

# COCOM's daughter?



Why a new multilateral export control regime is needed to address contemporary national security and human rights issues. By Kevin Wolf and Emily S. Weinstein.

The unprecedented economic response<sup>1</sup> by the United States and allied and partner countries to Russia's continued invasion of Ukraine has created an opportunity for a core group of techno-democracies to create a new multilateral export control regime. The need for an additional regime is urgent due to the four primary multilateral export control regimes' inability to manage the contemporary national security, economic security, and human rights issues that can be addressed through coordinated export controls.

## The opportunity

The opportunity exists because, for the first time since the Cold War, US allies and partners have collectively responded to a broad-based threat from an authoritarian major power by materially amending their export control laws and policies to achieve strategic objectives beyond those of the four primary export control regimes.

However, until recently, the allied countries' export controls were largely or completely limited to controlling only the items identified by:

1. the Missile Technology Control Regime ('MTCR'),
2. the Australia Group ('AG'),
3. the Nuclear Suppliers Group ('NSG'), and
4. the Wassenaar Arrangement ('WA'), which is the successor of the Cold War-era Coordinating Committee for Multilateral Export Controls ('COCOM').

The MTCR and the NSG are obviously focused on contributing to the nonproliferation of missile-related and nuclear-related items, respectively. The AG is focused on using export controls to ensure that certain chemicals, biological agents, and related



**THE ALLIES HAVE PROVEN THAT THEY CAN CHANGE THEIR EXPORT CONTROL LAWS TO AUTHORISE THE REGULATION OF ITEMS OUTSIDE THE SCOPE OF THE REGIME LISTS.**

items do not contribute to the spread of chemical and biological weapons. The WA's mandate<sup>2</sup> is to promote 'transparency and greater responsibility in transfers of conventional arms and dual-use<sup>3</sup> goods and technologies, thus preventing destabilising accumulations.' Thus, in sum, the control lists of the four existing regimes identify weapons of mass destruction ('WMD'), conventional weapons, and the bespoke and dual-use commodities, software, and technologies necessary for their development, production, or use. We refer to these as 'traditional export controls'.

Although the new controls are limited to Russia and Belarus, the mould has nonetheless now been broken for coordinated US allied and partner use of export controls to achieve strategic and other policy objectives regarding specific countries, end uses, and end users of common concern beyond traditional nonproliferation objectives. Thoughts in previous administrations about convincing

the allies to impose new types of export controls to achieve non-traditional objectives failed because the allies held firm that their laws limited their authority to control little more than the WMD-related, military, and dual-use items on the regime lists. Their policies generally limited their willingness to deny exports of such items unless they were clearly for an unacceptable proliferation-related or military-related end use. In other words, hopes for new types of plurilateral controls<sup>4</sup> were largely aspirational because of the limitations in allied export control laws<sup>5</sup> and the absence of a shared vision for such controls.<sup>6</sup> This has led the United States, over the years, to take a series of unilateral controls<sup>7</sup> to address legitimately serious and largely China-specific issues.

That is no longer the case. The allies have now proven that they can and will change their export control laws to authorise the regulation of items outside the scope of the regime lists. There is also now proof that coordinated export control actions outside the

scope of traditional controls are far more effective than unilateral (i.e., US-only) controls. Moreover, in merely months, the allied response has created information-sharing arrangements, coordinated enforcement efforts, and personal connections among export control officials that would normally have taken years of concerted action to establish. These new authorities, policies, arrangements, and connections can and should be leveraged quickly to accomplish much more in the common interest.

### The need

The need exists for two reasons. First, Russia is a member of three of the multilateral regimes. All regime decisions, such as changing the lists of controlled items, require consensus, meaning that the ability of these regimes to address traditional non-proliferation issues – many of which Russia and its allies create – will grow even more limited. This also means that Russia cannot be removed from a regime – even for invading a fellow regime member – unless it and all other members agree to the membership change. Indeed, Russia is the MTCR's chair this year. A new regime of like-minded techno-democracies is therefore needed to address traditional nonproliferation issues that the legacy regimes will not be able to because of Russia's disruptive membership.

