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| FEBRUARY 3, 2021STATEMENT FOR THE FOREIGN AFFAIRS COMMITTEE OF THE DUTCH HOUSE OF REPRESENTATIVES[[1]](#footnote-1) |

**Hearing on “Dealing with Emerging Technologies in the Security and Military Domain”**

by

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**I. Key Observations**

Distinguished members of the committee, thank you for the opportunity to share insights on a topic of vital importance. I want to begin with three observations on geopolitics and technology trends:

1. **The Netherlands’ economic and national security is entrenched in Dutch technological leadership.** The 21st century will be defined by competition; a contest of economic power rooted in technological advances. How countries decide to compete will shape the lives of billions of people. Technology-leading countries will determine how to harness new technologies to combat disease, feed their people, counter climate change, gain wealth, explore the universe, gain influence over others, secure their interests, and protect their independence and freedom. The leaders in adopting emerging technologies such as artificial intelligence (AI), quantum sciences, biotechnology, and next-generation telecommunications, and those who shape their use, will garner economic, military, and political strength for decades.
2. **Multinational collaboration should be a cornerstone of Dutch technology strategy.** No one country can achieve its full potential in desired capabilities across the spectrum of critical technology areas on its own. Nor can any single state, or even the European Union (EU) as a whole, muster the resources to nurture all the necessary talent and control vital supply chains needed to achieve and maintain such technological leadership. Instead, the Netherlands and the EU should maximize one of its greatest competitive strengths: its unmatched network of allies and partners. Broad-based, proactive, and long-term multilateral cooperation among like-minded countries is needed to maximize effectiveness across a range of areas, including R&D, supply chain diversity and security, standards-setting, multilateral export controls, and countering the illiberal use of technology.
3. **The pandemic crisis presents opportunity and urgency to act.** The global order is at an inflection point where decisions made by world leaders in coming months will shape the world for decades. The stakes are high: long-term economic and technological competitiveness, critical infrastructure integrity and security, and cohesion among the world’s liberal democracies. Collaboration between the allies will help to ensure that the upheavals of the post-pandemic world can be dealt with more effectively. It will also improve the chances that the coming decades are ones where their societies and economies can prosper, all while blunting the coercive power of authoritarian countries.

**II. Recommendations[[2]](#footnote-2)**

The Netherlands is well positioned to be a leading voice and key actor for increasing technology policy collaboration with allies, establishing new rules for technology development and trade, addressing the impact of emerging technologies on the international balance of power, and being a world leader in setting norms for technology use. Opportunities for leadership and impact include initiatives to:

* **Create a new international regime for technology policy.** The Netherlands should be a leading voice for the creation of a new international organization for technology policy comprised of democratic, technology-leading nations (a “technology alliance”). Multilateral cooperation is needed to maximize effectiveness in R&D, supply chain security, standards-setting, export controls, and countering illiberal uses of technology. Candidates for membership could include Australia, Canada, Finland, France, Germany, India, Japan, the Netherlands, South Korea, Sweden, the United Kingdom, and the United States.

This grouping could also serve as a forum to address concerns associated with the impact of emerging and disruptive technologies on international relations. For example, these like-minded countries could craft and promote confidence-building measures for the use of artificial intelligence by the world’s militaries or work in concert to harmonize export and counter-proliferation policies for unmanned aerial systems.[[3]](#footnote-3)

* **Secure and diversify supply chains.** The Netherlands should work with allies and partners to diversify and secure supplies for key technology inputs by investing in domestic industries and working with partners to build trusted international supply chains. For semiconductors in particular, the Netherlands could play a pivotal global role. I recommend a three-part strategy:
	1. *Enact multilateral export controls in concert with allies and partners to protect the Netherlands’ competitive edge in semiconductor manufacturing equipment (SME).* China seeks to indigenize cutting-edge semiconductor fabrication and eliminate dependency on foreign technology. As an essential player in the global semiconductor industry, it is not in the Netherlands’ strategic interest to have that happen. The Netherlands should enact broad restrictions on sales of SME to China, working in concert with allies and partners, in order to sustain its advantage in hardware.
	2. *Collaborate with partner governments and industry stakeholders to set up new semiconductor manufacturing facilities.* The Netherlands should initiate the creation of a semiconductor fab consortium, consisting of the like-minded countries that produce and consume much of the world’s chipset output. These countries — such as the France, Germany, Japan, South Korea, Taiwan, the United Kingdom, the United States, and the Netherlands — could collaborate to set up new fabs outside of China.

