

Secretary

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

MEMORANDUM FOR: Judge William Webster
Chair, Homeland Security Advisory Council

FROM: Kirstjen M. Nielsen
Secretary

SUBJECT: **Emerging Technologies Subcommittee**

Pursuant to the September 18th, 2018 HSAC meeting, I instruct the Homeland Security Advisory Council (HSAC) to establish a new subcommittee titled the “Emerging Technologies Subcommittee” to provide recommendations regarding the following issues surrounding the increasing emergence of technological advancements:

It has long been a truism that today’s innovations can become tomorrow’s threats. But the current speed of technological change has resulted in a world in which emerging dangers are rapidly outpacing our defenses. New technologies- from artificial intelligence to unmanned aerial systems-have the potential to disrupt the status quo and fundamentally alter the security landscape.

DHS and its partners have a responsibility to look to the future in order to foresee technological advancements that might result in new threats and vulnerabilities. The Department must also put in place the right programs, policies, and procedures to mitigate potential dangers.

The Emerging Technologies Subcommittee will explore these challenges, and its mandate will include, but is not necessary limited to, the following:

1. Provide an assessment of the current state and perceived future advancements over the next 3-10 years of the most critical emerging technologies that could pose a threat to the homeland security of the United States, such as but not limited to artificial intelligence and machine learning; quantum information science and quantum computing; 3-D printing; unmanned aerial and ground-based systems; synthetic biology and gene editing; and advanced robotics.

2. Analyze and provide insight into the ways in which such technologies could endanger the homeland, with a focus on those which have the highest likelihood of becoming a threat and those that pose the highest consequences to U.S. homeland security.
3. Provide recommendations to best mitigate the perceived deleterious impacts of the assessed technological advancements, including recommended DHS near and long-term actions. Provide an assessment on the perceived opportunities for DHS components to maximize the use of these new technological advancements to guard against emerging threats.

These recommendations are due to the full Council no later than 180 days from the date of the subcommittee's formation.

Thank you, in advance, for your work on these recommendations.