

IMPLEMENTING THE 2021 RECAST OF THE EU DUAL-USE REGULATION: CHALLENGES AND OPPORTUNITIES

MARK BROMLEY AND KOLJA BROCKMANN

I. INTRODUCTION

Since the early 1990s the European Union (EU) has taken a range of steps to increase the coordination and convergence of member states' export controls. One consistent focus has been the creation of common controls on exports of dual-use items—that is, goods, software and technology that have the potential to be used in both civilian and military products. Discussions in the 1980s and early 1990s led to the adoption of the first pieces of EU legislation in this area in 1994.¹ A significantly updated version—Regulation (EC) 428/2009—was adopted in 2009.² In 2011, the EU launched a review of the 2009 regulation, beginning a process that involved the European Commission (Commission), the European Parliament (EP) and the Council of the EU (Council). This process led to a new version of the dual-use regulation (the recast, or the 2021 recast) which enters into force on 9 September 2021.³ This paper outlines the review and recast of the 2009 regulation by examining the issues and proposals discussed and the key changes introduced.

Through these instruments the EU has established a common legal basis for member states' controls on the export, re-export, brokering and transit of dual-use items. They have also created tools—particularly a list of controlled dual-use items—that states outside the EU

¹ Council Regulation 3381/94 of 19 Dec. 1994 setting up a Community regime for the control of exports of dual-use goods, *Official Journal of the European Union*, L367, 31 Dec. 1994, pp. 1–7; and Council Decision of 19 Dec. 1994 on the joint action adopted by the Council on the basis of Article J.3 of the Treaty on European Union concerning the control of exports of dual-use goods (94/942/CFSP), *Official Journal of the European Union*, L367, 31 Dec. 1994.

² Council Regulation 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items, *Official Journal of the European Union*, L134, 29 May 2009.

³ A 'recast' amounts to the adoption of 'a new legal act'. See EUR-Lex, 'Recasting of legislation', [n.d.].

SUMMARY

In 2011, the European Union (EU) launched a review of its regulation establishing controls on exports of dual-use items. This began a process involving the European Commission, the European Parliament and the Council of the EU that led to a recast of the regulation which enters into force on 9 September 2021. This paper examines the main underlying concerns that drove the review and recast process: exporters' regulatory burden, uneven national implementation, exports of cybersurveillance items and advances in emerging technologies. It also analyses the key changes introduced by the recast, particularly a mechanism for coordinating enforcement, additional controls on exports of cybersurveillance items, new commitments on public transparency and an expanded mechanism to control unlisted items, including emerging technologies. The paper concludes by outlining the steps needed to ensure both effective implementation of the recast and greater coherence in the EU's wider efforts in the field of export controls and non-proliferation.

ABOUT THE AUTHORS

Mark Bromley (United Kingdom) is the Director of SIPRI's Dual-use and Arms Trade Control Programme, where his work focuses on national, regional and international efforts to regulate the international trade in conventional arms and dual-use items. His recent areas of focus include regulating the trade in cybersurveillance items and the challenges associated with investigating and prosecuting violations of export controls.

Kolja Brockmann (Germany) is a Researcher with SIPRI's Dual-use and Arms Trade Control Programme where he has worked since 2017. He leads research on dual-use export controls with a focus on the multilateral export control regimes and controls on emerging technologies. He also conducts research on EU sanctions and post-shipment controls and routinely presents his work at conferences, briefings and during capacity-building activities.

can utilize when developing their own export controls and which the EU draws from in its outreach and assistance activities.⁴ Two key goals when establishing the EU's dual-use export controls were implementing internationally agreed non-proliferation obligations and preventing illicit transfers to weapons of mass destruction (WMD) programmes.⁵ However, these goals have been increasingly supplemented by a focus on strengthening controls on so-called 'emerging technologies', such as surveillance items, additive manufacturing (often referred to as 3D printing), and artificial intelligence (AI). Common controls on dual-use exports are also an important means of helping the EU to implement shared positions on security policy objectives, such as regulating exports of military-relevant technology to China.

Throughout the process of creating and developing the EU's dual-use export controls these security-related objectives have co-existed with a focus on enabling 'non sensitive' exports of dual-use items. Along with exports of potential concern, dual-use export controls capture a wide range of benign transfers, such as the software employed in self-driving cars and the chemicals used for making toothpaste. Facilitating these types of exports has long been a key goal for the EU's dual-use export controls. Meanwhile, the goal of achieving true convergence in the implementation of controls at the national level has always been elusive. EU member states vary significantly in terms of the types and amounts of dual-use items that they produce and export, and in their historical, political and economic ties with recipient states. These variations create differences in how member states view certain transfers.

All of these goals and concerns were reflected in the review and recast of the 2009 regulation which saw many complex and interlinked debates. These included strong disagreements between the Commission, the EP and the Council, particularly around how to use the EU's dual-use export controls to regulate the trade in cybersurveillance items. However, the review and recast also saw a willingness to compromise on all sides that enabled wide-ranging changes to nearly all aspects of the 2009 regulation.

⁴ See European Union, 'Dual-use trade control: EU P2P export control programme for dual use goods' [n.d.].

⁵ See Micara, A. G., 'Current features of the European Union regime for export control of dual-use goods', *Journal of Common Market Studies*, vol. 50, no. 4 (2012), pp. 581–82.

Section II of this paper provides an overview of the recast process and examines four thematic issues that were prominent throughout: (a) reducing exporters' regulatory burden; (b) harmonizing national implementation; (c) controlling cybersurveillance items; and (d) responding to advances in emerging technologies. In each case, the paper details the relevant proposals that were made, discussed and adopted. As the paper reflects, certain issues that were prominent during the recast process did not lead to substantive changes to the 2009 regulation, while others that only emerged late in the process led to significant alterations. Section III examines four of the key changes made: (a) a new 'enforcement coordination mechanism'; (b) new controls on exports of cybersurveillance items; (c) a new public report for exports of dual-use items; and (d) an expanded mechanism to control unlisted items, including emerging technologies. In each case, the paper highlights some of the steps needed to operationalize these changes effectively. Section IV presents conclusions and recommendations.

II. THE REVIEW AND RECAST OF THE DUAL-USE REGULATION

The EU's dual-use export controls seek to address both commercial and security objectives and its structure reflects this duality. They are adopted under the EU's common commercial policy and are directly applicable law in EU member states. However, they leave key aspects of controls in the hands of member states—particularly the issuing of licences and detecting and responding to cases of noncompliance—and are implemented and enforced via their national control systems. The duality of purpose was reflected in the contents of the 2009 regulation, which included:

1. A common list of items that are subject to control (the 'dual-use list'). This list, updated annually, is a composite of the control lists of the multilateral export control regimes—the Australia Group (AG), the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG), and the Wassenaar Arrangement (WA).

2. A set of 'catch-all controls' which capture items that do not appear on the dual-use list. These controls apply to unlisted items that may (a) contribute to a WMD programme, (b) have a 'military end use' in a state subject to an arms embargo, or (c) be used as

parts and components in a military item that has been exported illegally.