These countries have a common interest in moving semiconductor supply chains out of China and introducing greater geographic diversity in global semiconductor supply chains. Taiwan in particular plays an outsized role in the global semiconductor market and its proximity to China makes it vulnerable to espionage, sabotage, and blockades. The consortium could serve as a mechanism to cooperate with Taiwan on safeguarding its semiconductor industry against undue Chinese influence. One way to do this is building new production capacity elsewhere, such as in Europe in coordination and partnership with the EU. Consortium members can also help Taiwan with investment screening and building safeguards against Chinese attempts to siphon human capital.

* 1. *Lay the foundation for the next generation of microelectronics.* This entails doubling down on R&D. Breakthroughs in areas such as novel materials and microelectronics design will be necessary to continue effective transistor scaling—the process of increasing the number of transistors on a single chip—because researchers are approaching the physical limitations of silicon, the prevailing semiconductor material. The Netherlands should craft a comprehensive semiconductor technology strategy, with particular emphasis on opportunities for joint R&D with other countries.
* **Enhance the Dutch Digitisation Strategy’s international component.** The strategy rightly identifies international collaboration as a key element. Details on what the international aspect of the strategy should comprise, however, are sparse. As the document notes, “it will be crucial to ensure a level playing field and vigorously defend the Dutch core values for a digitising world, including a free and open internet and effective ethical safeguards.” Partnering with key middle powers to drive meaningful change in digital policy is one promising avenue.

A critical mass of smaller but highly capable technology powers have the capacity for outsized influence on the global stage. Australia, for example, is crafting a Cyber and Critical Technology International Engagement Strategy and would be a suitable partner in such an effort. The Maximator countries (Denmark, France, Germany, the Netherlands, Sweden) could be a logical starting point to pursue comprehensive international engagement on cyber issues. In this spirit, the Netherlands should pursue:

* 1. Multilateral engagement for setting norms that promote a free and open cyberspace with the goal of building an enforceable rules-based international order in cyberspace. A common position on norms for cyberspace should serve as the foundation for engagement with a larger group of like-minded countries to standardize the myriad declarations on related norms, as well as engagement with other international actors such as Russian and China.
	2. Multilateral responses to nefarious cyber activity in accordance with international law. The Netherlands could spearhead efforts to formulate consensus on how to respond to cyber operations that target democratic institutions and systems (e.g., election infrastructure), attacks on personal information of the grouping’s citizens and residents (e.g., targeting of people for supposed violations of Hong Kong’s national security law), and state-backed theft of intellectual property.

I look forward to discussing these and other ideas with you.

1. In addition to new material, this testimony includes original content from the witness’s previously published and forthcoming work, and media commentary. [↑](#footnote-ref-1)
2. These recommendations are derived or pulled directly from *Common Code: An Alliance Framework for Democratic Technology Policy*, for which the witness was the lead author, *The American AI Century: A Blueprint for Action*, for which the witness was the lead author, from Martijn Rasser, *Networked: Techno-Democratic Statecraft for Australia and the* Quad, from Martijn Rasser, “Countering China’s Technonationalism,” *The Diplomat*, April 24, 2020, <https://thediplomat.com/2020/04/countering-chinas-technonationalism/>, from *Rising to the China Challenge: Renewing American Competitiveness in the Indo-Pacific*, for which the witness was a co-author, and from his testimony before the United States Senate Banking Subcommittee on Economic Policy on July 20, 2020. [↑](#footnote-ref-2)
3. See Michael Horowitz and Paul Scharre, *AI and International Stability: Risks and Confidence-Building Measures* and Elisa Catalano Ewers, et. al., *Drone Proliferation: Policy Choices for the Trump Administration.* [↑](#footnote-ref-3)