Second, the regimes' mandates do not permit actions to address other significant contemporary policy issues, such as those related to:

1. how to respond to the national security threat from China's objective of obtaining strategic economic dominance in key technology areas;
2. allied supply chain resiliency objectives;
3. the misuse of commercial technologies to abuse human rights; and
4. China's and Russia's military-civil fusion<sup>8</sup> policies. (Such policies involve the exploitation of Western commercial technologies that do not meet traditional definitions of 'dual-use' items for the benefit of their defence industrial base.<sup>9</sup>)

Also, the existing regimes' mandates and, thus, the laws of

US allies, do not permit controls over unlisted items against specific countries, end users, or end uses, except if related to WMD, nonproliferation, or arms embargo objectives. In particular, the Wassenaar Arrangement's foundational document explicitly states that the regime '... will not be directed against any state or group of states and will not impede bona fide civil transactions.' Obviously, most of the contemporary non-traditional national security, economic security, and human rights issues that can be addressed through coordinated export controls relate to Chinese and Russian government policies. The need for a new regime is, however, not

**WE ARE NOT CALLING FOR AN END TO THE EXISTING REGIMES, NOR DO WE BELIEVE THAT THE ALLIES SHOULD REDUCE THEIR COMMITMENTS TO MAKING THEM AS EFFECTIVE AS POSSIBLE.**

limited to responding only to these countries' policies.

To be clear, we are not calling for an end to the existing regimes, nor do we believe that the allies should reduce their commitments to making them as effective as possible. These regimes will still need to exist to be the foundations for their members' and their adherents' domestic export controls to address traditional non-proliferation objectives. They can also be useful venues for discussion and diplomacy. In addition, we are not advocating new controls for the sake of controls. Rather, we are calling for a public discussion among the allies about codifying a new way of thinking to address contemporary national security, economic security, and human rights issues that are outside the scope of the traditional nonproliferation focused export control structure.

### The scope and mandate of the new regime

The mission of a new export control regime would be for its

members to identify together the commodities, software, technologies, end uses, and end users that warrant control to address shared national security, economic security, and human rights issues that the four primary multilateral export control regimes cannot. Controls on exports to specific end users or for specific end uses are necessary when the underlying items at issue are widely available and widely used in benign or beneficial civil applications.

More specifically, when deciding whether any particular new control would be within the scope of the new regime, the questions for the members to answer would be whether it would either:

1. advance a traditional export control objective of an existing regime that cannot be advanced but for the disruptive memberships of Russia and its allies; or
2. address one or more of the contemporary non-traditional national security, economic security, or human rights issues that could be addressed through coordinated export controls.

Again, such non-traditional objectives are primarily those related to (i) responding to China's strategic economic dominance objectives that have risen or could rise to national security threats; (ii) advancing allied supply chain resiliency objectives; (iii) controlling the misuse of commercial technologies that enable human rights abuses; and (iv) responding to China's and Russia's civil-military fusion policies.

The regime would *not* be a tool of mercantilist, protectionist, or other purely trade policies as such. Identifying when a new control on commercial items that are not traditional military or dual-use items crosses the line from an acceptable national security or human rights control into an inappropriate trade policy tool will, of course, be difficult, but is doable if the new regime's mandate is clear.

### The need for a new regime is urgent

The need for a new regime is urgent because all the issues listed

above are urgent, serious, and common to the values of a core group of techno-democracies. The common threats to these countries are clearly not limited to those that existed near the end of the Cold War when the scope and mission of the current system was established. There is also no alternative for the long term. Unilateral controls are eventually counterproductive and ineffective. The existing multilateral system is generally either too slow, too compromised, or too limited in terms of its nonproliferation-focused mandate. We realise that the allied governments effectively now have a new plurilateral export control arrangement<sup>10</sup> as a result of their daily coordination of actions against Russia and Belarus. This *de facto* arrangement should continue to expand in scope, membership, and effectiveness to respond to Russia's continued invasion of Ukraine. We also realise that over the next year or so, this and other informal arrangements are likely to be leveraged to help accomplish other, limited plurilateral control efforts.