3. A mechanism outlined in Article 8 that allows member states to make additional dual-use items subject to national list-based controls ‘for reasons of public security or human rights considerations’.

4. A set of ‘common criteria’ for assessing export licences which, among other things, requires member states to apply the eight criteria of the EU Common Position on Arms Exports.⁶

5. A set of six EU-wide General Export Authorisations (EUGEAs), which allow exporters to carry out multiple shipments under a single licence, as well as provisions for member states to create National General Export Authorisations (NGEAs) for transfers that they view as less sensitive.⁷

6. Mechanisms for inter-governmental information exchange through meetings of national officials in the Council Working Party on Dual-use Goods (Dual-use Working Party) chaired by the rotating national presidency of the Council, the Dual-use Coordination Group chaired by the Commission, and via the Dual-use e-System (DUeS).⁸

The process of reviewing the 2009 regulation began in 2011. Since the Commission is tasked with preparing and making proposals in relation to the EU’s common commercial policy, it had the lead role in the review process. It began by publishing a Green Paper in 2011.⁹ This was followed by a communication in 2014 which outlined priorities for the review process and a set of ‘concrete policy options’.¹⁰ In September 2016 the Commission published a proposed ‘recast’

of the 2009 regulation.¹¹ The Council and—following changes made by the 2009 Lisbon Treaty—the EP have full powers of co-decision in the EU’s common commercial policy and are therefore co-legislators in any process of updating the regulation. In response to the Commission’s proposal the EP published a set of proposed amendments in January 2018 and the Council published its own response in the form of a negotiating mandate in June 2019.¹² In accordance with EU legislative procedures the Commission’s proposal underwent a process of ‘trilogue’ involving the Commission, the EP and the Council, which was represented by Finland in the second half of 2019, Croatia in the first half of 2020, and Germany in the second half of 2020. The process concluded in November 2020 when the Council and the EP reached agreement on a final compromise text.¹³ The regulation was recast as Regulation (EU) 2021/821, which was adopted by the EP in May 2021 and enters into force on 9 September 2021.¹⁴

The Commission’s 2016 proposal sought to revise virtually all aspects of the 2009 regulation and generated many overlapping and evolving debates both among EU member states during the adoption of the Council’s position, and between the EP and the Council during the trilogue. However, the most important proposals that were made and discussed can be broadly grouped under the following thematic headings: reducing the regulatory burden on exporters; creating more harmonised national controls; controlling exports of cybersurveillance items; and responding to advances in emerging technologies.

⁶ Council Common Position 2008/944/CFSP of 8 Dec. 2008 defining common rules governing control of exports of military technology and equipment, *Official Journal of the European Union*, L335, 8 Dec. 2008.

⁷ These cover exports: (a) to Australia, Canada, Japan, New Zealand, Norway, Switzerland and the USA; (b) of certain dual-use items to certain destinations; (c) for repairs, or of replacement parts; (d) of a temporary nature for exhibitions or fairs; (e) of certain types of telecommunications equipment; and (f) of certain types of chemicals.

⁸ See Council of the European Union, ‘Working Party on Dual-Use Goods’, [n.d.]; and Council of the European Union, ‘Report from the Commission to the European Parliament and the Council on the implementation of Regulation (EC) No 428/2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items’, Brussels, 5932/21, 5 Feb. 2021.

⁹ European Commission, ‘The dual-use export control system of the European Union: Ensuring security and competitiveness in a changing world’, Green Paper, COM (2011) 393 final, 30 June 2011.

¹⁰ European Commission, Report on the implementation of Regulation (EC) No. 428/2009, 16 Oct. 2013; and European Commission, ‘The review of export control policy: ensuring security and competitiveness in a changing world’, Communication from the Commission to the Council and the European Parliament, COM(2014) 244 final, 24 Apr. 2014.

¹¹ European Commission, ‘Proposal for a Regulation of the European Parliament and of the Council setting up a Union regime for the control of exports, transfer, brokering, technical assistance and transit of dual-use items (recast)’, 12798/16, 28 Sep. 2016.

¹² European Parliament, ‘Amendments adopted by the European Parliament on 17 January 2018 on the proposal for a regulation of the European Parliament and of the Council setting up a Union regime for the control of exports, transfer, brokering, technical assistance and transit of dual-use items (recast) (COM(2016)0616–C8–0393/2016–2016/0295(COD))’, *Official Journal of the European Union*, C458, 17 Jan. 2018, pp. 187–223; and Council of the European Union, ‘Proposal for a regulation of the European Parliament and of the Council setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast)—Mandate for negotiations with the European Parliament (2016/0295(COD))’, Document 52016PC0616, 5 June 2019.

¹³ Council of the European Union, ‘New rules on trade of dual-use items agreed’, Press release, 9 Nov. 2020.

¹⁴ Regulation 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast), *Official Journal of the European Union*, L206, 11 June 2021.

Reducing exporters' regulatory burden

The Commission's 2016 proposal sought to reduce exporters' regulatory burden, mainly by increasing the number of EUGEAs, reducing the time spent processing licensing applications, and facilitating the use of 'cloud computing' by exporters. While the EP supported these measures, member states held concerns about the impact on their ability to continue to determine key aspects of dual-use export controls at the national level. The Commission proposed four new EUGEAs covering (a) goods that employ cryptography, (b) intra-company transfers of 'technology', (c) low-value shipments, and (d) 'other dual-use items'.¹⁵ The EP supported all of these proposals and went further on cryptography where it called for a complete lifting of all export licensing restrictions.¹⁶ EU member states supported the adoption of the new EUGEAs but differed on specific aspects of their content due to their economic and security concerns.¹⁷ Member states also opposed abandoning controls on cryptography, which several view as a key mechanism for regulating the trade in technologies with relevance for national security.¹⁸ The 2021 recast includes additional EUGEAs for cryptography and intra-company transfers, although both are less widely applicable than the Commission and the EP had proposed. The proposed EUGEAs on low-value shipments and 'other dual-use items' were dropped completely. However, the recast also allows member states to issue 'Large Project Authorisations' for multiple transfers connected to a specific large-scale project.¹⁹ The recast also streamlines the process of amending the coverage of EUGEAs.²⁰

The Commission's 2016 proposal would have required member states to share information with the Commission 'on the average times for processing applications for authorisations'.²¹ It also stated

¹⁵ The EUGEA on 'other dual-use items' would have allowed the EC to quickly introduce new controls on dual-use items 'when it is considered appropriate for certain items and destinations'. European Commission, 12798/16 (note 11), pp. 8–9.

¹⁶ European Parliament, C458 (note 12), Amendments 13 and 15.

¹⁷ Göstl, C., Foreign Trade Administration, Federal Ministry for Digital and Economic Affairs, Austrian Presidency of the Council of the European Union, 'Opening remarks', EU Export Control Forum 2018, 13 Dec. 2018, Brussels.

¹⁸ Bromley, M., Brockmann, K. and Maletta, G., 'Controls on intangible transfers of technology and additive manufacturing', *SIPRI Yearbook 2018: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2018).

¹⁹ Regulation 2021/821 (note 14), Article 2(14).

²⁰ Regulation 2021/821 (note 14), Article 17(2).

