own formulation, to 'reduce administrative burden for businesses through the use of EU General Export Authorisations' (European Commission 2026d). The Commission's call for evidence explicitly invites input 'on costs and benefits, on reduction of administrative burden and on simplification of administrative procedures'. It also states that the process of preparing and adopting the delegated acts that add items to Annex I will be examined and that the evaluation will cover certain third countries of relevance to the EU regime (European Commission 2026c). Both are directly relevant to the following argument.

Reducing administrative burden is the subject of this briefing. The legitimacy of export controls is not in question here. Preventing the spread of chemical, biological, and nuclear weapons is a core function of the state, and a Union of 27 member states needs a common approach to this issue. The question is more specific and, for this evaluation, more tractable: Does the regime control what actually matters, quickly enough, at a cost anyone has measured?

I travelled to Kyiv in February 2025 to study the organisation of Ukraine's defence procurement and defence industry. The information that I discovered there has a direct impact on the way Europe should approach export controls, as Ukraine has been forced to ascertain, quickly and under fire, the current state of the relationship between civilian technology and military capability.

Technology has changed sides

Military technology was the dominant force throughout the majority of the twentieth century. GPS, the internet, and the laser were initially developed for military purposes and filtered outwards into civilian life. Today, the relationship is reversed. Civilian technological development, driven by fierce global competition, has overtaken the military sector. Products such as drones and artificial intelligence are initially developed for commercial markets and subsequently adapted for military use (Brattström 2026: 9–11).

The cost repercussions are profound. In competitive markets, products become cheaper and better; however, this is not the case in defence procurement. Researchers at the Defence Research Agency in Sweden calculated the cost growth of the entire Swedish defence materiel stock at 3–4% per year above general inflation. They found that the increase could not be attributed to improved performance (Khodabandeh et al. 2018). Combat aircraft were among the worst affected, with a 7.1% increase in price compared to the consumer price index. Drones, a civilian product of the 2000s, account for an estimated 70–80% of Russian losses in Ukraine. In many cases, an artillery shell now costs more than a far more technically advanced drone.

The implications for velocity are even more critical. A drone model is considered obsolete after approximately six months; by that time the adversary has developed effective jamming. Therefore, Ukrainian firms implement continuous iterations of hardware and software to mitigate adversarial behaviour. BRAVE1, Ukraine's defence innovation agency, had registered over 4,800 distinct products from approximately 2,300 companies by the end of 2025. Most of these companies were founded after 2022 (Brattström 2026: 16). Certification, which took one to two years before 2022, now takes between two weeks and three months (Brattström 2025a: 12).

Procurement and authorisation timelines measured in years are not merely inefficient; they are a decisive disadvantage. The Swedish Defence Materiel Administration's acquisition of a drone system for the army and the Home Guard took four years and two months from tasking to delivery.

According to Ukrainian evidence, this process would have rendered the equipment unusable in combat well before it arrived (Brattström 2025a: 16).

Two findings from that research bear directly on this evaluation. The first finding is a judgement from within the European market. According to Roman Knyazhenko, chief executive officer of Skyeton, a Ukrainian drone manufacturer, 'Bureaucracy in the EU is ten times harder than in Ukraine' (Brattström 2025b: 6). The second finding is more precise. A survey conducted by BRAVE1 in autumn 2024 found export restrictions to be the most pressing issue for Ukrainian weapons producers. The second issue was Russian missile attacks. Many firms were either considering or had already begun relocating production overseas to be able to export (Bilousova et al. 2024).

Ukraine's restrictions are not the same as the EU's, and the comparison should not be pursued beyond its current scope. However, the underlying lesson can be generalised. Where a defence technology sector depends on iteration speed, control friction is not a marginal cost. It determines the growth of firms, their location, and the availability of necessary capability when it is required.

Ukraine's own record also carries a warning. In July 2026, the government announced a fast-track procedure for arms exports to partner countries (Resolution No. 875). Two and a half months later, not a single permit had been issued. The State Service for Export Control explained that 'there are no mechanisms or instruments for the practical implementation' of the procedure: the lists of products that were too critical to export and of eligible partner countries had not been drawn up, which prevented manufacturers from knowing what they could sell or where. The resolution also imposed export charges of 20% on finished products and 30% on components, which manufacturers believe can exceed their entire margin.[1] A study by the Kyiv School of Economics Institute finds that at least 22% of Ukraine's international defence partnerships have stalled. One of the main bottlenecks is that export restrictions and procedures are spread across several agencies. One of the study's authors requests a process 'that works in bulk, handling many requests at once rather than one by one'.[2] Kyiv has understandable reasons to maintain weapons at home in wartime. However, the episode shows that simplification announced is not simplification delivered: a procedure without published lists, deadlines, and a single point of contact does not function, regardless of how fast it appears on paper.

