



EU Export Controls regulatory updates

*From Regulation (EU) 2021/821
to the Economic Security Strategy*

THE ECONOMIC SECURITY STRATEGY – THE WHITE PAPER ON EXPORT CONTROLS

- The [White Paper](#) set out an analysis of the EU current export control framework in the current geopolitical context, and identifies risks such as:
 - Lack of a common approach to the Union’s security and trade policy objectives
 - Risk of a patchwork of export controls in the Single Market and lack of level-playing field in the European Union
 - Risk of global supply chains disruptions and downstream impact
- Launched discussion on current framework – public consultation ([Have your say](#))

White Paper on Export Controls

- The White Paper outlines how to make EU export controls more effective in the current geopolitical environment to better safeguard the EU's security
- Short / medium-term proposals for uniform & effective controls across EU
 1. Possibility **to add new items to EU dual-use list**: close gaps created by delays / blockage at multilateral level
 2. **Forum** for more political coordination of Commission and Member States
 3. **Recommendation** to increase coordination on national measures
 4. Early **evaluation** of Dual-Use Regulation to launch first quarter of 2025

THE 2025 EU LIST OF DUAL USE ITEMS

- Commission Delegated Regulation (EU) .../... of 8 September 2025 updating the list of dual-use items, taking into account changes in the Multilateral Export Control Regimes in 2024
- Introduces controls on new items e.g. controls related to quantum technology, semiconductor manufacturing and testing equipment and materials, Additive manufacturing machines and related materials, peptide synthesisers, and changes to control parameters across all categories



Brussels, 8.9.2025
C(2025) 5947 final

COMMISSION DELEGATED REGULATION (EU) .../...

of 8.9.2025

amending Regulation (EU) 2021/821 of the European Parliament and of the Council as regards the list of dual-use items



Examples of new controls: lithography machines

3B501.f.4 Lithography equipment as follows:

- a. Align and expose step and repeat (direct step on wafer) or step and scan (scanner) equipment for wafer processing using photo-optical or X-ray methods and having any of the following:
1. a light source wavelength shorter than 193 nm; or
 2. a light source wavelength equal to or longer than 193 nm:
 - a. capable of producing a pattern with a 'Minimum Resolvable Feature size' (MRF) of 45 nm or less; and
 - b. a maximum 'dedicated chuck overlay' (DCO) value less than or equal to 1.50 nm.



*ASML, Deep Ultraviolet (DUV)
photolithography equipment*

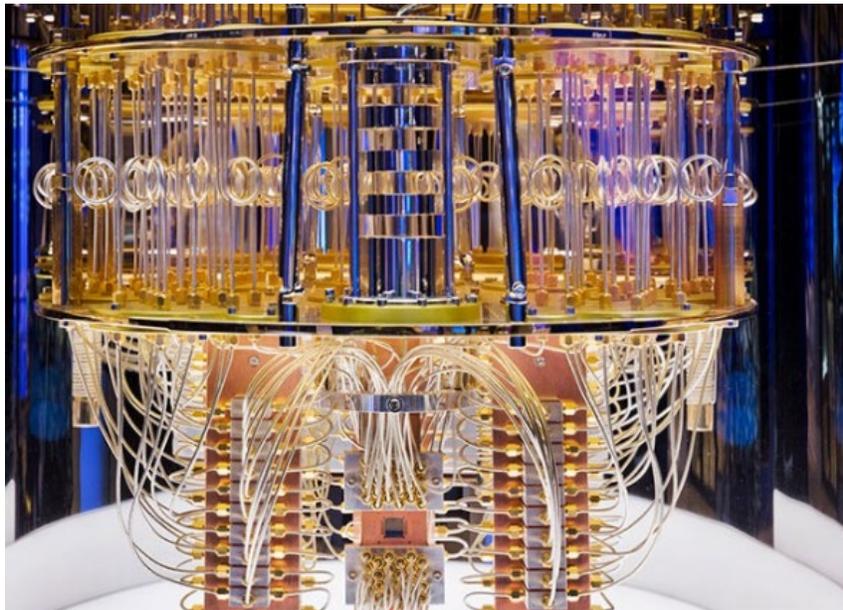
Examples of new controls: quantum computers

4A506 Quantum computers and related "electronic assemblies" and components therefor, as follows:

Parameters of control: qubits and C-NOT error

Major components: Qubit circuits and other electronic assemblies

and related software
4D901 and technology
4E901.b



Quantum computer



Google quantum chip (72-qubit)

Examples of new controls: cryogenic quantum cooling systems

3A504 Cryogenic cooling systems and components, as follows :

- a. Systems rated to provide a cooling power greater than or equal to 600 μW at or below a temperature of 0.1 K (-273.05 °C) for a period of greater than 48 hours;
- b. Two-stage pulse tube cryocoolers rated to maintain a temperature below 4.0 K (-269.15 °C) and provide a cooling power greater than or equal to 1.5 W at or below a temperature of 4.2 K (-268.95 °C)

Scope: Cooling systems for quantum



Cryogenic system

RECOMMENDATION ON THE COORDINATION OF NATIONAL CONTROL LISTS



- Commission Recommendation (EU) 2025/683 of 8 April 2025 on coordination of national control lists introduces a mechanism to coordinate the adoption of Control lists by the EU member states
- Outlines key principle for aligning National Control Lists (NCL) with EU and multilateral standards
- Allow coordinating the NCL in view of a EU compilation of controls
- Current compilation includes controls on quantum technology, additive manufacturing, semiconductor manufacturing equipment

**COMMISSION RECOMMENDATION (EU) 2025/683
of 8 April 2025
on coordination of national control lists**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292, third sentence, thereof,

Whereas:

- (1) Regulation (EU) 2021/821 of the European Parliament and of the Council ⁽¹⁾ of 20 May 2021 (‘the Regulation’) sets up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items. The common system of export controls on dual-use items set up by the Regulation ensures compliance with the international commitments and responsibilities of the Member States and the Union, such as United Nations Security Council Resolution 1540 ⁽²⁾, and with commitments agreed upon in multilateral export control regimes and non-proliferation treaties.
- (2) Article 9 of the Regulation allows Member States to adopt national control lists. Once a national control list is notified by the adopting Member State to the Commission and other Member States and published in a compilation of national control lists in the *Official Journal of the European Union* according to Article 9, on the basis of Article 10 of the Regulation other Member States may require an authorisation for the export of items published in the compilation.
- (3) As proposed in the Commission’s White Paper on Export Controls ⁽³⁾, national control lists adopted by Member States can be supported by this Recommendation with a view to improving coordination and the effectiveness and efficiency of the common system of export controls on dual-use items.
- (4) This Recommendation provides a coordination framework enabling Member States, on a voluntary basis, to identify similar risks and to coordinate when designing national control lists. It also facilitates the exchange of information