<u>**Senate Armed Services Committee**</u>
<u>**Advance Policy Questions for Dr. Radha Iyengar Plumb**</u>
<u>**Nominee for Deputy Under Secretary of Defense for Acquisition and Sustainment**</u>

<u>**Duties**</u>

1. **What is your understanding of the duties and functions of the Deputy Under Secretary of Defense for Acquisition and Sustainment?**

   The Deputy Under Secretary for Acquisition and Sustainment DUSD(A&S) serves as the principal assistant to, and under the authority, direction, and control of, the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)). My role will be to support the USD(A&S) to carry out responsibilities, fulfill functions, manage relationships, and exercise authorities, as provided in law. This includes maintaining oversight of the Department's entire acquisition and sustainment enterprise and working with him to review and revise policies and processes as appropriate to meet Department level priorities. Some areas USD(A&S) has identified as clear priorities are aligning policies and processes to drive innovation; enabling modernization of our weapons systems; developing and retaining a modern and agile acquisition workforce; enabling a robust defense industrial base; ensuring a resilient mission support and logistics enterprise; and meeting our commitment to Service Members that their housing and military installations are safe and healthy environments in which to live and work.

2. **What background and experience do you possess that qualify you to perform these duties? What background or experience, if any, do you have in the acquisition of major weapon systems?**

   I have over twenty years of experience in national security, technology, and research. This includes significant executive leadership experience managing budgets, recruiting and retaining talent, and driving culture change. I have a proven track record of delivering high quality, analytically driven innovations. Most recently as Chief of Staff to the Deputy Secretary of Defense, I have led cross-functional strategic initiatives and ensured budgets, programs and investments were aligned to deliver priority capabilities. This includes providing analysis and recommendations regarding high-impact decisions on major defense programs across the Services. If confirmed, I expect to continue these efforts to drive priority acquisition and sustainment issues as DUSD(A&S).

3. **If you are confirmed, what duties and functions do you expect that the Under Secretary of Defense for Acquisition and Sustainment will assign to you?**

   If confirmed, I expect USD(A&S) will prescribe duties to me in accordance with 10 U.S.C. § 137a(b). My likely areas of focus include ensuring software modernization and other new acquisition pathways are executed consistent with Congressional intent; sustainment costs on priority systems are more controlled; military housing is safe and healthy; and that we have the right approaches to recruit and retain the talent we need in the acquisition workforce.

<u>Qualifications</u>

The Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) is the Chief Acquisition and Sustainment Officer of the Department of Defense. If confirmed, in supporting the USD(A&S), you will be responsible for establishing policy and conducting oversight of an acquisition and sustainment system through which the Department spends more than $500 billion each year. What background and experience do you have that qualify you for this position? In particular:

4. **What background or experience, if any, do you have in executing programs to acquire products and/or services?**

   In my past role as a senior economist at RAND and researcher at Facebook and Google, as well as previous roles in government, such as with Special Operations/Low Intensity Conflict and Department of Energy, I have executed multi-million dollar technical and research programs. In these roles, I was charged with scoping, acquiring, and then ensuring on-time execution of programs, services, and analytic products.

5. **What background or experience, if any, do you have in overseeing the execution of programs to acquire products and/or services?**

   My past executive roles at Facebook and Google applied data analytic and other technical expertise to programmatic, financial, and talent management oversight to ensure relevant internal products as well as investment in external products and services were appropriately acquired, integrated, and executed. In my current role as Chief of Staff to the Deputy Secretary of Defense, I support the full range of major program execution and ensure appropriate senior level oversight is present for priority mission capabilities.

6. **What background or experience, if any, do you have in managing portfolios of programs?**

   My past roles at RAND, Facebook, and Google involved managing portfolios of programs aligned to different substantive or product areas. In my current role as Chief of Staff to the Deputy Secretary of Defense, I support the execution of portfolios of programs including those overseen by the Office of the Secretary of Defense (OSD) and the Military Departments.

7. **What background or experience, if any, do you have in developing policy and processes for programs to acquire products and/or services, as well as policies and processes for oversight of such programs?**

   In my past role as Deputy Chief of Staff to the Deputy Secretary of Energy and senior economist at RAND, I led and managed policies and processes on a range of products and services. In these roles, I was charged with defining policy and processes for science and technology as well as major programs in the national security sector.

8. **What qualifications do you have using modern data approaches, tools, and methods that prepare you to maintain visibility of, analyze, and manage data on the volume, variety, and complexity of the inventory of acquisition and sustainment initiatives and programs in the Department?**

   In all of my professional roles to date I have leveraged best in class data approaches to improve decision making and investments. Most recently at Google, I led the development of cross-product data systems to improve business practices, including acquisition and management of contractor operations. At the Department of Defense, I have served as a chief architect and advisor to the Deputy Secretary and the Secretary in applying modern data practices to the Department, to build the data foundations necessary to support the billions of dollars in investment executed annually at the Department.

9. **What background or experience, if any, do you have in managing contracts for services?**

   My past executive roles at Facebook and Google I managed contracts for services including research and analytic consulting work. In my current role as Chief of Staff to the Deputy Secretary of Defense, I support the execution of a full range of service contracts for the OSD working closely with the Director of Administration and Management.

Relations with Congress

10. **What are your views on the state of the relationship between the Office of the USD(A&S) and the Senate Armed Services Committee in particular, and with Congress in general?**

    I understand that the teams within the Office of USD(A&S) meet regularly with professional staff members of the Senate Armed Services Committee and other members of Congress. Such regular engagements are critical to identify areas of potential mutual interest, potential gaps, and areas to focus to ensure progress in priority areas.

11. **If confirmed, what actions would you take to sustain a productive and mutually beneficial relationship between Congress and the Office of the USD(A&S)?**

    If confirmed, I would continue to engage Congress and support broader Office of USD(A&S) engagement. Such engagements are critical to foster understanding, enable transparency, and support the critical oversight function of Congress.

Priorities and Challenges

12. **If confirmed, what are the top priorities you would plan to focus on during your tenure as the DUSD(A&S)? What would be your plans for achieving these priorities?**

If confirmed, my priority focus areas include (1) ensuring critical new authorities – including software acquisition pathways -- are leveraged and integrated into priority systems; (2) building ongoing work to identify and control drivers of sustainment costs in priority programs; (3) developing an integrated strategy with the military departments to ensure military housing is safe and healthy; and (4) leveraging new hiring and retention authorities and programs to recruit and retain the talent we need in the acquisition workforce.

13. **In your opinion, what are the greatest challenges facing the DOD's acquisition and sustainment communities?**

I believe the greatest challenge facing these communities is the shift in focus and changing requirements needed to align the Department to meet the pacing threat of China, balanced with the ongoing acute threats including Russia, Iran, and violent extremist organizations. This has impact on acquisition and sustainment priorities, and will require adjustments to the posture of our workforce in OSD and the Military Departments to deliver warfighters the capabilities they need on the time schedule they need it.