²¹ European Commission, 12798/16 (note 11), p. 30.

that licensing timelines for NGEAs and EUGEAs should be harmonized.²² The EP went further on this point by adding language that would have required member states to process licence and GEA applications within 30 days of valid submission.²³ Given differences in national practices and resources, member states viewed an EU-wide time limit for processing licenses unworkable and the issue is not mentioned in the Council's mandate or the recast. However, the preamble to the recast encourages states to adopt electronic licensing procedures, a goal that the Commission has been supporting through the development of an 'electronic licensing platform' for member states to utilise.²⁴

Cloud computing emerged in the early 2000s and can be broadly defined as 'the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer'.²⁵ Companies and research institutes increasingly utilise cloud computing to store and share technical data or software, but EU member states have different approaches when the items being shared are captured by dual-use export controls. These differences concern whether and how the controls take account of the location of the servers where the technical data or software is being stored and the steps that exporters need to take in order to ensure that it is kept secure during transfer and storage.²⁶ The Commission's 2016 proposal sought to reduce these differences by amending the definition of 'export' to make clear that uploading controlled software or technology to a cloud did not require a licence.²⁷ However, member states disagreed on the approach proposed by the Commission. The preamble to the 2021 recast recommends that member states use 'general or global licenses' and provide 'harmonised interpretations of provisions . . . for certain transmissions, such as transmissions to a cloud', but the definition of 'export' is unchanged.²⁸

²² European Commission, 12798/16 (note 11), p. 14.

²³ European Parliament, C458 (note 12), Amendment 51.

²⁴ Regulation 2021/821 (note 14), Recital 30; and Council of the European Union, 5932/21 (note 8), p. 5.

²⁵ Dryfhout, M. and Hewer, S., 'What is cloud computing?', Scout Technology Guides Blog, 11 Apr. 2019.

²⁶ See Bromley, M., and Maletta, G., *The Challenge of Software and Technology Transfers to Non-proliferation Efforts: Implementing and Complying with Export Controls* (SIPRI: Stockholm, Apr. 2018), pp. 23–24.

²⁷ European Commission, 12798/16 (note 11), p. 7.

²⁸ Regulation 2021/821 (note 14), Recital 11.

Creating more harmonized national controls

The Commission's proposal and the EP's amendments included several elements aimed at harmonizing member states' application of dual-use export controls, mainly by clarifying key terms, standardizing controls on brokering and so-called 'deemed exports', and promoting uniformity in the use of catch-all controls and enforcement measures. The Council resisted some aspects of these proposals—mainly on the grounds that they would generate negative side effects or impinge on national competency in licensing decisions. However, the 2021 recast does seek to address all of these underlying issues, mainly through guidelines and information sharing. The 2009 regulation includes several terms that are not clearly defined and which are interpreted differently in member states' national export control systems. These include the term 'internal compliance programme (ICP)' and the exemptions on exports of 'basic scientific research' and information that is 'in the public domain'. The recast provides a definition of ICP and calls for associated guidelines to be developed. The EU has already been working on this during the review and recast process.²⁹ The recast does not provide definitions of 'basic scientific research' and 'in the public domain' but it makes clear that new guidelines are needed here as well.³⁰

'Deemed exports' is a term from the United States' system of export controls which refers to transfers of controlled items that occur within a states' national borders, for example when a foreign citizen attends a university course or participates in industry training. These types of transfers are not covered by either the 2009 regulation or any other piece of EU legislation.³¹ Several EU member states have made them subject to control through national measures but their forms differ, with some using export licensing procedures

and others using visa-screening mechanisms.³² The 2021 recast fills this gap by expanding controls on 'technical assistance'—that is, 'instruction, advice, training, transmission of working knowledge or skills or consulting services'.³³ These controls include in their scope transfers to 'a resident of a third country temporarily present in the customs territory of the [European] Union'.³⁴ The recast makes clear that member states are responsible for providing guidance material on how the new controls on 'technical assistance' should be applied.³⁵

Reports by industry associations maintain that member states vary significantly in how they interpret and apply the 2009 regulation's set of catch-all controls.³⁶ The Commission's proposal sought to address this by creating mechanisms that would make a catch-all issued in one member state applicable across the EU and give member states the ability to object to each other's use of catch-all controls.³⁷ Another area of difference among member states is the penalties they impose when exporters fail to comply with dual-use export controls. Largely due to broader differences in member states' criminal justice systems, the severest penalty, imprisonment, ranges in maximum term from 30 years in France to 3 years in Slovakia.³⁸ The EP sought to address this point by including measures aimed at making penalties 'similar in nature and effect'.³⁹ The Council opposed both the Commission's catch-all proposal and the EP's penalty proposal, with neither appearing in the 2021 recast. However, the recast significantly expands the scope of inter-governmental information sharing, with commitments to share more detailed information on licensing practices and enforcement measures.⁴⁰ Most significantly, the recast establishes an 'enforcement coordination mechanism' to enable information sharing between enforcement agencies and licensing authorities (see section III).⁴¹

²⁹ European Commission, Recommendation (EU) 2019/1318 of 30 July 2019 on internal compliance programmes for dual-use trade controls under Council Regulation (EC) No 428/2009, *Official Journal of the European Union*, L205, 5 Aug. 2019; and European Commission, 'EU compliance guidance for research involving dual-use items', Nov. 2020.

³⁰ Regulation (EU) 2021/821 (note 14), Article 26(1).

³¹ Certain forms of 'in-person transfers' of knowledge and technical assistance are regulated by Council Joint Action of 22 June 2000 concerning the control of control of technical assistance related to certain military end-uses, *Official Journal of the European Union*, L159, 22 June 2000. However, since it forms part of the EU's Common Foreign and Security Policy, the Joint Action can only be applied to actions that take place outside the EU.

³² See Bromley and Maletta (note 26).

³³ Regulation (EU) 2021/821 (note 14), Article 2(9).

³⁴ Regulation (EU) 2021/821 (note 14), Article 2(10)(c).

³⁵ Regulation (EU) 2021/821 (note 14), Article 26(1).

³⁶ Digital Europe, 'European Commission proposed recast of the European export control regime: Making the rules fit for the digital world', Policy Paper, 24 Feb. 2017, p. 10.

³⁷ European Commission, 12798/16 (note 11), p. 25.

³⁸ See Bauer, S. and Bromley, M., *Detecting, Investigating and Prosecuting Export Control Violations: European Perspectives on Key Challenges and Good Practices* (SIPRI: Stockholm, Dec. 2019), p. 4.

³⁹ European Parliament, C458 (note 12), Amendments 22 and 73.

⁴⁰ Regulation (EU) 2021/821 (note 14), Article 23.

⁴¹ Regulation (EU) 2021/821 (note 14), Article 25(2).