Additionally, this is not exclusively a concern for military procurement. The Dual-Use Regulation itself covers drones: unmanned aerial vehicles are controlled under Category 9 of Annex I (Entry 9A012), whereas the components that make them effective – communications, sensors and cameras, and navigation equipment – fall under Categories 5, 6, and 7, respectively. Many commercial platforms fall below the listed performance thresholds; however, that does not exclude them from the regime. It shifts control to the component level and to the catch-all clauses of Article 4, where the obligation depends on the intended end use. This is where the Regulation meets the fast-iterating firms described above.

A regime that does not measure itself

If the Regulation is to be evaluated on its efficiency, the first observation is that the necessary evidence does not exist.

The Regulation sets no statutory deadline for a licensing decision. Neither the Commission's 2024 annual report nor the supplementary staff working document, which contains nineteen separate data

[1] 'Why Ukraine's arms makers are still waiting to sell abroad', The Kyiv Independent, 25 September 2026.

[2] 'Ukraine's defense tech partnerships surge, but many deals stall, new report finds', The Kyiv Independent, 22 September 2026.

reports, publishes any statistics on processing times (European Commission 2026a; 2026b). Nor do the national reports of major licensing states. In summary, the Commission, the European Parliament, and the industry have no public basis to determine whether authorisation is taking longer or shorter than it did in 2021.

Compliance costs are equally invisible. No current published figure exists for the cost per licence or per firm, either from the Commission or from European industry associations. The only quantified data point in the public record concerns authorities rather than exporters: a study conducted for the Commission a decade ago found that member states' spending on dual-use export controls varied 'from less than €100,000 to almost €6 million per year'; the study also observed that companies 'do not have information on compliance costs readily available' (SIPRI and Ecorys 2015).

The one quantified claim about exporters' costs is the Commission's own. Its 2016 proposal for the recast estimated that controls under the new EU General Export Authorisations system would be 'four times less costly for companies, and up to 11 times less' for licensing authorities (European Commission 2016). The call for evidence names the impact assessment behind that proposal as a source for this evaluation. It should be treated as a hypothesis to test rather than a baseline to rely on. The general authorisations, as demonstrated in the next section, account for only 12% of the authorised value. Consequently, whatever unit saving they offer reaches a small share of trade, and no one has verified whether the savings have materialised.

Other regimes show that measurement is possible. The United Kingdom's Export Control Joint Unit works to a published target of deciding 70% of standard individual export licence applications within 20 working days and 99% within 60, and reports its performance every quarter. However, it does not consistently meet the objective: in the first quarter of 2026, between 55% and 66% of applications were decided within 20 working days, depending on the licensing system, with median processing times of 16 and 18 days (Department for Business and Trade 2026). In 2025, the US Bureau of Industry and Security (BIS) reported an average processing time of 62 days for approximately 30,500 applications against a 90-day statutory benchmark (Bureau of Industry and Security 2026). Neither regime is fast by Ukrainian standards. But both can say how fast they are, and the EU cannot. If the evaluation is intended to cover third countries of relevance to the EU regime, then this is the comparison it should make.

Where the burden actually falls

Aggregate figures are reassuring. In 2024, the EU processed 133,470 authorisations and notifications, down from 138,764 in 2022. Authorised dual-use exports were worth €77.6 billion, accounting for approximately 3% of extra-EU goods exports. Denials numbered 487, worth €0.2 billion or 0.01% of extra-EU exports – down from 813 denials in 2022 (European Commission 2026a).

It is tempting to read these figures as evidence that the regime is light-touch. That inference does not hold: a denial rate quantifies the frequency with which permission is denied, rather than the cost of requesting it. The burden lies in classification, uncertainty around the catch-all provision, documentation, and waiting for authorisations.

The composition of licensing is moving in the wrong direction. Although the total number of authorisations decreased between 2022 and 2024, the number of individual licences – the most administratively demanding instrument – increased from 17,072 to 18,549. By value, EU General Export Authorisations accounted for only €9 billion of €77.6 billion, or 12%, against 47% under global authorisations and 31% under individual licences (European Commission 2026a). The simplifying instrument covers routine transactions; the commercially significant trade still goes through case-by-case authorisation.