14. **What would be your plans for addressing these challenges, if confirmed?**

If confirmed, I would work closely with the USD(A&S), the Undersecretary for Research and Engineering (USD(R&E)), and the Service Acquisition Executives (SAE) in the Military Departments to develop, exercise, and streamline the pathways to bring innovative new capabilities to scale. This would include leveraging the Adaptive Acquisition Framework to ensure we have agile and responsive policy and are using data and analytics across the department to build a data-driven approach to mission capability management.

15. **By what metrics will you measure your progress towards achieving these priorities and addressing these challenges?**

The defense acquisition and sustainment system suffers from disjointed, decentralized data. If confirmed, I will fully support and lend my energy to ensuring that A&S leads the Department driving integrated, systems level performance data to ensure the Department's leadership is making informed decisions on critical mission capabilities. If confirmed, I will work closely with the Chief Digital and Artificial Intelligence Office (CDAO) as well as the SAEs to identify clear deliverables, targets, and associated metrics and host regular reviews. I will also ensure support to the Deputy Secretary of Defense-led business health metrics and will ensure meaningful and accurate metrics help drive delivery and sustainment of on-time capabilities to the warfighter and at target installations and facilitates.

Implementation of Acquisition Reforms

16. If confirmed, what steps would you take to ensure the Department continues its progress in implementing Congressionally-mandated and Department-driven reforms to the acquisition system?

If confirmed, I will work with the USD(A&S) to ensure that we are utilizing innovation to continue our progress toward acquisition reform. By prioritizing innovation and the timely fielding of needed capabilities to address key challenges, we can work within the authorities provided to us via Congressional mandates and promote additional Department-driven reforms.

17. Are there any Congressionally-mandated or Department-driven reforms that you would recommend be modified or suspended? If so, why?

If confirmed, I will work with the USD(A&S) and my staff to carefully review the impact of recent changes to the acquisition system in the last few years, and consider modification legislation or Department policy as appropriate.

18. If confirmed, what additional acquisition reforms, if any, would you recommend?

The Deputy Secretary of Defense recently approved six Competitive Advantage Pathfinder efforts to speed the delivery of capabilities to the warfighter. If confirmed, I will work with the USD(A&S) to deliver on this effort and coordinate between the requirements, resourcing, and acquisition communities to find other Pathfinder efforts to speed delivery and inform the acquisition enterprise of lessons learned on how to reduce road blocks.

19. In your view, of the Congressionally-mandated or Department-driven reforms, which specifically have been the most successful and impactful acquisition reform initiatives of the past decade?

If confirmed, I look forward to working with the USD(A&S) in reviewing the reform of the Defense Acquisition System. The expansion of Other Transaction Authorities provides increased flexibility to acquire innovative technologies more rapidly, increases competition, and ensures requirements are incorporated into future technologies and products. Similarly, the middle-tier acquisition pathway provides flexibility to move faster and get to operational capabilities.

Key Relationships

Recent National Defense Authorization Acts have directed significant changes to the assignment of responsibilities within the defense acquisition system. For example, the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2017 split the former Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) into the USD(A&S) and the Under Secretary of Defense for Research and Engineering (USD(R&E)).

20. In your view, what are the advantages and disadvantages of having two separate organizations: one to manage acquisition and sustainment, and one to manage research and engineering?

If confirmed, I will work with USD(A&S) and USD(R&E) leadership to focus on the broad challenges we face in accelerating innovation and more quickly fielding capability to the warfighter. I will be mindful that transition areas between these portfolios may be created, thus introducing challenges and risks as we transition emerging technologies from research and development programs into fielded capabilities. Strong, close collaboration between A&S and R&E and other stakeholders can prevent these challenges and risks.

   In recent years, considerable authority and responsibility for acquisition activities have been given to the Services through: (1) the Secretary's delegation of Milestone Decision Authority for most acquisition programs to the Service Acquisition Executives (SAEs) and (2) Congress' emphasis on the Service Chiefs' role in requirements development, resourcing discussions, and tradeoff decisions for major defense acquisition programs.

21. In your view, what are the advantages and disadvantages of delegating more responsibility for managing acquisition programs to the Services and away from the Office of the Secretary of Defense (OSD)?

It is my understanding that shifting program management to the Services has led OSD to focus on implementing reform efforts and improving the Defense Acquisition System. If confirmed, I will work with the USD(A&S) to fully review the advantages and disadvantages of this shift and make recommendations as appropriate to Congress.

22. In this construct where more responsibility for managing acquisition programs has been delegated to the Services, what suggestions would you make for the USD(A&S) to maintain oversight over and insight into programs while reducing bureaucratic drag on the process?

The Department has made major investments in increasing transparency in acquisition data through the analytics effort. This data-driven oversight reduces the amount of time taken away from service program managers in providing information to USD(A&S) while providing the OUSD(A&S) staff with greater understanding of their portfolio areas and potential areas of risk. The Department needs to continue with the analytics and advanced forecasting and modeling capabilities to identify areas for improvement across the enterprise to enable service program managers to be more effective and efficient.

23. If confirmed as the DUSD(A&S), how would you structure your relationship with the SAEs and the Service Chiefs? Are there any programs for which Milestone Decision Authority should be moved to the OSD-level or, conversely, returned to the SAEs?

If confirmed, I would work with the SAEs and their civilian and military deputies to understand their issues with executing efforts under the current Defense Acquisition System. I would also work with the Service Chiefs' staffs to understand their roles in determining capabilities. I will work with the USD(A&S) to ensure the milestone decision authority is aligned between OSD and Services.

24. **What do you believe should be the respective roles and responsibilities of the Secretary of Defense, USD(A&S), and the SAEs in ensuring acquisition programs deliver promised capabilities to the end user on time and on budget? How should the role of the DUSD(A&S) support that?**

I believe the role of the Secretary of Defense, the USD(A&S) and the (SAE) is to operate in combination, consistent with their statutory responsibilities, to ensure the effective operation of the Defense Acquisition System. If confirmed as the DUSD(A&S) I would work with the USD(A&S) and my counterparts in the Services to support delivering capabilities to the end user on time and on budget.

25. **What further steps do you believe are necessary to align authority and accountability in the acquisition system, if any?**

If confirmed, I will work with the USD(A&S) to assess the authorities and accountability within the acquisition system to ensure they are appropriately aligned, as this is critical to ensure the effectiveness of the system as a whole.

26. **In your view, who should provide independent oversight within the acquisition system, and specifically, who should ensure that acquisition strategies are based on prudent technical risk, subsystem technology maturation prototyping when necessary, and realistic cost estimating while allowing for sufficient time in the program schedule to accomplish these tasks?**

If confirmed, I will work with the USD(A&S) to balance statutory requirements, Department policy, and independent oversight within the acquisition system. The decision authority for acquisition strategies and other aspects of the acquisition system must be maintained at the proper level to account for program complexity, dollar value, and technological maturity.