Over time, however, the spirit, effectiveness, and the urgency of the current ad hoc efforts risk fading away if not somehow locked into the laws, policies, schedules, and export control cultures of the techno-democracies. As with any significant policy objective, it can be implemented only if there is a clearly stated vision for the policy, a structure for its development and implementation, and the passionate commitment of political leadership and the civil services in the allied countries to make it happen. Beginning work now on creating a new regime would accomplish these objectives. Moreover, the commitment alone from the allied political leaders that a new regime should be created 'will serve to organise and measure the best energies and skills'<sup>11</sup> of their export control agencies, which will only reinforce the good Russia-specific work occurring now. Without beginning work toward a new regime, there is a risk that any novel export control efforts outside the regime process will fragment and thus grow unnecessarily burdensome for allied industry.

Creating a new regime of techno-democracies to address issues other than Russia's invasion of Ukraine will be difficult. The technological, supply chain, geopolitical, domestic political, and economic issues pertaining to China and other countries of concern are far more complex. Few issues warranting coordinated action are as clear as one country's brutal invasion of another. Nonetheless, now is the time to structurally lock in for the long term durable benefits of the current efforts for traditional and non-traditional issues that cannot be addressed by the existing regimes. The US-EU Trade and Technology Council's Export Control Working Group<sup>12</sup> is indeed a good start to developing the ideas we propose. However, due to its being Euro-centric and limited in resources, it does not include the input and participation of the Pacific allies that would be critical to the success of a new export control regime. Calls for creating a fifth new regime among the techno-democracies, together with work on its creation, would thus combine and benefit from all the good thoughts and resources of our Pacific and European allies.

### The process

Notwithstanding the urgency, trying to implement all the non-traditional objectives in a new regime at once will likely fail. The issues will be too complicated. The government resources will be spread too thin. The country group alignments on the various issues and technologies will be too different. Thus, a first step could be to get the willing allies to state in a common document what they have already essentially agreed to do – impose new substantially similar controls on regime-listed items *and* on items not on regime lists important to Russia's strategic economic and military objectives.<sup>13</sup> This will establish the first plurilateral arrangement since the end of COCOM to control otherwise commercial commodities, software, and technologies to achieve *strategic* objectives outside the scope of the four existing regimes.

Once that is done in a city with a name easier to spell for most than 'Wassenaar,' the signatories can then establish a charter similar to what was agreed to in

the US-EU TTC<sup>14</sup> export control working group. Its mandate would primarily include the identification for the members to control in their domestic systems the traditional and non-traditional items, end users, *and* end uses that cannot be addressed by the existing regime systems.

To show proof of concept and effectiveness, the members would want to agree quickly on a first new set of controls to be implemented under their new domestic authorities. The most likely new control would be of items that are not in the regimes lists, but would become subjected, by member countries, to controls on exports to countries that are under arms embargoes, when there is knowledge or notification that the end user or end use is militarily related. The United States and other allies already have some form of military end use controls pertaining to China, Russia, and other countries subject to arms embargoes. A natural first step would be to harmonise and align such controls.

As a benefit for participating, members would agree to work to reduce or eliminate most formal and informal export control-specific limitations on commercial and defence trade by and among companies in their countries for end uses in their countries. Any trade compliance practitioner can provide a long list of unintended and unnecessary frictions on beneficial trade by and among the allies that can be addressed by aligning and streamlining domestic export control regulations. A further incentive for a techno-democracy to do the hard work to become a member of the new regime should be that most US extraterritorial controls would not apply to exports from participating countries. To great effect, the United States has adopted this approach with the new coordinated controls against Russia and Belarus. Such changes focused on reducing compliance burdens along with separate but parallel 'run faster' industrial policies, market access, immigration, and investment reforms among the allies would advance their common prosperity.