Table 1.1. Cybersurveillance items subject to export controls in the dual-use lists of the Wassenaar Arrangement, the European Union and Germany

Item and description	Year of inclusion in dual-use list		
	WA	EU	Germany
<i>Mobile telecommunications interception equipment</i> —also known as IMSI Catchers—are used to remotely track, identify, intercept and record mobiles phones.	2012	2013	2013
<i>Intrusion software</i> can be inserted into computers and mobile phones without detection and used to remotely monitor and, in certain cases, control them.	2013	2014	2014
<i>IP network surveillance systems</i> are used to intercept, collect and, in some cases, analyse data as it passes through an IP network.	2013	2014	2014
<i>Monitoring centres</i> are used by LEAs and intelligence agencies to collect, store and analyse different forms of communications data from various surveillance sources.	2019	2020	2015
<i>Digital forensics systems</i> are used by LEAs and intelligence agencies to retrieve and analyse data stored on networks, computers and mobile devices.	2019	2020	2020
<i>Data retention systems</i> are used by network operators to comply with legal requirements for storage of their users' data for potential later use by LEAs and intelligence agencies.	–	–	2015

EU = European Union; IMSI = international mobile subscriber identity; IP = internet protocol; LEAs = law enforcement agencies; WA = Wassenaar Arrangement; – = not included.

Source: Bromley, M., *Export Controls, Human Security and Cyber-surveillance Technology: Examining the Proposed Changes to the EU Dual-use Regulation* (SIPRI: Stockholm, Dec. 2017).

Controlling exports of cybersurveillance items

Cybersurveillance items are used by intelligence agencies and law enforcement agencies (LEAs) in virtually all states to enable the monitoring and exploitation of data or content that is stored, processed or transferred via information communication technologies (ICTs), including computers, mobile phones and telecommunications networks.⁴² After the so-called Arab Spring uprisings in 2011 a series of reports by media and non-governmental organizations (NGOs) highlighted the role of EU- and US-based companies in the supply of cybersurveillance items to states in the Middle East and North Africa.⁴³ In certain cases the recipient state's security forces used the systems supplied in connection with cases of repression and violations of human rights, including torture and arbitrary arrest and detention. This led to calls for stronger EU controls and in 2014 the Commission, the Council and the EP issued a joint statement committing them to exploring how to use the dual-use regulation

to tighten restrictions on exports of cybersurveillance items.⁴⁴

Discussions about how to operationalize this commitment dominated the review and recast process. In parallel to these discussions the WA, the EU and Germany took a range of steps to use export controls to regulate the trade in cybersurveillance items (see table 1.1). From 2012 until 2019 the WA added five categories of cybersurveillance items to its dual-use control list. The EU subsequently added these items to its dual-use list. In 2015, Germany used Article 8 of the 2009 regulation to make two cybersurveillance items subject to their national export controls. The EU has also implemented restrictive measures (sanctions) to control the export of a wide range of cybersurveillance items to Iran, Syria, Venezuela and Myanmar.⁴⁵ However, some NGOs and EP members viewed these regulatory steps as insufficient, arguing that member states were unevenly applying the controls adopted.⁴⁶ NGOs also pointed to gaps in the

⁴² C5IS, *The Big Black Book of Electronic Surveillance*, 5th ed. (2017).

⁴³ See, e.g., International Federation for Human Rights (FIDH), *Surveillance Technologies 'Made in Europe': Regulation Needed to Prevent Human Rights Abuses*, FIDH position paper no. 648a (FIDH: Paris, 14 Dec. 2014).

⁴⁴ 'Joint Statement by the European Parliament, the Council and the Commission on the review of the dual-use export control system', *Official Journal of the European Union*, L173, 12 June 2014, p. 82; see also Immenkamp, B., 'Review of dual-use export controls', European Parliamentary Research Service briefing PE 589.832, 15 Jan. 2021.

⁴⁵ See European Commission, 'EU sanctions map', [n.d.].

⁴⁶ See Goslinga, M. and Tokmetzis, D., 'The surveillance industry still sells to repressive regimes. Here's what Europe can do about it', *The Correspondent*, 23 Feb. 2017.

controls and pushed for them to be expanded to a wider range of technologies, including ones with both law enforcement and civilian applications, such as ‘facial recognition systems’ and ‘biometric systems’.⁴⁷

Supported by the EP, the Commission’s proposals sought to expand controls on exports of cybersurveillance items through four sets of changes, which it framed within a broader attempt to apply the concept of ‘human security’ to the EU’s dual-use export controls. These changes would have (a) expanded the definition of dual-use items to include cybersurveillance items; (b) created a new ‘catch-all control’ for unlisted cybersurveillance items; (c) established an ‘autonomous’ EU control list for cybersurveillance items that were not covered by the WA dual-use list; and (d) introduced language on human rights concerns into the ‘common criteria’. Member states resisted the Commission’s and the EP’s proposals and the use of the ‘human security’ concept, and the Council’s negotiating mandate made no reference to these points. However, while the definition of dual-use items remains unchanged, the 2021 recast reflects the other three proposals—albeit in a diluted form (see section III). During the debates in the trilogue the EP pushed for increased public transparency—something which the Commission and the EP had proposed but that the Council’s mandate did not mention—to allow for better oversight of the trade in cybersurveillance items.⁴⁸ The recast commits member states to publishing details of their exports of dual-use items and—particularly—of cybersurveillance items (see section III).

Responding to advances in emerging technologies

Emerging technologies are novel, rapidly developing and often disruptive technologies that increasingly originate from civilian technological innovation and usually lack an agreed risk assessment.⁴⁹ Addressing the challenges posed by possible military or WMD applications of emerging technologies became a

⁴⁷ See, e.g., Amnesty International, *Out of Control: Failing EU Laws for Digital Surveillance Export*, Report no. EUR 01/2556/2020 (London: Amnesty International, Sep. 2020).

⁴⁸ Gregorová, M., INTA Rapporteur, European Parliament, ‘The European Parliament’s expectations for more effective controls on cybersurveillance technologies’, 2020 Export Control Forum, 11 Dec. 2020.

⁴⁹ Brockmann, K., ‘Drafting, implementing, and complying with export controls: The challenge presented by emerging technologies’, *Strategic Trade Review*, vol. 4, no. 6 (2018).

growing focus of attention during the recast of the dual-use regulation. The Commission’s 2011 Green Paper raised concerns about the impact of the foreign availability of strategic technologies on the effectiveness of export controls.⁵⁰ The Commission’s 2014 Communication also highlighted the difficulties faced when keeping up with technological developments in areas like cloud computing, additive manufacturing and nanotechnology.⁵¹ By 2017 the focus had expanded to include improving processes for timely controls of exports of certain emerging technologies. The Commission, in particular, raised the possibility of expanding the scope of the proposed ‘autonomous’ EU list for cybersurveillance items to cover certain emerging technologies.⁵² Two developments in particular spurred this shift: US efforts to introduce national controls on a range of emerging technologies, and growing discussions over competition with China in many areas of emerging technology.⁵³

A group of member states viewed the introduction of an autonomous control list as highly problematic, for reasons that include its potential to undermine multilateral efforts through the regimes, and the Council did not include it in its negotiating mandate.⁵⁴ Many member states instead saw a need for creating mechanisms within the EU that would help to address emerging technologies, particularly when the multilateral export control regimes struggle to find consensus on adding new control list items or updating existing ones.⁵⁵ Between November 2019 and December 2020 the Commission and Germany also organized a series of technical workshops on emerging technologies for interested member states, complementing similar discussions in the

⁵⁰ European Commission, COM (2011) 393 final (note 9).