The acquisition of information technology, ranging from embedded software in weapons systems to the procurement of commercial cloud computing services, is an increasingly important challenge for defense acquisition programs.

27. **If confirmed, what role will you have in developing acquisition strategies for information technology systems and services and how is that role different, in your view, from that of the Chief Information Officer?**

If confirmed, I look forward to working with the USD(A&S), the CIO, the newly-established CDAO, and the Components to pursue unique and informative acquisition

strategies for information technology solutions. The Office of the USD(A&S) can complement the CIO's role in identifying solutions from a technical view to ensure integration of information systems to meet the Department's mission by providing oversight and offering guidance to ensure those systems and services are effectively and efficiently developed and integrated with hardware and service contracts.

28. **If confirmed, what responsibilities related to policies for and oversight of the acquisition of information technology systems and services should be delegated to the Chief Information Officer, as opposed to the USD(A&S)?**

If confirmed, I will ensure an effective partnership between the USD(A&S), CIO, and CDAO and determine an appropriate balance of technical, functional and acquisition oversight. Current statute is clear regarding the Defense Acquisition Executive role and ability to delegate responsibilities. If confirmed, I will work with the CIO office and the USD A&S to determine the optimal path regarding delegation of responsibilities.

29. **If confirmed as the DUSD(A&S), how would you structure your relationship with the Chief Data and Artificial Intelligence Officer (CDAO)?**

If confirmed, I would build off my current working relationships established as the Chief of Staff for the Deputy Secretary of Defense. I would actively partner with CDAO, in pursuit of synergizing CDAO and USD A&S efforts to leverage the breath of data and information available to the Department. Data, artificial intelligence and innovation must become the cornerstone of the Department's abilities to measure, monitor and transform. No one office will succeed. It is only through strong partnerships across the Department, and in particular with the CDAO, will the Department move forward.

Managing the Performance of the Defense Acquisition System

Many of the Department's major defense acquisition programs have established overly optimistic cost, schedule, and performance goals that they have subsequently struggled to achieve, resulting in cost growth and schedule delays.

30. **If confirmed, what steps would you take to address cost growth, schedule delays, and performance shortfalls on the Department's major warfighting and business system programs?**

If confirmed, I will work with the USD(A&S), my staff, and the Service and Component Acquisition Executives to address cost growth, schedule delays, and performance shortfalls on major programs. Working with the Joint Staff and Cost Assessment and Program Evaluation (CAPE) will be a key element to align the Joint Capabilities Integration and Development System (JCIDS) and Planning, Programming, Budgeting, and Execution (PPBE) processes within the acquisition system. I will focus on the early phases of program and technology development to provide these programs with a solid foundation, and I will emphasize the need for rigorous independent cost and schedule estimates. I believe setting realistic cost, schedule, and technical baselines is a vital

starting point for all programs. We should also utilize lessons learned from successful programs that do better than originally planned.

31. **What is your assessment of the Department's ability to estimate lifecycle costs for its programs and activities? If applicable, what specific changes would you make to improve this ability?**

If confirmed, I will work closely with Assistant Secretary of Defense (ASD) for Sustainment, CAPE, and the SAEs to develop and refine accurate lifecycle cost estimates. Both estimation and management of sustainment costs is a significant challenge, but I will utilize proven methodologies to assist in making accurate assessments of lifecycle costs.

32. **What is your assessment of the Department's ability to assess and appropriately manage programs based on the programs' technical maturity?**

If confirmed, I will work closely with the USD(A&S), USD(R&E), and SAEs to review the Department's ability to assess technical risk for programs and make improvements as appropriate.

33. **What is your assessment of the Department's ability to assess a program's health over its lifecycle, with respect to the necessary industrial base and availability of the supply chain?**

The Department's capabilities are dependent on reliable access to a robust and ready supply chain. Risks develop when our defense systems depend on outdated technologies with diminishing manufacturing or foreign sources of supplies. If confirmed, I will work closely with the ASD for Industrial Base Policy (ASD(IBP))to assess a program's health over its lifetime, with respect to the defense industrial base and supply chain risk management.

34. **Traditionally, acquisition programs are managed on a program-by-program basis. Do you see advantages of moving toward a more portfolio-based management approach? What would be the disadvantages of adopting such an approach?**

If confirmed, I will work with USD(A&S), USD(R&E), the SAEs, and CAPE to review the advantages and disadvantages of moving toward a more portfolio-based management approach.

35. **What are the strengths and weaknesses of the current Adaptive Acquisition Framework?**

If confirmed, I will work with the USD(A&S)'s data driven review of the advantages and disadvantages of the Adaptive Acquisition Framework.

36. What further changes, if any, should be made to DOD's Adaptive Acquisition Framework?

Working with the USD(A&S), the SAEs and my staff, I will use a data driven review to recommend ways to improve the performance of the Adaptive Acquisition Framework.

Acquisition Data

Selected Acquisition Reports are set to be sunset in the near future and need to be replaced with a modernized reporting requirement that can be tailored to different acquisition strategies and pathways based on existing data sources and systems. In order to implement a risk-based approach for managing acquisition programs, many experts believe that DOD needs to adopt modern tools and methods for collecting and analyzing large amounts of acquisition data.

37. In your opinion, does the Department have sufficient and timely data to assess the full range of risks facing acquisition programs, including risks pertaining to development and sustainment costs, schedule, performance, integration, supply chains, and technical maturity, among others?

If confirmed, I will work with the USD(A&S) to prioritize assessing the status of relevant data, its availability and accessibility, as well as our tools and human capital to use that data to inform decision-making. We can build on the progress made thus far to make data accessible and usable at all levels of the Department. I will work with Department leadership, the Executive Branch, Congress, and industry to address any identified shortcomings.

38. What specific steps would you take, if confirmed, to ensure the acquisition enterprise is collecting authoritative data, including data from industry partners and other DOD organizations, to effectively model risk, and use appropriate indicators of program and portfolio health?

If confirmed, I will work with the USD(A&S) to continue efforts across the Department to ensure the availability and effective use of authoritative data while preserving transparency to Congress. I will work with USD(A&S) to evaluate current data collection to ensure alignment with industry best practices. Accurate, timely, clearly understood and authoritative data is absolutely essential to understanding our performance and areas for improvement.

39. In what ways do you think the Department could be better using the acquisition data it collects (or could collect) in order to improve decision making for both the acquisition and sustainment of systems and services in the Department?

If confirmed, I will work with USD(A&S) to review the quality, accuracy, and timeliness of the acquisition data we collect to determine how well the Department is utilizing that data to improve decision-making.

40. What are your suggestions for the format, content, and tailoring of future Congressional reporting on acquisition programs?

My understanding is that the Department is currently building the capability to provide automated acquisition program dashboards, beginning with the Major Capability Acquisition and Middle Tier of Acquisition pathways; other pathways will follow as metrics are developed. CAPE is currently researching improvements to the Selected Acquisition Reports; however, legally required content in Selected Acquisition Reports remains the same for at least the next two years. If confirmed, I will work with USD(A&S) to review these plans and make adjustments as appropriate with the goal of maintaining transparency while modernizing format.