As a condition of participating, each member would need to ensure that it had the statutory authority for its export control agencies to regulate items outside

the scope of the four existing regimes. Even more important, the participating members would need to make sure that they have or will soon create the authority to impose list-based, end-user, and end-use controls with respect to specific countries, including China and Russia. Outside of the new Russia- and Belarus-specific controls, most allies do not now have such authorities because the existing regimes' controls are not country specific. This is all the more reason why the process to create a new regime should begin

### RUSSIA CANNOT BE REMOVED FROM A REGIME – EVEN FOR INVADING A FELLOW REGIME MEMBER – UNLESS IT AND ALL OTHER MEMBERS AGREE.

immediately given the usually slow pace of statutory changes in most countries' legislatures.

Each member would also need to commit to maintaining effective and significantly better-resourced export control systems domestically. Although the US export control system needs more resources, it still has, per capita, significantly more technical, policy, licensing, intelligence, compliance, and enforcement resources than the allies. In particular, the United States and the allies would need to commit to hiring significantly more subject matter experts in the types of emerging,<sup>15</sup> foundational, and other critical technologies outside the scope of the traditional proliferation-focused technologies the agencies have been built to address.<sup>16</sup> Mandatory conditions for participation would include commitments and procedures to harmonise traditional and non-traditional licensing policies, coordinate enforcement efforts, and advance aggressively and in good faith the objectives of the new regime.

### Other efforts upon which a new regime-building exercise would be based

Many other commentators and government officials have long

advocated<sup>17</sup> the use of coordinated export controls to address the issues of concern for techno-democracies<sup>18</sup> specific to China and other countries that are broader than nonproliferation-related concerns. A major difference between this piece and the other efforts is that we are advocating for the formal creation of a new export control regime to address all the issues that the existing regimes cannot. Nonetheless, there is much quality commentary and structure in the earlier efforts that could be the foundation for the new regime-creation process.

For example, in 2018, the State Department convened the first Multilateral Action on Sensitive Technologies<sup>19</sup> forum with 15 like-minded nations to build a 'coalition of caution' to curb Chinese acquisition of sensitive technology. The Biden-Harris administration has made non-traditional export control policy and related objectives important elements of various multilateral efforts, such as the Quadrilateral Security Dialogue, the US-EU Trade and Technology Council ("TTC"), and the Export Controls and Human Rights Initiative.<sup>20</sup> Indeed, the US-EU TTC Inaugural Joint Statement<sup>21</sup> (Annex II) was the first time<sup>22</sup> since the end of the Cold War that any other country or international body had stated publicly the need for the imposition of non-traditional controls outside the scope of the regime controls to address contemporary issues of common concern. The Indo-Pacific Economic Framework might also have an export control element. Also, in 2020,<sup>23</sup> the Center for Security and Emerging Technology ("CSET") presented data to argue that the United States could work with like-minded allies to forge a democratic way of using artificial intelligence. In 2020<sup>24</sup> and 2021,<sup>25</sup> the Center for New American Security made the case for an alliance of techno-democracies to address export control and other issues.

### The statutory authority for the United States

The Export Control Reform Act of 2018 ("ECRA") requires the administration to identify and control the export of emerging and foundational technologies

'essential to the national security of the United States' that are not yet controlled. The Trump administration was able to get the existing regimes to agree to control 37 emerging technologies. These new controls were, by definition, limited in scope to items within the mandates of the existing regimes. ECRA, however, explicitly states that new controls should also be imposed on such emerging and foundational technologies 'in addition to traditional' export controls agreed to by the regimes – i.e., to address national security concerns that the regimes could not necessarily address.