⁵¹ European Commission, ‘Communication from the Commission to the Council and the European Parliament on the review of export control policy: Ensuring security and competitiveness in a changing world’, COM (2014) 244 final, 24 Apr. 2014.

⁵² EU official, Interview conducted by the authors, 28 May 2021.

⁵³ US Department of Commerce, Bureau of Industry and Security, ‘Advance notice of proposed rulemaking: Review of controls for certain emerging technologies’, Federal Register, vol. 83, no. 223 (19 Nov. 2018); and Bromley, M., Brockmann, K. and Maletta, G., ‘Developments in the European Union’s dual-use and arms trade controls’, *SIPRI Yearbook 2020: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2018).

⁵⁴ Council of the European Union, ‘Paper for discussion—for adoption of an improved EU Export Control Regulation 428/2009 and for Cyber surveillance controls promoting human rights and international humanitarian law’, WK5755/2018 INIT, 15 May 2018, Brussels.

⁵⁵ European Commission, 12798/16 (note 11), p. 6.

regimes.⁵⁶ The areas covered included additive manufacturing, quantum computing, semi-conductors, biotechnologies, brain–computer interfaces, advanced materials and AI.⁵⁷

The 2021 recast reflects the compromise that developed during the trilogue through the inclusion of several recitals that both call for the establishment of a coordination mechanism to address ‘new risk associated with emerging technologies’ and stress the continued focus on working through the regimes.⁵⁸ The main way in which the recast seeks to address the challenges posed by emerging technologies is an expanded mechanism for establishing new national controls. This allows member states to adopt national controls on unlisted items for a wider array of reasons and also creates a mechanism for these controls to be applied by other member states and across the EU as a whole (see section III).

III. KEY CHANGES AND IMPLEMENTATION PRIORITIES

As outlined in section II, the 2021 recast introduces a wide range of changes to the EU’s system of dual-use export controls. However, four changes are especially worthy of closer attention, not only for their potential to promote a more effective and harmonized application of controls, but also because of the particularly technical and political challenges that their implementation is likely to generate. These are: (a) a new ‘enforcement coordination mechanism’; (b) new controls on exports of cybersurveillance items; (c) a new public report for exports of dual-use items; and (d) an expanded mechanism to control unlisted items—including emerging technologies.

A new ‘enforcement coordination mechanism’

Under the 2021 recast, the Dual-Use Coordination Group is responsible for establishing a new ‘enforcement coordination mechanism’.⁵⁹ The mechanism is to bring together member states’ licensing authorities and enforcement agencies to exchange—in confidence—information on a range of

areas, including ‘risk-based audits’ and ‘the detection and prosecution of unauthorised exports of dual-use items’ that involve either infringements of the dual-use regulation or ‘relevant national legislation’.⁶⁰ This is the first time enforcement agencies have been formally included in an EU body tasked with overseeing the implementation of dual-use export controls. Until now, the work of the Dual-use Coordination Group has not systematically involved enforcement functions but instead focused on licensing officers.⁶¹

A crucial first task for the enforcement coordination mechanism will be identifying both the competent national agencies responsible for enforcement issues and the officials within those agencies with expertise in this area. The many differences in member states’ administrative systems mean that authority and competence may reside at either the federal or regional level and may be located in either the customs or export licensing authorities, the police, intelligence agencies, or offices of prosecutors. The enforcement coordination mechanism should connect and provide a forum for officials working on licensing and enforcement issues to regularly exchange information about relevant past and ongoing cases involving attempted or completed illegal exports.

Looking further ahead, the mechanism could play a key role in increasing the ability of member states to enforce dual-use export controls effectively. Enforcement is an area where the capacities and experiences of member states differ significantly and where there is clear scope for sharing of knowledge and good practices and, where possible, pooling resources.⁶² In this context it is significant that the 2021 recast additionally establishes a mandate for the EU to support export control capacity-building work not just outside the EU, where it has been traditionally focused, but also within the EU. Specifically, the Commission is tasked with supporting an EU ‘licensing and enforcement capacity-building programme, including by developing, in consultation with the Dual-Use Coordination Group, common training programmes for officials of the Member States’.⁶³

If the relevant institutional barriers can be overcome, the enforcement coordination mechanism could also be an opportunity to achieve greater coherence in both the development and implementation of the EU’s wider

⁵⁶ Barkin, N., ‘Export controls and the US–China tech war: Policy challenges for Europe’, *China Monitor*, 18 Mar. 2020, p. 7.

⁵⁷ EU member state official, Interview conducted by the authors, 7 Jan. 2021.

⁵⁸ Regulation (EU) 2021/821 (note 14), Recital 10.

⁵⁹ Regulation (EU) 2021/821 (note 14), Article 25(2).

⁶⁰ Regulation (EU) 2021/821 (note 14), Article 25(2)

⁶¹ See Bauer and Bromley (note 38), p. 34.

⁶² See Bauer and Bromley (note 38).

⁶³ Regulation (EU) 2021/821 (note 14), Article 24(4).

set of export control instruments. These instruments include the EU common position and EU restrictive measures as well as the Intra-Community Transfers Directive and the Anti-torture Regulation.⁶⁴ The mechanism could also help to connect and harmonize key aspects of the EU's export control instruments and its customs regulations. Different EU bodies are responsible for overseeing their implementation, which makes it hard to address possible overlaps and inconsistencies that can occur.⁶⁵ For example, the term 'serious violations of human rights' appears in both the 2021 recast and the EU common position without a clear definition provided in either instrument. In addition, the term 'exporter' has different definitions in the EU dual-use regulation and the EU customs code. These issues often become most apparent at the point of enforcement, which makes the new enforcement coordination mechanism a useful avenue for both identifying and addressing them.

New controls on exports of cybersurveillance items

The 2021 recast includes a new catch-all control for unlisted cybersurveillance items, a mechanism for creating an EU list of controlled cybersurveillance items, and additional language in the preamble on human rights concerns. Under the new catch-all control, unlisted items require a licence 'if the exporter has been informed by the competent authority that [the items] may be intended, in their entirety or in part, for use in connection with internal repression and/or the commission of serious violations of human rights and international humanitarian law'.⁶⁶ It also creates

⁶⁴ Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defence-related products within the Community, *Official Journal of the European Union*, L146, 10 June 2009; and Regulation (EU) 2016/2134 of the European Parliament and of the Council of 23 Nov. 2016 amending Council Regulation (EC) 1236/2005 concerning trade in certain goods which could be used for capital punishment, torture or other cruel, inhuman or degrading treatment or punishment, *Official Journal of the European Union*, L338, 13 Dec. 2016.

⁶⁵ The Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA) oversees the implementation of the EU's restrictive measures. The Commission's Service for Foreign Policy Instruments oversees the Anti-torture Regulation. The Directorate General for Trade of the European Commission (DG Trade) oversees the implementation of the Dual-use Regulation. The European External Action Service (EEAS) oversees the implementation of the Common Position. The Directorate-General for Defence Industry and Space (DEFIS) oversees the implementation of the ICT Directive. The Directorate-General for Taxation and Customs Union oversees the implementation of the EU's customs controls.