Software and IT Acquisition

Software has become one of the most critical components of DOD systems, but recent studies by the Government Accountability Office (GAO), the Defense Innovation Board, and the Defense Science Board, among others, show the Department's software development practices have not kept up with leading industry practices. While DOD has taken significant steps in the last few years, such as establishing a software acquisition pathway emphasizing rapid delivery and user engagement, programs have yet to consistently incorporate leading software development practices.

41. What do you believe are the major barriers to DOD fully adopting modern software development approaches and what additional steps would you take to drive their adoption throughout DOD?

If confirmed, I will work with the USD(A&S) to coordinate with OSD, Joint Staff, the Services and others in an effort to build on the Department's initial momentum to modernize enterprise processes, strategies, and tools for rapid digital capability delivery. I believe it is essential to tailor Department interoperability and requirements processes for software.

42. What is your assessment of the current capabilities of the Defense Industrial Base (DIB) to properly execute agile software development?

If confirmed, I will work with the USD(A&S) to promote incorporating leading private-sector industry practices throughout DoD where delivery of capability is done iteratively and collaboratively with the government to reduce cycle times and respond to changing technologies, operations, and threats.

43. How are initiatives like the Defense Digital Service and Software Factories helping or hindering the Department's progress in acquiring software intensive systems?

DoD is scaling its software production capabilities by adopting a framework that follows commercial industry's model for modern infrastructure and deploying digital products with security, reliability, and speed. DoD must build on this momentum and modernize

its enterprise processes, strategies, and culture for rapid digital capability delivery, including improving transparency and understanding of the transition to scale. If confirmed I will work with DoD CIO, the CDAO, and USD(A&S) to enable our programs with the enterprise tools and processes it needs to support more rapid and secure digital product delivery.

Iterative Development Approaches

44. What is your opinion on ways DOD could incorporate iterative development approaches centered on fielding minimum viable capabilities?

DoD should work to embrace rapid, iterative product development that creates innovation and gives us competitive advantage over our adversaries. If DoD builds capabilities in iterations similar to industry, it can reduce cycle times and be more responsive to changing technologies, operations, priorities, and threats. This is particularly true for software which is central to every major DoD mission and weapon system. My understanding is that similar to industry, DoD's Software Acquisition Pathway policy focuses on iterative delivery of Minimum Viable Products and Capabilities to the warfighter which enables the learning and feedback that will help continuously improve our products.

45. To what extent do you believe DOD has broadly implemented commercial best practice agile development approaches adequately for software and hardware systems?

Thanks in large part to strong Congressional support, DoD has made significant progress over the last few years to enable more modern agile development and acquisition practices, policies, pilots, and training. In particular, Congress provided DoD greater speed and flexibility to develop the new Software Acquisition Pathway to acquire and deliver software using modern, commercial software development practices including agile software development. DoD should continue to modernize its enterprise processes, strategies, and culture for agility and rapid digital capability delivery. DoD can also learn how to extend the rapid innovation cycles for software into more agile hardware deliveries.

Advanced Technology Adoption

The rapid pace at which our adversaries are fielding technological advancements demands the Department establish an acquisition system that can deliver capabilities that are responsive to new threats and emerging technological opportunities.

46. In your view, do the current policies and practices of the defense acquisition system sufficiently encourage and support the adoption of disruptive technologies in the Department's acquisition programs? If not, what changes would you recommend in support of these initiatives?

At this time, I do not believe there are any necessary recommended changes, but if confirmed, I will endeavor to evaluate and identify where improvements can be made. I believe the Defense Acquisition System has allowed for improved flexibility, but the Department must continue to evolve to become more agile and leverage these innovative technologies. The Department must meet the imperative to offer a range of options to the programs, such as the application of new technologies and concepts. Further, the use of the Acquisition Innovation Research Center will be essential to research, model and pilot innovative practices.

47. **What do you believe are the specific technologies that will be critical to defeating a near-peer competitor?**

If confirmed, I will work with the USD(A&S), the Services, the Combatant Commands, and the USD(R&E) to partner with commercial industry partners in key areas, such as AI, autonomy, and advanced computing.

48. **In your opinion, how should the Department define and manage concepts like risk and failure so that program managers can try new technologies and acquisition practices, derive lessons learned and establish a common understanding of best practices, and more quickly drive technological advancement in ongoing acquisition programs and into current fielded capabilities?**

If confirmed, I will work to ensure the Department learns from both successes and failures that occur during the development of acquisition practices throughout the lifecycle. I will focus on the appropriate application of prototyping and experimentation to identify issues as early as possible.

49. **What do you view as the major barriers to entry for new companies that want to do business with DOD? How would you address these barriers, if confirmed?**

If confirmed, I will continue to encourage engagements with industry, work with the Services to simplify requirements, stress the use of novel strategies, and work to ensure we can provide the required capabilities at the best cost possible. Transparency between industry and government is critical to deliver the capabilities we need at costs we can afford.

DOD continues to struggle with the transition of new technologies into existing programs of record. The USD(R&E) enterprise has primary responsibility for development of new advanced technologies, but the Acquisition and Sustainment enterprise must do its part to address transition of technology development programs into procurement and fielding.

50. **What impediments to technology transition do you see within the Department?**

As the USD(A&S) has noted, budgeting timelines with the PPBE process and the traditional requirements systems can prevent rapid movement of programs through the defense acquisition system.

51. If confirmed, what steps would you take increase the rate and frequency at which proven technologies developed by DOD, defense industry, or the commercial sector are transitioned into programs of record?

I believe that the Department should deliver and build capabilities in iterations—similar to industry—to reduce cycle times and be more responsive to changing technologies, operations, and threats. For software specifically, the continued employment of modular, open systems approaches as well as commercial as-a-service models is critical, given its reliance for most major weapon systems. The Department must organize around capability or mission area portfolios that rapidly harnesses a wide-array of commercial and defense solutions and enable rapid insertion of emerging technology.

Other Transactions Authority (OTA)

52. What steps will you take to promote the appropriate use of OTAs to encourage the participation of new and non-traditional defense contractors in the defense industrial base?

I am aware that DoD successfully uses Other Transaction Authority (OTA) to attract new and non-traditional entrants to the Defense Industrial Base. If confirmed, I will work with the USD(A&S) to ensure that the DoD acquisition community is properly trained and has the tools to effectively leverage this important capability.

53. What do you see as the benefits and downsides of using OTA consortium agreements?

Consortia may offer valuable services that facilitate access to a wide range of sources that might not otherwise participate in the Department's research and development and prototyping efforts. This has the potential to accelerate innovative technology into capabilities for DoD. However, I also understand the need for transparency in using consortia, including the need to ensure they effectively attract and identify non-traditional Defense contractors in the performance of individual projects awarded to a consortium.