There has been progress. Registered users of EU General Export Authorisations grew from 7,033 in 2022 to 12,093 in 2024, and the share of the oldest authorisation method, EU001, fell from roughly 81% to about half – suggesting genuine take-up of the instruments added in the 2021 recast. As usage is not published per authorisation, it cannot be determined whether EU007, which covers intra-group technology transfer, or EU008, which covers cryptography, is working as intended. EU007 is, in any case, confined to commercial product development and does not extend to production.

Two further costs are entirely unmeasured. The number of notifications under the Article 4 catch-all provision is not published. Consequently, the compliance uncertainty it generates cannot be assessed. Furthermore, the definition of 'export' as it applies to intangible transfers of technology remains vague – a point made by European industry, which argues that this vagueness 'complicates regulations, increasing costs for EU exporters' (DIGITALEUROPE 2024). That cost falls hardest on software-intensive and research-intensive small firms, precisely the constituency that Europe says it wants in defence technology.

The difficulty is compounded by the way modern dual-use products are developed. Export control assumes a finished product: an item is classified, a licence is granted for that specification, and the matter is closed. However, a drone, a sensor, or a piece of software iterated against an adversary every few months is never finished (Brattström 2026: 25). Each version may require reclassification, and each software update or engineering exchange with a partner abroad may constitute a new intangible transfer. A regime built around the fixed specification imposes its cost again with every iteration and so falls most heavily on the firms whose speed is their advantage.

Fragmentation and the Union's partial remedy

In 2024, the Commission warned of a 'patchwork of export controls', observed that member states need not consult before adopting national controls, and noted that there is 'no certainty about how or when other member states may take up the controls' (European Commission 2024a).

The patchwork is genuine. National lists under Article 9 have been adopted by, among others, the Netherlands (June 2023, extended September 2024), Spain (May 2023, updated June 2025), France (in force March 2024), Italy (July 2024), and Finland (September 2024). The Commission's April 2025 recommendation on coordinating national controls establishes a voluntary framework with no binding timelines (European Commission 2025a). The underlying capacity is also uneven: nine member states are not members of the Missile Technology Control Regime, and Cyprus is not a member of the Wassenaar Arrangement.

To be fair to the Commission, this has been partially rectified. Delegated Regulation (EU) 2025/2003, in force since November 2025, introduced autonomous EU controls in a new '500 series' covering quantum technologies, semiconductor manufacturing equipment, advanced computing, and additive manufacturing, largely replacing the national measures that had been previously adopted. That is the right institutional answer: if items are to be controlled, they should be controlled uniformly and simultaneously at the Union level.

However, it reveals a structural asymmetry. The EU now has two routes for adding items to Annex I and none for removing them. The multilateral route is a slow process: the 2023 Wassenaar decisions entered EU law in November 2024, and the 2024 decisions in November 2025 – roughly eleven months for each cycle. Upstream, it is slower still. The Wassenaar Arrangement requires consensus among 42 members, meets in plenary once a year, and, according to one assessment, can take up to three years to add a technology to the list (Reinsch and Junusova 2024). Russia, a member, has blocked new listings since 2022; the Commission itself records that Russia 'is reported to be hampering the adoption of new controls' (European Commission 2024a).

A regime that is sluggish to add is also slow to subtract. Annex I contains roughly 1,800 items. No actor has the mandate or the incentive to propose removals, and so controls accumulate – including on technologies that have since become globally available from suppliers outside the regime, where the control constrains European exporters without denying anyone access. The problem is structural. Many Annex I entries are defined by performance thresholds – processing power, sensor resolution, and range – while the performance of civilian technologies roughly doubles every two years at constant cost (Brattström 2026: 9–11). A threshold set for specialised equipment at the time of writing will, within a few product generations, capture ordinary commercial goods. Without a review mechanism, the reach of a control widens every year without anyone having decided that it should.

Article 5 and the limits of soft law

The controls on cyber-surveillance items in Article 5 address a real problem. The export of interception and intrusion technologies to repressive governments has enabled documented abuses, and it is reasonable for the EU to control it. The difficulty lies in the method, not in the objective.

In 2024, member states processed 320 applications for cyber-surveillance items, issuing 293 authorisations and 13 denials across 71 destinations. Denials fell from 37 in 2022 to 20 in 2023 to 13 in 2024, while application volumes remained broadly stable (European Commission 2026a). Two readings are possible. Deterrence may be effective, as applications that would be refused are no longer submitted, or scrutiny may be loosening. Neither can be established based on the published evidence, which itself is the point.