⁶⁶ Regulation (EU) 2021/821 (note 14), Article 5(1).

an obligation for exporters to inform their national authorities if they are 'aware according to [their] due diligence findings' of any such risks.⁶⁷ The 2021 recast also provides a definition of cybersurveillance items—one that is far narrower than the Commission and the EP had proposed—and commits the Commission and the Council to producing guidelines to help exporters fulfil their obligations under the new catch-all.⁶⁸

If a member state uses the new catch-all control for an unlisted cybersurveillance item—and if all other member states indicate within 60 working days that they wish to do the same—then the EU will publish the details. The 2021 recast has therefore created a mechanism for establishing an 'EU list' of controlled cybersurveillance items but does not formally connect the mechanism to the EU dual-list and gives every member state a veto over whether something is added. EU member states are also to 'consider supporting the inclusion' of the item in the coverage of the multilateral export control regimes.⁶⁹ The common criteria have been left intact but language added to the non-binding preamble asserting that member states 'should consider in particular' the risk of exported cybersurveillance items 'being used in connection with internal repression or the commission of serious violations of human rights and international humanitarian law'.⁷⁰

A key challenge following entry into force of the recast will be drafting the guidelines that are intended to assist exporters with implementing the new catch-all control. This will involve defining what is required from the 'due diligence' procedures to which the catch-all refers. Here, the Council and Commission will be able to draw on a wide range of guidance materials aimed at preventing the misuse of exported ICT equipment that have been produced by NGOs, governments and manufacturers since 2011.⁷¹ Common

⁶⁷ Regulation (EU) 2021/821 (note 14), Article 5(2).

⁶⁸ Specifically, cybersurveillance items are 'dual-use items specially designed to enable the covert surveillance of natural persons by monitoring, extracting, collecting or analysing data from information and telecommunication systems'. Regulation (EU) 2021/821 (note 14), Article 2(20).

⁶⁹ Regulation (EU) 2021/821 (note 14), Article 5(10).

⁷⁰ Regulation (EU) 2021/821 (note 14), Recital 2.

⁷¹ See e.g. Cohn, C. and York, J. C., "Know your customer" standards for sales of surveillance equipment', Electronic Frontier Foundation (EFF) Deep Links Blog, 24 Oct. 2011; Hughes, D., 'Symantec's approach to "exercising due diligence" on human rights concerns', Presentation to 2018 Export Control Forum, Brussels, 13 Dec. 2018; and US Department of State, 'U.S. Department of State guidance on implementing the UN guiding principles for transactions linked to foreign government end-users for products or services with surveillance capabilities', 30 Sep. 2020.

themes include regularly reviewing the capabilities of the products being exported and the human rights records of the states where customers are based, as well as taking active steps to minimise diversion and misuse. More challenging will be defining the scope of the catch-all control. This will require elaborating upon the definition of cybersurveillance items provided in the recast.

Also challenging will be determining which human rights concerns should be taken into account both when applying the new catch-all control and when member states are deciding whether to approve exports of cybersurveillance items. Both the new catch-all control and the preamble make reference to the need to pay attention to the risk of ‘internal repression’ and ‘serious violations of human rights’ but these terms are not defined. The EU common position provides a definition of ‘internal repression’ from which states and exporters could draw but it does not explicitly define what is meant by ‘serious violations of human rights’.⁷² One possible approach here would be to further develop the user’s guide that accompanies the EU common position, with a targeted annex covering exports of cybersurveillance items.⁷³ This would help to ensure coherence in the different aspects of the EU’s export controls.

A final challenge will be reaching an agreement about the extent to which the new catch-all control and EU list mechanism for cybersurveillance items should be utilised. Members of the EP have indicated that they view the extent to which the tools are employed as a measure of the success of the recast, and would like to see them used to control exports of facial recognition systems and biometric systems.⁷⁴ In practice, the need for all EU member states to provide approval may make it hard to create new EU-wide controls on cybersurveillance items. The 2021 recast establishes a review mechanism which will be triggered in 2024, and has a specified role for the EP and specific focus on the cybersurveillance controls.⁷⁵ This will provide an

opportunity to discuss and address any differences of opinion between the EP and the Council over whether the catch-all is being used appropriately.

A new public report for exports of dual-use items

The 2021 recast creates a new and ambitious set of targets on public reporting on exports of dual-use items. The commitments are most far-reaching for cybersurveillance items. Here, the EU commits itself to publishing annual data on licence applications by item, origin and destination.⁷⁶ The recast tasks the Commission and the Council with developing guidelines to clarify which data will be collected and published.⁷⁷ It also notes that member states are obliged to give ‘due consideration . . . to legal requirements concerning the protection of personal information, commercially sensitive information or protected defence, foreign policy or national security information’ when collecting and submitting data.⁷⁸ Hence, while there are strong commitments to publishing more detailed information, there is also clear language indicating that there will be limits on what states will make available.

The new reporting guidelines will need to balance these competing commitments while also establishing both a methodology for collecting data and a format for presenting it in the Commission’s annual report that allows for a meaningful interpretation of how states are interpreting and applying the common criteria. Several EU member states—including Bulgaria, the Flanders regional government, the Netherlands, Spain and Sweden—have acquired extensive experience in collecting and publishing data on exports of dual-use items which could be drawn upon when determining what is possible and realistic.⁷⁹ Also relevant will be the experience that the EU and EU member states have acquired in developing and implementing the reporting instruments on arms exports attached to the EU common position.⁸⁰

⁷² Council Common Position 2008/944/CFSP (note 6), Article 2(2).

⁷³ See Council of the European Union, ‘User’s Guide to Council Common Position 2008/944/CFSP defining common rules governing the control of exports of military technology and equipment’, Document no. 12189/19, 16 Sep. 2019.

⁷⁴ Gregorová (note 48).

⁷⁵ Specifically, after 10 Sep. 2024, the Commission is tasked with conducting an ‘evaluation’ of the new catch-all control and reporting ‘the main findings to the European Parliament, the Council and the European Economic and Social Committee’. Regulation (EU) 2021/821 (note 14), Article 26(4).

⁷⁶ Regulation (EU) 2021/821 (note 14), Article 26(2).

⁷⁷ Regulation (EU) 2021/821 (note 14), Article 26(2).

⁷⁸ Regulation (EU) 2021/821 (note 14), Article 26(3).

⁷⁹ See SIPRI, ‘National reports on arms exports’, SIPRI database, [n.d.].

⁸⁰ Under the EU Common Position member states provide data on the financial value of their arms export licences and arms exports broken down by destination and EU military list categories. In 2020 the EU began making the figures available in a searchable online database. See ‘COARM online database’ in EEAS, ‘Arms Export Control’, 26 Oct. 2020. The database is available at EEAS, ‘COARM Public 2.0’, 15 Apr. 2021.