Earned Value Management

The earned value management system (EVMS) is used to assess the cost, schedule, and technical performance of major capability acquisitions for proactive course correction. However, the Section 809 Panel reported that EVM does not measure product quality and concluded, "EVM has been required on most large software programs but has not prevented cost, schedule, or performance issues." In 2009 DoD reported to the committee that "a program could perform ahead of schedule and under cost according to EVM metrics but deliver a capability that is unusable by the customer" and stated the program

manager should ensure that the EVM process measures the quality and technical maturity of technical work products instead of just the quantity of work performed.

54. **If confirmed, what steps would you take, if any, to require contractors to report valid measures of cost, schedule, and technical performance for all acquisition pathways?**

    If confirmed, I will work with the USD(A&S), the CDAO, and Department leaders to establish or improve appropriate, executable metrics across the acquisition pathways and to ensure the industrial base can work within those metrics. I will work to continually improve and refine approaches to best meet warfighter needs.

55. **If confirmed, what steps would you take, if any, to require contractors that employ the DOD Digital Engineering (DE) Strategy to maintain valid information in the digital authoritative source of truth that is sufficient for program managers to make informed and timely decisions to manage cost, schedule, performance, and risk?**

    If confirmed, I would assist the USD(A&S) in engagements with industry and Service representatives to better understand how the digital engineering strategy is currently employed. I will foster collaboration to ensure proper training of our acquisition corps and development of contract and data rights guidance.

Planning, Programming, Budgeting, and Execution (PPBE)

The Department's acquisition process is closely linked with its PPBE process, and acquisition programs can move only as nimbly as the budget processes that fund them. The National Defense Authorization Act for Fiscal Year 2022 established a Commission to examine and make recommendations for PPBE reform.

56. **In your view, what changes are needed to the PPBE process to ensure it can effectively support ongoing acquisition reforms, including by improving timeliness, reducing bureaucracy, and increasing flexibility?**

    Refining the PPBE process is important to realizing agile and timely procurement of key emerging technology. If confirmed, I look forward to working with the PPBE Commission and stakeholders across the Department and in Congress to examine the system issues and develop proposals to address these challenges.

57. **What steps can the Department take under the current PPBE construct to ensure acquisition programs are appropriately resourced in a timely manner?**

    The Competitive Advantage Pathfinders (CAPs) initiative is aimed at identifying ways to align the PPBE with the requirements and acquisition systems. If confirmed, I will work to identify solutions that support the acquisition system with our partners in CAPE, the Comptroller, and Congress to apply lessons learned to accelerate acquisition of important technologies.

One of the major obstacles to successfully bringing emerging technologies into the Department's acquisition system is the so-called "valley of death," partially caused by the gap in funding between the development of a new technology and its transition into a program of record.

58. **What changes are needed to the PPBE and other processes to help bridge the "valley of death"?**

   If confirmed, I will work closely with the USD(A&S) to assess the PPBE process and to ensure transparency and security while balancing the imperative for speed, in order to bridge the "valley of death."

59. **To what extent should the role of the government's systems engineering commands (e.g., Naval Warfare Centers and the Air Force Research Laboratory), as the government's technical experts in particular technology areas, be used to help emerging technologies bridge the "valley of death"?**

   If confirmed, I will work with USD(A&S) and USD(R&E) leadership to ensure the warfighter's prioritized capability gaps are appropriately communicated and aligned with the efforts of our laboratories and industry partners.

60. **In your view, do the military departments and defense agencies have different results in transitioning technology developed "in-house" versus technology developed by others, such as DARPA, the Strategic Capabilities Office, or the commercial sector?**

   In my view, aligning the requirements, resources and development communities is critical to reversing the erosion of technical advantage. The Military Departments have processes in place to align technology investments from within their own centers to acquisition partners. Defense agencies have the ability to look at needs in a different way and bring cross functional and joint requirements to the forefront of emerging technologies development.

The Goldwater-Nichols Act (GNA) of 1986 was enacted just prior to the explosion in information technology. The GNA successfully instilled a "joint" culture in the Department's warfighting operations, but the PPBE, requirements, and systems acquisition processes remained service-centric. Today's information technology could enable interoperability between ground, maritime, air, space, and cyber systems to proliferate options to detect, locate, identify, track and guide weapons to targets. However, systematically constructing "kill chains" across domains, systems, and services and managing such joint operations may be very difficult given that the "man, train, and equip" role is performed by the separate military departments and a small number of defense agencies. To take a concrete example, DARPA is struggling to determine how it can "transition" its Assault Breaker II initiative, since the interconnectedness it is working on transcends any one military service or department.

61. What are your views on how to address this problem?

The Integrated Acquisition Portfolio Reviews started last year indicate the Services are developing and fielding capabilities that support their Title 10 responsibilities, without taking into account the interoperability needed to achieve the goals of the National Defense Strategy. If confirmed, I will work with the USD(A&S), my staff, and the SAEs to identify ways to increase interoperability.

62. As there are few options other than the military departments, Special Operations Command, and Cyber Command to field and maintain systems, do you believe consideration should be given to creating some joint acquisition and sustainment capabilities? Please explain your answer.

Ensuring acquisition and sustainment of joint capabilities is critical to meeting warfighter requirements. If confirmed, I would work with USD(A&S) and Department leaders to review the effects of previous joint efforts to understand the utility of applying those concepts to future efforts.

Requirements

The Joint Capabilities and Integration Development System (JCIDS) process was established nearly twenty years ago with the intention of addressing overlap and duplication in the Military Services' acquisition programs.

63. With respect to driving the acquisition system to deliver capabilities that meet the national security needs of the nation, what do you see as the primary shortfalls of the current requirements building process?

The Joint Staff has made strides in the last few years to take a more strategic look at requirements through the Joint Warfighting Concept (JWC) and the Capability Portfolio Management Reviews (CPMRs). These efforts provide the acquisition community with a clear signal on the highest priority capabilities in the Department. If confirmed, I would work with my colleagues in the acquisition community and the Joint Staff to translate these capabilities into requirements documents.

64. If confirmed, how would you propose to reform the process?

If confirmed, I would work with the USD(A&S) and my staff to understand the application of the JWC and CPMRs to the acquisition planning process. The CAPs efforts are focused to integrate the requirements, budgeting and acquisition processes to provide capabilities in a shorter time frame, and lessons learned will lead to changes in all three defense decision making process areas.

The requirements process has often been incapable of developing requirements that consider technological advances made by DOD's own research programs. In recent years, DOD has also undertaken a number of initiatives to improve the Department's connectivity with commercial technology companies.

65. What changes would you suggest to ensure that emerging technologies from within DOD, defense industry, and the commercial sector are better accounted for and leveraged within the requirements process?