The operative guidance is non-binding. The Commission's October 2024 recommendation setting out guidelines under Article 5(6) concedes that it is 'by definition impossible' to provide an exhaustive list of the non-listed items concerned, and that assessment must proceed on a case-by-case basis (European Commission 2024b). It states that the controls are 'not meant to affect the activity of the cybersecurity researchers and industry', who need to share information about intrusion software to develop fixes. However, this is guidance, not a legal exemption, and the residual legal risk for legitimate security research remains. The Commission has also not published how many member states have exercised the national extension in Article 5(2).

Controls that rest on soft law and subjective assessments of an exporter's 'awareness' lead to uneven application and weak predictability. A narrower control defined in the legal text would likely offer better human rights protection than a broad one defined in guidance, because it would be applied consistently.

Recommendations

Measure. Require member states to report licensing processing times – including the median and 90th percentile for each authorisation type – and publish them in the annual report. Without fulfilling this requirement, neither efficiency nor simplification can be evaluated in this or subsequent exercises. The external study supporting this evaluation, which is to include a cost–benefit analysis, should apply the standard cost model from the Commission's own Better Regulation Toolbox to a sample of exporters so that the next evaluation has a baseline. The UK already publishes processing-time data of this kind every quarter.

Set deadlines. Introduce a statutory decision deadline for individual authorisations, with an obligation to give reasons where it is exceeded. Tacit approval after a fixed period could be considered for lower-risk categories, although the objection deserves weight: a deadline can produce hasty refusals as easily as prompt approvals and should be paired with a right to reasons. The US adheres to a 90-day statutory benchmark and maintains an average of around two months; the EU has no benchmark at all.

Broaden general authorisations. Extend EU007 beyond commercial product development to production; review the exclusions in EU008; and consider a general authorisation for Ukraine and NATO allies outside the EU001 group. The case for Ukraine is not only one of solidarity. Ukrainian drone production capacity now exceeds 10 million units a year, and manufacturers rely heavily on imported components, many of which are produced in China (Brattström 2025a: 23; Brattström 2026: 18). Wherever EU licensing makes European components slower to obtain than Chinese ones, it steers a strategically important supply chain towards China. Publish usage by authorisation so that the instrument's effect can be assessed.

Build in de-listing. Establish a periodic review of Annex I incorporating a foreign availability test: entries covering items widely obtainable from suppliers outside control regimes should be removed. A mechanism exists for adding; none exists for subtracting.

Keep lists at the Union level, and licensing where it is. Autonomous EU listing is preferable to national lists on single-market grounds, and the 2025 recommendation should be strengthened by requiring an economic impact assessment before national controls are introduced. Centralised EU licensing, by contrast, should be resisted: a new licensing bureaucracy at the Union level would relocate the speed problem rather than solve it.

Avoid copying the wrong model. The US affiliates rule, adopted in September 2025 and suspended for one year from 10 November 2025 as part of the US–China trade arrangement, would extend restrictions to foreign entities majority-owned by listed parties, on a strict liability basis, without the administering agency quantifying how many entities are newly captured.[3] This type of extraterritorial reach places an investigative burden on firms that cannot discharge it. The EU should compete on predictability rather than on reach.

The Commission's own work serves as a precedent for this logic. The Defence Readiness Omnibus amendment to Directive 2009/43/EC, adopted by the European Parliament on 16 September 2026 and awaiting formal approval by the Council, records in its recitals that Union defence industrial programmes are 'often hindered by significant delays in the transfer of defence-related products, due to the lengthy and complex processes of obtaining transfer licences' (European Commission 2025b). Thus, the Commission accepts that licensing friction degrades capability. However, the Omnibus addresses intra-EU transfers of defence products only and leaves dual-use flows untouched. Tellingly, it asserts delay without publishing a single figure for it.

Conclusion

Export control is a legitimate and necessary instrument, and this evaluation should not be read as an argument for abandoning it. The question is whether the EU controls what matters, quickly enough, at a cost that someone has determined. Based on the published evidence, we cannot say – and that in itself is a finding against the efficiency criterion.

The broader point is that this has ceased to be a trade-policy detail. When defence capability depends increasingly on civilian technologies, and on how fast those technologies can be iterated,

[3] 'New BIS rule expands export restrictions to majority-owned affiliates', Skadden Insights, 30 September 2025 (https://www.skadden.com/insights/publications/2025/09/new-bis-rule-expands-export-restrictions). On the suspension, see 'BIS suspends affiliates rule for one year as part of the US-China trade deal', Skadden Insights, November 2025 (https://www.skadden.com/insights/publications/2025/11/bis-suspends-affiliates-rule-for-one-year-as-part-of-the-us-china-trade-deal).

the speed and predictability of the control regime are determinants of European security. Simplification and security are not in conflict in this context. They are the same objective.

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