Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Office of the Secretary Of Defense	Date: May 2021
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603950D8Z / *National Security Innovation Network*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	0.000	37.658	40.000	21.270	-	21.270	-	-	-	-	-	-
845: *National Security Innovation Network*	0.000	37.658	40.000	21.270	-	21.270	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The National Security Innovation Network (NSIN) is a program office within the Office of the Under Secretary of Defense for Research and Engineering and authorized through Section 219 of the FY 2021 NDAA. NSIN reports through the Defense Innovation Unit (DIU) to the Undersecretary of Defense for Research and Engineering. NSIN has been chartered with a mission to build networks of innovators that generate new solutions to national security problems. NSIN develops programs that are designed to help other DoD entities from the Military Services, Joint Staff, Combatant Commands, and Defense Agencies and Field Activities solve problems with non-traditional partners from academia and the start-up community. NSIN is organized around three core lines of effort. These lines of effort include: 1) creating new opportunities for National Security Service by building models of service that account for generational and cultural differences between the military, academic, and venture communities and providing flexible pathways to official service within the Department of Defense; 2) solving national security problems by collaborating with partners from the academic and venture communities by engaging new problem-solvers in collision events with DoD customers that generate novel concepts and solutions and building a national network of problem-solving ecosystems that leverage the competitive advantages of regions and commercial innovation hubs for DoD customers; and 3) accelerating the adoption of novel concepts and solutions by facilitating engagement with DoD end users and transition partners to stimulate dual-use venture growth and improving Technology Transfer and Transition (T3) rates for DoD lab technology through dual-use commercialization via early stage ventures.

NSIN's physical network is composed of 11 Regional Directors, each of which is located in critical venture innovation hubs throughout the country (Boston, MA; New York City, NY; Washington, DC; Raleigh, NC; Chicago, IL; St. Louis, MO; Austin, TX; Denver, CO; Seattle, WA; San Diego, CA; and San Francisco, CA) and supported by University Program Directors (UPDs) that are embedded at critical universities throughout the country and are co-located with emerging or extant venture ecosystems. At objective stated, NSIN envisions approximately 35 such UPDs throughout the country and in all 50 states.

NSIN executes a suite of 12 programs (e.g., Hacking for Defense) and 7 pilot activities (see below) with annual costs of approximately $40.000 million, inclusive of the personnel that support program planning, execution, and assessment.

NSIN has been a continuous Congressional interest program that has received funding in FY 2016 ($5.000 million), FY 2017 ($25.000 million), FY 2018 ($25.500 million), FY 2019 ($15.000 million), FY 2020 ($40.000 million), and FY 2021 ($40.000 million). In prior years, NSIN was predominantly funded through Congressional Additions but was included in the President's Budget submission for FY 2020 ($25.000 million). FY 2022 is the first year that NSIN appears as a funded Program Element throughout the FYDP and its program mission was codified in Section 219 of the FY 2021 NDAA.

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B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	40.000	0.000	0.000	-	0.000
Current President's Budget	37.658	40.000	21.270	-	21.270
Total Adjustments	-2.342	40.000	21.270	-	21.270
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	40.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.948	-			
• SBIR/STTR Transfer	-1.387	-			
• Cancelled Account	-0.007	-	-	-	-
• Program Adjustment	-	-	21.270	-	21.270

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Project: 845: *National Security Innovation Network*		
Congressional Add: *NSIN*	15.000	40.000
Congressional Add Subtotals for Project: 845	15.000	40.000
Congressional Add Totals for all Projects	15.000	40.000

Change Summary Explanation

FY 2022 increase supports the National Security Academic Accelerator (NSA2) program, expands H4D efforts, expands the Propel program, and pilots additional program concepts in partnership with the Office of Small Business Programs, ManTech, SBIR office and offices of the Deputy Director of Research and Engineering for Modernization.

FY 2021 increase supports the expansion of the Hacking for Defense (H4D) program, expansion of the X-Force Fellowship Program, the inaugural cohort of the Technology and National Security Fellowship (TNSF), National Security Academic Accelerator (NSA2) Pilot activities, and the acquisition and use of commercial platforms that assist with due diligence of NSIN’s early-stage venture partners and counter foreign influence and investment.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Office of the Secretary Of Defense			Date: May 2021
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603950D8Z / *National Security Innovation Network*	Project (Number/Name) 845 / *National Security Innovation Network*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
845: *National Security Innovation Network*	0.000	37.658	40.000	21.270	-	21.270	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

NSIN executes the following programs and pilot activities, all of which are designed to enhance DoD's access to technologists and entrepreneurs for the purposes of improving its talent pool, collaborate with universities and the early-stage venture community to develop novel concepts and solutions to end-user problems and requirements, and prototype and test new technologies to place them on the path to becoming programs of record or integrated with existing platforms.