Although ECRA does not call for the United States to lead an effort to create a new regime of techno-democracies, it clearly authorises such an effort with US participation. In particular, ECRA states that the: 'National security and foreign policy of the United States require that the United States participate in multilateral organisations and agreements regarding export controls on items that are consistent with the policy of the United States, and take all the necessary steps to secure the adoption and consistent enforcement, by the governments of such countries, of export controls on items that are consistent with such policy.'

ECRA also states that: 'Export controls that are multilateral are most effective, and should be tailored to focus on those core technologies and other items that are capable of being used to pose a serious national security threat to the United States and its allies.'

With regards to unilateral action, ECRA affirms that: '[E]xport controls applied unilaterally to items widely available from foreign sources generally are less effective in preventing end users from acquiring those items. Application of unilateral export controls should be limited for purposes of protecting specific United States national security and foreign policy interests.'

ECRA's core statement of policy also states that export controls should be used to 'carry out the foreign policy of the United States, including the protection of human rights and the promotion of democracy.' Finally, ECRA gives the administration the broad

authority to 'undertake any other action as is necessary to carry out' ECRA's national security and human rights objectives. This includes doing all the work with the allies necessary to get new multilateral controls over emerging and foundational technologies, and technologies of concern for human rights issues.

### Questions that need to be studied and answered

Another purpose for this piece is to help set the stage for framing the issues to be addressed in subsequent publications by think tanks including CSET, the allied governments, trade associations, companies, and others regarding the questions to be answered to help convert the new regime idea into actual, effective, and durable

## THE REGIME WOULD NOT BE A TOOL OF MERCANTILIST, PROTECTIONIST, OR OTHER PURELY TRADE POLICIES.

multilateral controls. Examples of questions warranting study and answers are:

- Which countries should be in the regime's initial core group of techno-democracies?
- When is a control designed to respond to strategic economic objectives a legitimate national security tool as opposed to just being trade protectionism? Similarly, how does one identify a strategic economic objective of concern that export controls could address? These are critical and difficult questions to answer. Traditionally, export controls have been focused on specific commodities, software, and technologies that have inherent properties specific to WMD or conventional military applications. Economic considerations have not traditionally been a significant part of the considerations as to why or how such items should be controlled.
- To what extent should or could traditional free trade notions of comparative advantage involving the production of commercial items give way

to achieving a new regime's economic security and supply chain resilience objectives?

- Can supply chain resiliency objectives be achieved through any form of export control, or can they only be achieved by investment controls or incentives for domestic onshoring?
- What 'chokepoint' or 'enabling' technologies are necessary for the development of emerging capabilities of national security concern that are not widely available outside the allied countries? What are the resources for identifying which countries have the leading producer companies in the technologies of concern?
- How does one identify purely commercial items that nonetheless have relevance to civil-military fusion objectives that warrant control?
- How could coordinated controls on outbound and foreign direct investment enhance the purpose of the new export control regime?
- When should end-user or end-use controls unrelated to WMD or arms embargoes be used instead of or in addition to list-based controls?
- As a practical and a legal matter, which allied country laws, policies, and mindsets would need to be changed in order for member state controls to be imposed to implement the requirements of a new regime?
- Although the United States already has broad legal authority in ECRA to accomplish all the objectives of a new regime, which additional US statutory authorities would be helpful or harmful to the effort?
- How can allied country export control agencies expand their economic expertise to be able to adequately consider the costs and benefits of new controls focused on economic policies that create national and economic security threats unrelated to items that are inherently related to WMD or conventional military applications?
- What specific types of items, end uses, and end users warrant controls to address human rights issues? In particular, what are the specific items with critical

capabilities to enable human rights abuses involving, for example, (i) censorship and social control; (ii) surveillance, interception, and restriction of communications; (iii) monitoring or restricting access to the internet; (iv) identifying individuals through facial or voice recognition, biometric indicators, or DNA sequencing?