The Department has established two efforts, Rapid Defense Experimentation Reserve (RDER) and CAPs, to find ways to accelerate the introduction of new capabilities to the war fighter. If confirmed, I would work with the USD(A&S), USD(R&E), and the Services to institute the lessons learned from RDER and CAPs to identify how to rapidly and efficiently transition capabilities from prototype, to production, to fielding, into the hands of our warfighters.

Many requirements are established with technical goals that are unachievable at any reasonable cost or schedule.

66. What changes would you recommend to the requirements development process (including workforce changes) to support the development of requirements that allow for risk-informed tradeoffs that are technically feasible at reasonable costs and schedules?

The JWC and CPMRs give the acquisition community an understanding of the capability gaps we much address to reverse the erosion of our technical edge. If confirmed, I would work with the USD(A&S), the Joint Staff, CAPE and the Services to convert these capability gaps into requirements.

The USD(A&S) is not a member of the Joint Requirements Oversight Council, but does advise the Secretary of Defense how to acquire capabilities and what capabilities should be acquired.

67. In your opinion, should the requirements process for new capabilities continue to be exclusively the province of the military departments, and military officers of the Joint Staff and the combatant commands?

If confirmed, I would work with the USD(A&S) and my staff to understand the role of OUSD(A&S) in the requirements process. It is my understanding that OUSD(A&S) staff members participate in the Functional Capability Boards, Joint Capabilities Board and Joint Requirements Oversight Council to provide an acquisition perspective on all requirements.

68. If confirmed, in what circumstances would you consider it appropriate to recommend that the Secretary invest in a capability you consider of high importance, for which there is either no formal requirement or with respect to which no military department is funding a solution to a requirement?

Ensuring we have the right mix of capabilities is critical to effectively executing the National Defense Strategy. If confirmed, I would work with the USD(A&S) and my staff

to understand how we can influence the Military Services' budget process and then work with CAPE to identify areas of high importance to the joint fight that were not prioritized by the Military Services.

69. How would you recommend the Department handle requirements oversight for cross-cutting capabilities, such as Joint All-Domain Command and Control (JADC2), that require simultaneous coordination and funding across multiple lines of effort for new capabilities as well as modernization of existing systems?

If confirmed, I will work with the USD(A&S), the Joint Staff, and OSD leadership to review the oversight process for requirements of cross cutting capabilities and identify any recommended changes.

Modularity and Interoperability

Section 805 of the Fiscal Year 2017 National Defense Authorization Act (NDAA) established requirements for implementing Modular Open Systems Approaches (MOSA) for all major systems acquisitions in DOD and for rights in interface data for the critically important objectives of improving interoperability and increasing potential competition throughout the life cycle of the system. This section further required the use of widely supported and consensus-based standards for system interfaces. Since enactment of section 805, DARPA has developed and transitioned technology that should revolutionize interoperability, under the STICHES program (System of Systems Technology Integration Tool Chain for Heterogeneous Electronic Systems). STITCHES enables auto-generation of software to achieve interoperability across any interface that has been properly characterized and defined, including when neither system nor subsystem has been built to a common standard. STITCHES achieves this interoperability with less performance degradation than with a common standard. Accordingly, Congress enacted section 804 of the Fiscal Year 2021 NDAA to require that all DOD programs characterize system interfaces and that these interface specifications be available in multiple databases for rapid integrations.

70. What is your judgment of the progress that DOD and the Defense Industrial Base has made in implementing the MOSA mandate?

If confirmed I will work with USD(A&S) to understand if additional progress can be made for full implementation and industry acceptance of the MOSA mandate. This includes setting standards and regulations, developing capability reference architectures, and building repositories for modular systems interfaces.

71. Are you familiar with DARPA's technical achievement in the STITCHES program?

It is my understanding that DARPA recently transitioned the STITCHES program to the Air Force. If confirmed, I look forward to receiving more information on this innovative tool.

72. If confirmed, will you commit to assisting in fulfilling the requirements of section 804 with respect to defining interfaces and making them accessible in databases?

If confirmed, I will work with the USD(A&S) to ensure the Department meets the section 804 statutory requirements.

Test and Evaluation

Test and evaluation activities work to meet specifications and requirements, and that deployed capabilities are operationally effective against threats.

73. In your opinion, what is the appropriate role of developmental, operational, and live-fire testing in the acquisition process?

If confirmed, I will work with the USD(A&S), USD(R&E), Director, Operational Test & Evaluation (DOT&E), and the Military Service testing organizations to understand the appropriate role of all testing in the acquisition process and the value of live-fire testing in that broader context.

74. If confirmed, what steps would you take to ensure acquisition programs efficiently address issues and deficiencies identified through test and evaluation?

If confirmed, I will work with the USD(A&S), DOT&E, the SAEs, and my staff to ensure acquisition programs address any issues identified through test and evaluation.

75. Under what circumstances, if any, do you believe DOD should procure weapon systems that have not demonstrated, through test and evaluation, to be operationally effective, suitable, and survivable?

If confirmed, I will work with the USD(A&S), DOT&E, the SAEs, and my staff to understand decisions made to procure weapon systems that have not demonstrated to be operationally effective, suitable and survivable.

76. If confirmed, would you support programs accepting more risk upfront for flight test failures, to accelerate fielding schedules for a potential ~2027-2030 China fight?

Acceptance of greater risk and even a "fail fast" approach is critical to accelerating progress in key technology areas. If confirmed, I will work with the USD(A&S), DOT&E, SAEs, and the Joint Staff to understand where we can accept more risk for flight test failures to accelerate fielding.

In recent years, the Department's test and evaluation community has sought to integrate aspects of developmental and operational testing and conduct such testing early in the acquisition process.

77. In your view, what are the advantages and disadvantages of increasing the integration among the developmental, acquisition, and testing communities?

If confirmed, I will work with the USD(A&S), USD(R&E), DOT&E, and the SAEs to understand where we are taking risk by increasing integration between the developmental, acquisition and testing communities.

78. **What other reforms would you recommend to improve the timeliness, efficiency, and effectiveness of the test and evaluation process to more quickly correct technical deficiencies in weapon systems?**

    If confirmed, I will work with the USD(A&S), USD(R&E), DOT&E, and the SAEs to recommend improvements to the test and evaluation process to more quickly correct technical deficiencies in weapons systems.

79. **If confirmed, how would you work with USD(R&E), the developmental test and modeling and simulation community, the Director of Operational Test and Evaluation, and the Military Services to ensure the Department has the testing infrastructure, workforce, and other resources it needs to support the test and evaluation needs of current and future acquisition programs?**

    If confirmed, I will work with the USD(A&S), USD(R&E), DOT&E, and the SAEs through my staff to ensure the infrastructure and resources are available to support the test community.

Defense Industrial Base (DIB)

Over the past several years, there have been increasing concerns in Congress, industry, and the Department over the health of the DIB and its ability to reliably meet current and future defense needs.