One potential lesson from both national and EU reporting practices is the limited utility of certain types of data. Notably, data on the financial value of export licences and exports has little relevance when assessing how states are applying the export licensing criteria. In addition, differences in member states' licensing procedures, including whether and how values are assigned to open licences, means that the data generated on financial values is often not comparable.⁸¹ Moreover, publication of financial values can generate concerns regarding revelation of commercially sensitive information about the amounts charged for particular sales and exports. Of far greater utility from a public transparency and oversight perspective are details of the licensed and exported items and the type of end-user and end-use.

An expanded mechanism to control unlisted items

The 2021 recast expands the mechanism that allows member states to make additional dual-use items subject to national list-based controls.⁸² The new mechanism, set out in Articles 9 and 10 of the recast, is designed to expand the range of rationales that can motivate the establishment of national controls. Article 9(1) provides the possibility for member states to 'prohibit or impose an authorisation requirement' on non-listed items 'for reasons of public security, including the prevention of acts of terrorism, or for human rights considerations'.⁸³ Therefore, the expanded scope specifically seeks to address risks posed by emerging technologies and terrorism. In addition, Article 10 creates a process of 'transmissible controls' that makes a decision by one member state to create a national list entry (pursuant to Article 9) the basis of a catch-all control that is applicable across the EU.⁸⁴ Member states have to inform the Commission and other member states when creating national control list entries using this mechanism, and have to provide similar information about any subsequent changes to and any denials issued based on these national list entries.⁸⁵ The Commission is tasked with

compiling, publishing and updating these entries in the form of a public list.⁸⁶

Article 10 establishes transmissible controls on those national control list items published by the Commission, if an exporter has been 'informed' by the national authority that an item may have a possible end-use of concern 'with respect to public security, including the prevention of acts of terrorism, or to human rights considerations'.⁸⁷ In contrast to the existing catch-all controls and the new catch-all control for unlisted cybersurveillance items created by the 2021 recast, the catch-all mechanism for nationally listed items does not establish any requirement for exporters to inform national authorities if they are aware of one of the aforementioned end-uses of concern. The terms 'uses of concern with respect to public security', 'prevention of acts of terrorism' and 'human rights considerations' could potentially be interpreted as encompassing a wide range of uses that would be difficult for exporters to interpret and apply. However, potential uncertainties on the part of exporters should be mitigated by the fact that the Commission will publish the list of items to which transmissible controls may be applied.

A key step following entry into force of the 2021 recast will be adapting the DUES so that member states can provide the required notifications related to the creation of national control list items, updates of these list items and licence denials. More challenging will be establishing procedures for identifying and adding new items to national control lists, ensuring that other member states understand the content and rationale of the new listings, and taking steps towards adding these items to the multilateral export control regimes. While the Dual-use Working Party already provides an appropriate framework to present and discuss national listings, including these tasks and responsibilities will require ensuring adequate resources and staffing. However, the extent to which the use of this framework becomes necessary will depend on how often the provisions under Articles 9 and 10 are used. A key factor here will be how the efforts to expand controls on emerging technologies will develop, both in the EU and internationally, and to what extent the regimes are able to respond in a timely manner.

The extent to which these new controls are used will also be determined by broader developments

⁸¹ See Council of the European Union, 'Twenty-Second Annual Report according to Article 8(2) of Council Common Position 2008/944/CFSP defining common rules governing the control of exports of military technology and equipment', *Official Journal of the European Union*, C431, 11 Dec. 2020, p. 9.

⁸² For comparison, see Regulation (EC) 428/2009 (note 2), Article 8.

⁸³ Regulation (EU) 2021/821 (note 14), Article 9.

⁸⁴ European Commission, 12798/16 (note 11), p. 28.

⁸⁵ Regulation (EU) 2021/821 (note 14), Article 9 and Recital 22.

⁸⁶ Regulation (EU) 2021/821 (note 14), Article 9(2)–(4) and Recital 25.

⁸⁷ Regulation (EU) 2021/821 (note 14), Article 10(1).

in the EU's relations with the United States and the growing systemic competition that is playing out in relation to China, among other states, where several emerging technology areas—primarily AI and quantum computing—have become key areas of concern.⁸⁸ This set of issues will be the focus of ongoing debate and discussion both within the EU and in the EU's bilateral relationship with the United States. The importance of these issues was underlined by the launch in June 2021 of the EU–US Trade and Technology Council among whose several working groups will be two specifically on '[t]he misuse of technology threatening security and human rights' and '[e]xport controls'.⁸⁹

The expanded mechanism to control unlisted items potentially sets the stage for an uneasy relationship between those pushing for more autonomous EU controls—namely, the EP and the Commission—and those with the power to determine whether and how the controls are used—that is, the member states. The EP may seek to probe the member states—particularly if they were to abstain from using the mechanism—as part of the regular review mechanism established by the 2021 recast. Meanwhile, the Commission looks set to continue putting its institutional weight behind efforts aimed at addressing the challenges posed by emerging technologies. It is planning to set up an EU emerging technology experts group to share technological insights, complementary to multilateral efforts.⁹⁰

IV. CONCLUSIONS AND RECOMMENDATIONS

That the review and recast of the 2009 regulation would be completed was by no means a foregone conclusion and it was only achieved due to the willingness of the Commission, the EP and the Council to make concessions in key areas. The outcome reflects the key concerns of member states in that it ensures that the central aspects of the dual-use regulation—particularly the EU dual-use list—remains tied to the multilateral export control regimes and that decision-making on licensing stays at the national level. However, that outcome also reflects significant

changes that the Commission or the EP proposed, particularly on exports of cybersurveillance items and transparency. The 2021 recast is ultimately the result of a willingness to compromise that will need to be maintained if the instrument is going to be implemented effectively. At the same time, the EU's efforts to update the dual-use regulation need to be viewed in the wider context of the EU's ambition to be a geopolitical actor in its own right, acting with strategic autonomy. The recast adds new functionalities that can enable it to become an even more important tool of EU foreign policy if it is operationalized and implemented swiftly and effectively.

More broadly, the export controls enacted by the EU and its member states serve as an important means of preventing proliferation while also reflecting and applying the EU's values, particularly with regard to human rights. It is therefore imperative to approach the implementation of the recast in this context and apply the necessary urgency, commitment and rigour in taking necessary steps, providing required resources and implementing the regulation, including its new provisions. As this paper demonstrates, effectively implementing the 2021 recast will involve taking a range of practical steps and keeping in mind a number of broader considerations. These steps and considerations include the following:

1. *Effective resource allocation at the EU and member state level.* The expansion in the range of policy concerns and information-sharing mechanisms created by the 2021 recast is just one aspect of an ongoing process through which export controls are becoming more complex and challenging to implement. This points to the need for both the EU and member states to ensure that the financial and human resources assigned to work in this area are commensurate with the range of tasks that they will need to perform. It also highlights the need to operationalize the recast's commitment to conduct export control capacity-building work within the EU in an effective and targeted manner.

2. *Building greater coherence in the EU's export control framework.* The EU has a wide and growing set of policy instruments related to the export control field which it is seeking to employ to address an expanding set of foreign and security policy challenges. If this process is to continue to move ahead in a meaningful and coherent fashion, there needs to be greater coordination between the EU institutions responsible

⁸⁸ See e.g. European Commission, 'EU–US Relations: EU–US Trade and Technology Council', [n.d.]; Barkin (note 56).