- Technology and National Security Fellowship: a national, one-year fellowship that places STEM graduates into the immediate offices of policy makers in Congress and the Pentagon for the purposes of enhancing technical literacy and improving policy outcomes through informed understanding of emerging and nascent technologies.
- Hirethon: a national program that leverages NSIN's existing and emerging network to pair exceptionally qualified candidates with DoD mission partners that plan to use direct or expedited hiring authorities to aid in job placement.
- X-Force Fellowship: a summer fellowship experience for current students that embeds project-based teams of graduate and undergraduate students with DoD mission partners for the purposes of developing early-stage prototypes. Occurs annually from June-August.
- Hacks: a national program that provides early-stage concept development and proof of principle solutions to DoD mission partners through dedicated 54-hour hackathons operated in conjunctions with top universities and start-ups throughout the country.
- Bootcamp: a national program that provides crowd-sourced solutions for DoD mission partners by deploying faculty from top tier research universities to bases and installations to facilitate early-stage concepts for technology and policy-based problems.
- Capstone: a national program that pairs prototyping development needs for DoD mission partners with extant engineering capstone courses from top tier research universities throughout the country. Outputs include TRL-4 prototypes that can undergo testing and evaluation.
- Starts: a national program that showcases high-TRL technologies to DoD mission partners for the purposes of enhanced tech scouting and improving technical capability gaps. Teams and companies with the technology that best meets a DoD mission partner's needs are awarded initial prototyping or testing contracts.
- Propel: a national program that partners with commercial incubators and accelerators to sponsor particularly promising technology and early-stage ventures into cohort-based customer discovery that improves DoD end user validation.
- National Security Academic Accelerator (NSA2): a national pilot that identifies extant university IP, matches it against DoD mission partner needs, and then commercializes the technology through entrepreneurial training, recruitment, and licensing agreements. Currently being executed at four pilot sites with the intent to expand it to an additional six (6) sites in FY 2022.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: National Security Innovation Network (NSIN)	22.658	-	21.270

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Description: The NSIN mission is to build networks of innovators to generate new solutions for national security problems. It does this through three portfolios of programs and services designed to catalyze non-traditional problem-solving capabilities that combine warfighters, early-stage ventures, and applied academic communities at top-tier research universities. ***FY 2022 Plans:*** In addition to executing programs and pilots with its DoD mission partners, NSIN will: • Establish 15 project sites for the National Security Academic Accelerator (NSA2) program in as many states. • Expand H4D efforts with NATO and other partners and allies including India, Japan, Australia, New Zealand, and Canada. • Expand the Propel program, which partners with commercial incubators and accelerators to sponsor early-stage dual-use ventures of DoD interest to up to 15 different sites throughout the United States. • Pilot additional program concepts in partnership with the Office of Small Business Programs, ManTech, SBIR office and offices of the Deputy Director of Research and Engineering for Modernization. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** The FY 2022 minor reduction is due to inflation rate adjustments.			
Accomplishments/Planned Programs Subtotals	22.658	-	21.270

	FY 2020	FY 2021
Congressional Add: NSIN	15.000	40.000
FY 2020 Accomplishments: • Supported more than 250 early-stage ventures from 46 states participated in NSIN programs that have never done business with DoD • Integrated more than 3,500 new problem solvers into DoD concept development in the form of students, faculty, and entrepreneurs from the private sector • Launched more than 50 dual-use ventures using existing technology from DoD laboratories, resulting in an average annual improvement of ~15% for commercialization rates from the DoD laboratories • Supported technology transition through partnerships with other DoD agencies, more than 67% of the 835 solutions fielded by NSIN are in some stage of transition. These solutions are supported by more than $240M in DoD mission partner funding and more than $300M in private capital funding. • Augmented the DoD Talent Pool by placing more than 175 people into temporary, term, and permanent STEM hiring actions within the national security enterprise. Of these about half (47%) were women or historically underrepresented minorities with STEM degrees.		
FY 2021 Plans: In addition to executing programs and pilots with its DoD mission partners, NSIN intends to:		

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	FY 2020	FY 2021
• Establish the Berkeley Institute for National Security Innovation (BINSI) at Cal-Berkeley, which will provide a course curriculum for graduate and undergraduate students in Technology and National Security and pilot a talent pipeline for STEAM positions within DoD. • Expand Hacking for Defense (H4D) to an objective state of delivery at more than 75 schools nationwide, including at least one site in every state, district, and territory. This includes piloting new partnerships through NATO and USEUCOM with allied universities to address NATO problem sets. • Expand current pilot efforts to deliver virtual, dual-use accelerator training for low-income areas to improve economic development opportunities and expand the National Security Innovation Base in AR, OK, MS, AL, TN, KY, and WV. • Expand current pilot efforts to convert extant university IP into dual-use commercial ventures by investing in six (6) additional project sites throughout the United States • Establish rapid prototyping sites in partnership with the ManTech program at six national institutes in five of NSIN's regions.		
Congressional Adds Subtotals	15.000	40.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A