80. **What do you assess to be the most significant challenges facing the DIB?**

    The most significant challenge is ensuring the DIB is robust and ready to develop and sustain the capabilities required by the National Defense Strategy. This includes having regular, on-time funding, a stable workforce, and clear requirements in order to execute at the speed and scale needed to match the pacing threat of China along with a myriad of acute and persistent threats.

81. **How would you propose to address these challenges, if confirmed?**

    If confirmed, I would focus on stabilizing investments in key programs and systems and applying new funding and authorities to increase resilience and reliability of both the organic and commercial industrial base.

82. **What steps will you take to ensure the DIB has the appropriate scientific, technical, and manufacturing workforces to support current and future needs of DOD?**

The "graying" of the workforce is a significant challenge that cuts across almost every sector of the DIB. DoD has launched several efforts through the Industrial Base Analysis & Sustainment program to begin training the next generation of manufacturing workers. If confirmed, I would work with USD (A&S) and USD (R&E) to invest in workforce development as well as expanding the STEM talent across the DIB.

83. What steps will you take to ensure that the DIB has the appropriate manufacturing and production infrastructure to support current and future needs of DOD?

. If confirmed, I will continue to work with Congress and Department leadership to ensure that DoD has the resources and authorities needed to invest in and support the sustainment and enhancement of the defense production infrastructure.

84. What steps should the Department take—on its own or as part of a "whole of government" approach—to increase domestic industrial capacity and reduce reliance on suppliers in China and on other adversaries?

DoD procurement regulations can help reduce our reliance on adversarial supply sources. DoD currently operates under numerous sourcing restrictions related to critical materials from China and Russia, such as rare earth elements and titanium, and I understand that additional sourcing restrictions are under consideration for the FY 2023 National Defense Authorization Act. If confirmed, I would work with USD (A&S) to understand how best to apply existing and future activities to enhance capacity.

The Biden Administration has made domestic sourcing a key part of its policy agenda. If confirmed, you would oversee the beginning of a significant push to increase DOD's procurement of American-made goods, products, and materials.

85. Do you see any associated challenges or opportunities? Please elaborate.

I strongly support the whole of government effort to expand procurement policies. If confirmed, I will work with the interagency and international partners to ensure access to critical capabilities, while supporting the development of a competitive defense ecosystem.

86. In your opinion, what role should domestic sourcing requirements play in efforts to manage the DIB, support domestic companies, and ensure trusted and reliable supplies of goods and services?

If confirmed, I will work with the SAEs and interagency partners to develop a consistent domestic sourcing policy across the federal government, ensuring a robust domestic manufacturing base to foster cooperation and innovation and supporting our international partners.

87. What steps should the Department take to ensure a secure supply of strategic materials such as rare earth elements given the scarcity of domestic or allied sources?

I understand the Department has recently made investments to improve the supply chain resiliency of rare earth minerals. If confirmed, I will work with interagency partners to develop a consistent domestic sourcing policy across the federal government and identify other approaches to secure a reliable supply of rare earth elements.

88. In your view, what steps should the Department take to ensure that companies are able to find needed financing and resources from trusted sources?

The Department has taken a number of actions to provide the DIB with access to trusted financing and resources such as the Strategic Investment Fund and the Defense Production Act. If confirmed, I will continue to support efforts to facilitate better access to vetted sources of capital.

89. What actions should the Department take to address the threat of "adversarial capital" from China and other sources that seek to gain undue influence over the DIB?

As a member of the Committee on Foreign Investment in the United States, the Department should seek to mitigate adversarial capital from China and other sources using all the tools at its disposal and in concert with interagency partners, international allies, and Congress. If confirmed, I will work with USD (A&S), Department leadership and Congress to recommend additional actions as necessary to ensure appropriate technology protections.

90. In your view, what is the appropriate role for the Department with respect to proposed and ongoing private sector merger and acquisition activities of DOD contractors?

It is my understanding that the Department has an important role in assessing the competitive and national security impacts of a proposed activity and conveying that assessment to the regulators at the Federal Trade Commission or Department of Justice. If confirmed, I will work with the Department's senior leadership to review DoD's current role and recommend adjustments as appropriate to strengthen the Department's oversight role to appropriately balance the need for growth with the risks of anti-competitive consideration.

91. What are your views on defense industry mergers and acquisitions in terms of Pentagon guidance to industry?

Industry mergers and acquisitions can be important to growing, but can also risk limiting competition and reducing the vibrancy of the DIB as a whole. The Department benefits

most from a robust and diversified DIB, which reduces costs, spurs innovation, and generates new entrants.

92. How can the Department better leverage suppliers in the national technology and industrial base (NTIB) and among allies and partners?

The recent events in Ukraine and supply chain impacts of COVID have highlighted the benefits and risks of interdependent supply chains. If confirmed, I will continue efforts to better leverage suppliers in the NTIB and among partners and allies and build off lessons learned from our combined support to Ukraine, while ensuring the US has a robust and vibrant domestic industrial capacity.

The Assistant Secretary of Defense for Industrial Base Policy was recently created by Congress and is responsible for overseeing the Department's efforts to manage and support the DIB.

93. In your view, what should be the key priorities and activities of the Assistant Secretary of Defense for Industrial Base Policy?

The new ASD(IBP), working with the USD(A&S) should focus on strengthening the DIB and its supply chains to provide the capabilities warfighters need. If confirmed, I will work closely with the ASD to ensure the Department has the resources needed to strengthen the DIB and its supply chains.

94. If confirmed, how would you ensure the office of this new Assistant Secretary is adequately resourced (in terms of personnel, budget, and authority) and provided with the high-level support necessary to perform its duties and responsibilities?

If confirmed, I will work with Department leadership to develop a resourcing plan that will provide the personnel, budget, and authority necessary.

Section 4819 of title 10, United States Code established a framework for modernizing and digitizing the approach for mitigating risks to the defense industrial base.

95. What is the status of implementing that framework?

For the DIB to continue to provide current and future warfighting capabilities it will need to continually evolve and modernize. If confirmed, I will work with the ASD(IBP) to continue to develop and refine a framework to modernize our supplier base to include leveraging digital processes.

96. What other steps would you take to assess the health of the current and future defense industrial base?

If confirmed, I would continue to implement the findings in the E.O. 14107 report, "Securing Defense-Critical Supply Chains", to include improving the Department's visibility into its supply chains and developing data-driven illumination of key dependencies and risk areas.

Organic Industrial Base

97. In your opinion, what role does the organic industrial base play in modernization efforts and in the sustainment of warfighting capabilities?

The organic industrial base (OIB) plays a critical role in the Department's ability to provide materiel readiness and operational availability of warfighting weapon systems. The OIB provides a ready and controlled source of capacity and capability, essentially serving as the nation's readiness and industrial insurance policy by safeguarding the readiness, sustainment, and modernization of the Department's warfighting. As essential use for this capacity is partnership with industry on efforts to modernize our currently capabilities.

98. What is your assessment of the status of the facilities and workforce in DOD depots, logistics centers, arsenals, and other elements of the organic industrial base?