⁸⁹ European Commission, 'EU–US launch Trade and Technology Council to lead values-based global digital transformation', Press release, 15 June 2021.

⁹⁰ European Commission official, Interview conducted by the authors, 28 May 2021.

for these instruments and the national officials responsible for implementation and enforcement, and greater investment in identifying areas of overlap and duplication and in establishing common definitions of key terms and concepts.

3. Guidelines on catch-all controls and reporting requirements. The Council and the Commission should move quickly to draft the mandated guidelines connected to the new catch-all controls and public reporting instrument. When doing so, it is imperative that both documents build upon the extensive amount of work that has already been conducted in these two areas within both the EU and the export control regimes, and that they also draw from the extensive experience available in national governments, NGOs and the private sector.

4. EU emerging technologies technical experts group. The Commission should set up an emerging technologies technical experts group at the EU level. This group should help share information and improve technical understanding across the Commission and member states, which would have the added benefit of strengthening active and constructive participation in international efforts, particularly in the multilateral export control regimes. This group should include national technical experts and representatives from the Commission (including technical experts from its Joint Research Centre) and should regularly invite stakeholders, including compliance practitioners, and technical experts from industry and research.

5. Information exchange in support of the new catch-all controls on cybersurveillance items and nationally listed items. The Commission should integrate into the DUEs as soon as possible the mechanisms for information sharing required by the 2021 recast, particularly those associated with the new catch-all control on cybersurveillance items and the updated mechanism for controlling unlisted items. The Council should also ensure that discussions about the application and implementation of these new controls are a regular item on the agenda of the Dual-use Working Party.

6. Maintaining and expanding the dual-use export control ‘community’. One of the most effective outcomes of the review and recast of the 2009 regulation is the way its associated studies and discussions brought together an ever-expanding group of EU and member state officials and representatives of industry, academia, research institutes and NGOs with an interest in dual-use export controls. Keeping this community active would help to build awareness and understanding of the 2021 recast. It would also serve as a source of technical and practical expertise for more effectively addressing some of the areas that could not be fully addressed in the recast, such as achieving harmonized controls on cloud computing.

ABBREVIATIONS

AG	Australia Group
AI	Artificial intelligence
DUeS	Dual-use e-System
EP	European Parliament
EU	European Union
EUGEA	EU General Export Authorisation
ICP	Internal compliance programme
ICT	Information communication technology
LEA	Law enforcement agency
MTCR	Missile Technology Control Regime
NGEA	National General Export Authorisation
NGO	Non-governmental organization
NSG	Nuclear Suppliers Group
WA	Wassenaar Arrangement
WMD	Weapon(s) of mass destruction

**LIST OF RECENT NON-PROLIFERATION AND
DISARMAMENT PAPERS**

**A Comparison of National Reviews of the Treaty on
the Prohibition of Nuclear Weapons**

Non-Proliferation and Disarmament Paper no. 76
Michal Onderco and Andrea Farrés Jiménez
June 2021

**Effective and Comprehensive CBRN Security Risk
Management in the 21st Century**

Non-Proliferation and Disarmament Paper no. 75
Maurizio Martellini and Tatyana Novosiolova
June 2021

**A Proposal for a Ban on Destructive Anti-Satellite
Testing: A Role for the European Union**

Non-Proliferation and Disarmament Paper no. 74
Nivedita Raju
April 2021

**Explaining the Nuclear Challenges Posed by
Emerging and Disruptive Technology: A Primer for
European Policymakers and Professionals**

Non-Proliferation and Disarmament Paper no. 73
Andrew Futter
March 2021

**The Importance of Narrative in Nuclear
Policymaking: A Study of the Nuclear Non-
Proliferation Treaty**

Non-Proliferation and Disarmament Paper no. 72
Laura Considine
January 2021

**The Case for Gender Balance in Arms Control,
Non-proliferation and Disarmament Negotiations**

Non-Proliferation and Disarmament Paper no. 71
Federica Dall'Arche
October 2020

**Monitoring the response to converted firearms in
Europe**

Non-Proliferation and Disarmament Paper no. 70
Benjamin Jongleux and Nicolas Florquin
October 2020

**Mapping Non-proliferation and Disarmament
Education in Europe**

Non-Proliferation and Disarmament Paper no. 69
Elizabeth I-Mi Suh
September 2020



This document has been produced with the financial assistance of the EU. The contents are the sole responsibility of the EU Non-Proliferation and Disarmament Consortium and can under no circumstances be regarded as reflecting the position of the EU.

A EUROPEAN NETWORK

In July 2010 the Council of the European Union decided to support the creation of a network bringing together foreign policy institutions and research centers from across the EU to encourage political and security-related dialogue and the long-term discussion of measures to combat the proliferation of weapons of mass destruction (WMD) and their delivery systems. The Council of the European Union entrusted the technical implementation of this Decision to the EU Non-Proliferation Consortium. In 2018, in line with the recommendations formulated by the European Parliament the names and the mandate of the network and the Consortium have been adjusted to include the word 'disarmament'.

STRUCTURE

The EU Non-Proliferation and Disarmament Consortium is managed jointly by six institutes: La Fondation pour la recherche stratégique (FRS), the Peace Research Institute Frankfurt (HSFK/ PRIF), the International Affairs Institute in Rome (IAI), the International Institute for Strategic Studies (IISS), the Stockholm International Peace Research Institute (SIPRI) and the Vienna Center for Disarmament and Non-Proliferation (VCDNP). The Consortium, originally comprised of four institutes, began its work in January 2011 and forms the core of a wider network of European non-proliferation and disarmament think tanks and research centers which are closely associated with the activities of the Consortium.

MISSION

The main aim of the network of independent non-proliferation and disarmament think tanks is to encourage discussion of measures to combat the proliferation of weapons of mass destruction and their delivery systems within civil society, particularly among experts, researchers and academics in the EU and third countries. The scope of activities shall also cover issues related to conventional weapons, including small arms and light weapons (SALW).

www.nonproliferation.eu

EU Non-Proliferation and Disarmament Consortium

Promoting the European network of independent non-proliferation and disarmament think tanks

FONDATION
pour la RECHERCHE
STRATÉGIQUE

**FOUNDATION FOR
STRATEGIC RESEARCH**

www.frstrategie.org

PRIF  **HSFK**
Peace Research Institute Frankfurt Hessische Stiftung
Friedens- und Konfliktforschung

**PEACE RESEARCH INSTITUTE
FRANKFURT**

www.hsfk.de

 **iai** Istituto Affari
Internazionali

INTERNATIONAL AFFAIRS INSTITUTE

www.iai.it/en

 **IISS**

**INTERNATIONAL INSTITUTE
FOR STRATEGIC STUDIES**

www.iiss.org

 **sipri**

**STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE**

www.sipri.org

 **VCDNP**

Vienna Center for Disarmament
and Non-Proliferation

**VIENNA CENTER FOR DISARMAMENT
AND NON-PROLIFERATION**

www.vcdnp.org