- How could the allies better collect and share the data necessary for the governments, academics, and affected industries to analyse the impact and effectiveness of any new controls?
- What are the lessons learned from the COCOM structure that should be incorporated into the new regime or to be avoided?

Each of these topics and many others warrant their own papers, studies, conferences, and discussions by CSET and others to analyse in detail how they could or could not address contemporary policy issues that can be tackled through export controls outside the current regime structure.

### Reasons why industry should support the effort

Companies and industry groups in the United States and allied countries should not fear the creation of a new export control regime. To the contrary, they should support the effort because it will help create level regulatory playing fields for them and their competition in allied countries. Industry engagement will also be critical to ensuring that the new controls are clearly written, technically accurate, and effective given the complexity of the technological, supply chain, and foreign availability issues. A successful effort that parallels new industrial policy efforts will also open up opportunities for joint investment and access by and among the participating countries.

Whether industry supports or opposes such efforts, however, will not change the fact that the US and allied country governments are gradually changing their definitions of national security. The United States and allies will also expand their approaches toward



addressing human rights issues involving the misuse of commercial technologies. The external pressure for change will continue to be high because members of Congress, think tanks, journalists, academics, and others not historically interested in export controls have come to discover them – and have been thinking through how they can be used to achieve policy objectives not tied to traditional nonproliferation concerns. They usually eventually realise that, with limited exceptions,

unilateral controls can be effective in the short-term, but are eventually counterproductive and ineffective. They also realise that relying on the traditional multilateral regime system would take too long, if ever, to address non-traditional policy issues. Well-supported plurilateral efforts or, better yet, a new multilateral arrangement among techno-democracies, are the only obvious solutions. Thus, some form of new controls will happen. A public commitment by allied political leadership that they plan

Mr Wolf is a non-resident senior fellow at Georgetown University's Center for Security and Emerging Technology ("CSET"), a partner at Akin Gump, and a former assistant secretary for export administration (2010-2017). Ms Weinstein is a research fellow at CSET. The views are those of the authors alone.

to begin work on creating a new regime will help channel such pressure productively.

Finally, opposition by US industry to new types of multilateral controls will only increase the pressure for the imposition of too-blunt unilateral controls that will eventually hurt

US industry more. The need to address the national security, economic security, and human rights issues in this piece have broad bipartisan support. Doing little more than supporting the existing system created near the end of the Cold War is no longer a viable policy or political option.

