











July 17, 2020

Via Email chad.wolf@hq.dhs.gov

The Honorable Chad F. Wolf Acting Secretary of Homeland Security Office of the Executive Secretary MS 0525 Department of Homeland Security 2707 Martin Luther King Jr. Ave., SE Washington, D.C. 20528-0525

Dear Secretary Wolf:

We, the undersigned, have reviewed the <u>letter</u> that Representatives Garamendi, DeFazio, and Mooney sent to you on June 9, 2020 – and which industry publication *GPS World* <u>wrote about</u> the same day. This letter was highly critical of the <u>Report on Positioning</u>, <u>Navigation</u>, <u>and Timing (PNT) Backup and Complementary Capabilities to the</u> <u>Global Positioning System (GPS)</u> that DHS issued to U.S. Congressional committees in April as required by the National Defense Authorization Act for Fiscal Year 2017 (NDAA 2017).

As senior executives of companies that provide commercially available forms of alternate PNT services to back up GPS and support the resilience of our national critical infrastructure, our view is that with its report, DHS did exactly what was required by Congress. Section 1618 of NDAA 2017 called for "a study to assess and identify the **technology-neutral requirements** [emphasis added] to backup and complement the positioning, navigation, and timing capabilities of the Global Positioning System for national security and critical infrastructure."

We appreciate Representatives Garamendi, DeFazio, and Mooney for their leadership in highlighting the critical problem of GPS vulnerability. After all, it is paramount to ensure that our nation can continue to operate its critical infrastructure if GPS is disrupted or manipulated. However, we strongly disagree with their letter's characterization of CISA's report, a document which we believe is extremely sound and highly instructive.

In sum, we believe that some key claims made in the Members' letter of June 9 are either exaggerated, irrelevant to the report's Congressional tasking, or simply wrong.

EXAGGERATED CLAIM	"The report focuses on the needs of 'industry' largely ignoring the needs and impacts on public services (including first responders), government operations, and individual citizens."
OUR COMMENTS	The focus of the report, as directed by the NDAA, is on the requirements of the owners and operators of national critical infrastructure. This includes "public services, government operations," and its beneficiaries, "individual citizens." To the extent that the report focuses on incentivizing the industry, it is in order for it to be able to meet these requirements.
	While the report only highlights PNT use cases from a subset of the 16 critical infrastructure sectors, their pragmatic recommendations address a range of requirements across all sectors. With respect to PNT needs for backing up GPS, DHS acknowledges the differences between

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	and commonalities among the sectors and offers exceptional guidance for leveraging the capabilities of diverse forms of commercially available alternative PNT rather than endorsing a single, anti-competitive, government-imposed solution.
IRRELEVANT CLAIM	"The report also ignores the stellar twenty-five year history of GPS as a consummate public good and that provides trillions of dollars in benefits each year."
OUR COMMENTS	The very premise of the report is the need to continue to provide critical GPS's PNT services to national critical infrastructure if GPS is unavailable. Therefore, it does not ignore this history; it presumes it.
IRRELEVANT CLAIM	"Your report fails to address most of the legislative mandates."
OUR COMMENTS	The requirements that Congress in the NDAA levied for this report did not include a discussion of "legislative mandates." These "legislative mandates" appear to equate to the 2018 National Timing Resilience and Security Act, which is tantamount to an authorization earmark for one particular government-built technological approach.
	By contrast, the February 2020 executive order on the responsible use of PNT directs a market- based approach that leverages diverse technologies and solutions and also is technology- agnostic. Thus, since the report is totally consistent with a Presidential Executive Order on PNT (<u>E.O. 13905</u>), it recommends a different approach from the Act (i.e., the "legislative mandates"). This is another reason why the Members' letter is wrong that the report contradicts Presidential policy (<i>see below</i>).
	Furthermore, technology has evolved since the Act was signed, with innovative and robust solutions that have been developed, field tested, offered commercially, and put in use by customers. Whereas the 2018 legislative mandate is overly prescriptive and likely to end up with a suboptimal solution that will be too rigid to address all situations, the DHS recommendations are futureproof and will stand the test of time because they are compatible with new solutions as they emerge or improve.
INCORRECT CLAIM	"Most of the report's assumptions and conclusions are incorrect, or at best, unsupported."
OUR COMMENTS	We find that what is "at best, unsupported" is this claim. Our careful review of the report found no major assumption or conclusion that was incorrect or unsupported. We expect that DHS will demonstrate this in the Department's response to the Members' letter.
INCORRECT CLAIM	"Your report also contradicts established Presidential policy."
OUR COMMENTS	The report is clearly and completely consistent with the recently issued E.O. 13905, which calls for a diversity of market-driven, technology-agnostic, and resilient solutions to a diverse set of infrastructure needs. The report was fully coordinated by the interagency, OMB, and White House policy counsels on behalf of the President, in large part to ensure consistency with the President's E.O. Just because the report did not mention every single aspect of the E.O., it in no way means that the report contradicts it. In fact, the Executive Summary of the report states that "[w]hatever the source of the PNT, it is incumbent on users to apply the principles found in Executive Order 13905, Strengthening National Resilience Through Responsible Use of Positioning, Navigation, and Timing Services."
INCORRECT CLAIM	"Further, the President's recent executive order, E.O. 13905, on responsible use of PNT calls for a national research effort on non-space based PNT systems."
OUR COMMENTS	This is exactly the type of inaccuracy that the Members' letter claims the report contains. Instead, E.O. 13905 calls for "a national plan […] for the R&D and pilot testing of additional, robust, and secure PNT series that are not dependent on global navigation satellite systems (GNSS) "

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[emphasis added]. (NOTE: GNSS means national space-based navigation systems such as GPS and Galileo (Europe), Glonass (Russia), or BeiDou (China)). Thus, the E.O. does not call for a non-space national research effort — but rather for a plan for R&D of systems "not dependent" on GNSS. This could include space-based, air-based, sea-based, or land-based services.

We look forward to supporting the efforts of DHS and other departments to work with infrastructure owners and operators to follow the PNT guidelines in CISA's report and implement the directives of Executive Order 13905.

Very truly yours,

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