## LINKS AND NOTES

- <sup>1</sup> Kevin Wolf, et al., 'International Trade Alert: US Government Imposes Expansive, Novel, and Plurilateral Export Controls Against Russia and Belarus,' Akin Gump Strauss Hauer & Feld LLP, 8 March 2022, [www.akingump.com/a/web/ayCoxfB41bXG1H8Y4jUWup/3FFMet/us-government-imposes-expansive-novel-and-plurilateral-export.pdf](http://www.akingump.com/a/web/ayCoxfB41bXG1H8Y4jUWup/3FFMet/us-government-imposes-expansive-novel-and-plurilateral-export.pdf)
- <sup>2</sup> 'Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies: Public Documents Volume 1,' Wassenaar Arrangement Secretariat, December 2019, [www.wassenaar.org/app/uploads/2021/12/Public-Docs-Vol-I-Founding-Documents.pdf](http://www.wassenaar.org/app/uploads/2021/12/Public-Docs-Vol-I-Founding-Documents.pdf)
- <sup>3</sup> 'Criteria for the Selection of Dual-Use Items,' Wassenaar Arrangement, adopted in 1994, amended in 2004 and 2005, [www.wassenaar.org/app/uploads/2019/consolidated/Criteria\\_for\\_selection\\_du\\_sl\\_vsl.pdf](http://www.wassenaar.org/app/uploads/2019/consolidated/Criteria_for_selection_du_sl_vsl.pdf)
- <sup>4</sup> Kevin Wolf, 'Export Controls Will Become More Effective When They Include Plurilateral Controls,' Center for a New American Security (CNAS), 13 August 2020, <https://www.cnas.org/publications/commentary/export-controls-will-become-more-effective-when-they-include-plurilateral-controls>
- <sup>5</sup> 'Public Comments of Kevin Wolf, Emily Kilcrease, and Jasper Helder Regarding Areas and Priorities for US and EU Export Control Cooperation under the US-EU Trade and Technology Council,' Center for a New American Security, 14 January 2022, <https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/011422.US-EU.TTC.Wolf.Kilcrease.Helder.FINAL.pdf?mtime=20220118112213&focal=none>
- <sup>6</sup> Kevin Wolf, 'Testimony before the US-China Economic and Security Review Commission Hearing on "US-China Relations in 2021: Emerging Risks" Panel III: "Assessing Export Controls and Foreign Investment Review"', 8 September 2021, [www.uscc.gov/sites/default/files/2021-08/Kevin\\_Wolf\\_Testimony.pdf](http://www.uscc.gov/sites/default/files/2021-08/Kevin_Wolf_Testimony.pdf)
- <sup>7</sup> Kevin Wolf, 'Developments in Unilateral US Dual-Use Export Controls,' Akin Gump Strauss Hauer and Feld LLP, April 2021, [www.akingump.com/a/web/4TkJLuDdoUSFf4gjMCz9ya/3b2k3P/beitrag-wolf-aus-aw-prax\\_2021\\_04\\_v2-korr-2-umbruch.pdf](http://www.akingump.com/a/web/4TkJLuDdoUSFf4gjMCz9ya/3b2k3P/beitrag-wolf-aus-aw-prax_2021_04_v2-korr-2-umbruch.pdf)
- <sup>8</sup> 'Military-Civil Fusion and the People's Republic of China,' US Department of State, May 2020, [www.state.gov/wp-content/uploads/2020/05/What-is-MCF-One-Pager.pdf](http://www.state.gov/wp-content/uploads/2020/05/What-is-MCF-One-Pager.pdf)
- <sup>9</sup> Emily S. Weinstein, 'Testimony before the US-China Economic and Security Review Commission on "US Investment in China's Capital Markets and Military-Industrial Complex"', 19 March 2021, [www.uscc.gov/sites/default/files/2021-03/Emily\\_Weinstein\\_Testimony.pdf](http://www.uscc.gov/sites/default/files/2021-03/Emily_Weinstein_Testimony.pdf)
- <sup>10</sup> Ibid.
- <sup>11</sup> 'John F. Kennedy Moon Speech – Rice Stadium,' rehosted by NASA, 12 September 1962, <https://er.jsc.nasa.gov/seh/ricetalk.htm>
- <sup>12</sup> 'Public Comments of Kevin Wolf, Emily Kilcrease, and Jasper Helder Regarding Areas and Priorities for US and EU Export Control Cooperation under the US-EU Trade and Technology Council.'
- <sup>13</sup> 'FACT SHEET: The United States Continues to Impose Costs on Russia and Belarus for Putin's War of Choice,' White House Briefing Room, 2 March 2022, [www.whitehouse.gov/briefing-room/statements-releases/2022/03/02/fact-sheet-the-united-states-continues-to-impose-costs-on-russia-and-belarus-for-putins-war-of-choice/](http://www.whitehouse.gov/briefing-room/statements-releases/2022/03/02/fact-sheet-the-united-states-continues-to-impose-costs-on-russia-and-belarus-for-putins-war-of-choice/)
- <sup>14</sup> 'US-EU Summit Statement,' White House Briefing Room, 15 June 2021, [www.whitehouse.gov/briefing-room/statements-releases/2021/06/15/u-s-eu-summit-statement/](http://www.whitehouse.gov/briefing-room/statements-releases/2021/06/15/u-s-eu-summit-statement/)
- <sup>15</sup> 'Critical and Emerging Technologies List Update: A Report by the Fast Track Action Subcommittee on Critical and Emerging Technologies of the National Science and Technology Council,' Executive Office of the President, February 2022, [www.whitehouse.gov/wp-content/uploads/2022/02/2022-Critical-and-Emerging-Technologies-List-Update.pdf](http://www.whitehouse.gov/wp-content/uploads/2022/02/2022-Critical-and-Emerging-Technologies-List-Update.pdf)
- <sup>16</sup> Kevin Wolf, 'Testimony before the Senate Committee on Banking, Housing and Urban Affairs on "Confronting Threats from China: Assessing Controls on Technology and Investment"', 4 June 2019, [www.banking.senate.gov/imo/media/doc/Wolf%20Testimony%206-4-19.pdf](http://www.banking.senate.gov/imo/media/doc/Wolf%20Testimony%206-4-19.pdf)
- <sup>17</sup> Kevin Wolf, 'Testimony before the US-China Economic and Security Review Commission Hearing on "US-China Relations in 2021: Emerging Risks" Panel III: "Assessing Export Controls and Foreign Investment Review"'
- <sup>18</sup> 'Technology Alliance,' Center for a New American Security (CNAS), [www.cnas.org/research/technology-and-national-security/technology-alliance](http://www.cnas.org/research/technology-and-national-security/technology-alliance)
- <sup>19</sup> 'Technology Transfer Diplomacy and the Challenge of Our Times: Remarks by Dr. Christopher Ashley Ford, Assistant Secretary, Bureau of International Security and Nonproliferation, Multilateral Action on Sensitive Technologies 2020 Plenary Meeting (Virtual),' US Department of State, 15 September 2020, <https://2017-2021.state.gov/technology-transfer-diplomacy-and-the-challenge-of-our-times/index.html>
- <sup>20</sup> 'Fact Sheet: Export Controls and Human Rights Initiative Launched at the Summit for Democracy,' White House Briefing Room, 10 December 2021, [www.whitehouse.gov/briefing-room/statements-releases/2021/12/10/fact-sheet-export-controls-and-human-rights-initiative-launched-at-the-summit-for-democracy/](http://www.whitehouse.gov/briefing-room/statements-releases/2021/12/10/fact-sheet-export-controls-and-human-rights-initiative-launched-at-the-summit-for-democracy/)
- <sup>21</sup> 'US-EU Trade and Technology Council Inaugural Joint Statement,' White House Briefing Room, 29 September 2021, [www.whitehouse.gov/briefing-room/statements-releases/2021/09/29/u-s-eu-trade-and-technology-council-inaugural-joint-statement/](http://www.whitehouse.gov/briefing-room/statements-releases/2021/09/29/u-s-eu-trade-and-technology-council-inaugural-joint-statement/)
- <sup>22</sup> 'Public Comments of Kevin Wolf, Emily Kilcrease, and Jasper Helder Regarding Areas and Priorities for US and EU Export Control Cooperation under the US-EU Trade and Technology Council.'
- <sup>23</sup> Andrew Imbrie, et al., 'Agile Alliances: How the United States and its Allies Can Deliver a Democratic Way of AI,' Center for Security and Emerging Technology (CSET), February 2020, <https://cset.georgetown.edu/wp-content/uploads/CSET-Report-Agile-Alliances-1.pdf>
- <sup>24</sup> 'Technology Alliance,' Center for a New American Security (CNAS).
- <sup>25</sup> 'Martijn Rasser, "The Case for an Alliance of Techno-Democracies"', Center for a New American Security (CNAS), 19 October 2021, [www.cnas.org/publications/commentary/the-case-for-an-alliance-of-techno-democracies](http://www.cnas.org/publications/commentary/the-case-for-an-alliance-of-techno-democracies)