It is my understanding that the Department's OIB facilities and workforce are in need of dedicated and predictable investment to modernize new capabilities, while renewing the existing facilities, plants, and equipment. If confirmed, I will work with our DoD leadership and Congress to ensure the necessary resources are requested to modernize and optimize the facilities, workforce, and other key elements of the OIB.

99. What role should the organic industrial base play in the sustainment of software in defense systems?

It is my understanding, the OIB plays a critical role in sustaining software to support warfighting readiness and is focused on improving planning early in the life cycle, to include efficient and effective software sustainment strategies. If confirmed, I will work with the Services to continue to improve OIB software sustainment strategies.

100.   What role should the organic industrial base play in the sustainment of dual use and commercial technologies used by DOD?

I support continued collaboration and, if confirmed, will work with senior leaders in the DoD sustainment communities and industry to enhance and build upon existing mechanisms like cooperative agreements and technology transfer authorizations from Congress. If confirmed, I would also work to identify new opportunities to expand and strengthen these relationships.

101.   What role, if any, does USD(A&S) have in ensuring that the facilities and equipment at military depots are modern, operable, and effective?

It's my understanding, the Department delivered to Congress a comprehensive strategy for improving the depot infrastructure to ensure the OIB has the resiliency, capacity, and capability to support the materiel readiness goals of current and future DoD weapon systems. In addition, I believe that the Military Services are actively working on Infrastructure Optimization Plans (IOPs) that will improve and extend OIB facilities service life. If confirmed, I will work with Congress to ensure the Military Services' depot maintenance strategic plans are properly aligned and resourced with the National Defense Strategy readiness priorities.

102.   **If confirmed, what steps would you take to strengthen the Department's organic industrial base?**

If confirmed, I commit to working closely with the Military Services to understand their current and future OIB requirements, ensure weapon system depot activations are resourced, and reinforce OSD's oversight role. Additionally, I will work collaboratively with Congress to ensure that our limited sustainment resources are directed toward efforts to strengthen the OIB.

Defense Industrial Base Cybersecurity

Section 1648 of the FY 2020 NDAA requires the Secretary of Defense to develop a comprehensive framework to enhance cybersecurity for the DIB.

103.   **What is your understanding of the challenges of enhancing cybersecurity of the DIB?**

Ensuring cybersecurity capabilities across the DIB is critical to safeguard intellectual property and sensitive information from malicious activity that threatens economic and national security. However, small and medium sized businesses face particular challenges in implementing the National Institute of Standards and Technology (NIST) Special Publication 800-171 cybersecurity guidance. I understand OUSD(A&S) is working with NIST and the DoD CIO to help better understand the cost and barriers to cybersecurity. If confirmed, I will work with the CIO, NIST, and the DIB to tackle these challenges.

104.   **If confirmed, how would you balance the needs of improving cybersecurity with the burden of compliance on small and medium sized businesses?]**

The Department must reduce the barriers to small businesses in competing in the DIB. OUSD(A&S) is working with CIO on a DIB cybersecurity pilot to cyber harden the supply chain for an important weapons system that will help DoD better understand the level of resourcing required for small and medium size companies to enhance their cybersecurity in a meaningful way to protect our supply chains. If confirmed, I will work with the CIO's office to enhance the cybersecurity of the DIB.

105.   **The framework required by Section 1648 has not yet been completed and delivered to Congress. If confirmed, will you commit to completing the work required by Section 1648?**

It is my understanding that the CIO is responsible for Section 1648. That said, I am aware that Section 1648 requires strong collaboration across the Department and if confirmed, I will work with the CIO to provide inputs to the framework as appropriate.

In the last few years, the focus of the Acquisition & Sustainment model has been on one element of the framework: the Cybersecurity Maturity Model certification (CMMC).

106. **What is your understanding of the current status of CMMC?**

I understand that the CMMC model is being restructured and that many decisions remain regarding what requirements to levy on which programs or contractors. If confirmed, I will work to ensure that CMMC requirements are applied consistently and fairly across the DIB.

107. **If confirmed, are there any changes you would make or recommend to the CMMC efforts beyond those already mandated by the Deputy Secretary?**

If confirmed, I would review proposed changes around feedback in the formal rule making process to inform any further changes to recommend to the Deputy Secretary.

International Armaments Cooperation

The Department conducts a number of activities that support International Armaments Cooperation (IAC) that are used to promote US strategic goals. IAC is defined as (1) cooperative research, development, test, and evaluation of defense technologies, systems, or equipment; (2) joint production and follow-on support of defense articles or equipment and; (3) procurement of foreign technology, equipment, systems or logistics support. In addition to activities like information exchange agreements, defense trade, cooperative logistics, the Department also funds activities that can be used to promote interoperability and joint development, such as the Defense Exportability Features (DEF) program, Coalition Warfare Support Program, and Foreign Comparative Test Program.

108. **How are international armaments cooperation activities used to shape and support broader DOD warfighting needs and priorities? Are there new approaches or activities we should consider to be more effective and strategic?**

Engaging our allies and partners in armaments cooperation activities allows the United States to maximize coalition warfighting capabilities—increasing warfighter interoperability while leveraging resources and global innovation opportunities for collective defense purposes. In my role as the Chief of Staff to the Deputy Secretary of Defense, I saw firsthand the importance of our international partnerships as we organized our defense establishments to support of Ukraine's defense against Russia's aggression. If confirmed, I look forward to working within the Department, interagency, industry, and with the Congress to implement plans and policies that support enhanced international armaments cooperation.

109. **Based on current experiences with Ukraine, what recommendations would you have to help streamline or improve our security cooperation, foreign military sales and cooperative logistics processes in order to be more responsive to rapidly changing security situations?**

Secretary Austin and the DoD leadership team are committed to applying the lessons we are learning from Ukraine. If confirmed, I look forward to working with USD (A&S) to assess how A&S can support the larger security cooperation enterprise and will seek to implement identified changes to drive improved agility and responsiveness.

110. **How are newer initiatives like the Defense Technology and Trade Initiative (DTTI) with India, the Quadrilateral Security Dialogue (or Quad), or the AUKUS initiative being used to support our defense posture, and are there recommendations for improvements of those activities that should be considered to make them more effective?**

Initiatives such as DTTI, the Quad, and AUKUS offer opportunities for the identification and pursuit of focused, mutually beneficial activities, enabling the prioritization of resources for execution and the advancement of shared goals. If confirmed, I will work with stakeholders in government and industry to align plans and objectives in support of our defense posture requirements.

Microelectronics

Over the last few decades, Taiwan, South Korea, and the People's Republic of China have implemented large-scale national industrial policies to build microelectronics manufacturing facilities. In contrast, the availability of large-scale state-of-the-art microelectronics manufacturing foundries in the United States has been steadily declining. DOD has a diverse set of requirements and needs for the domestic production of measurably secure state-of-the-art, state of the practice, and legacy integrated circuits in low volumes to meet its needs.

111. **What is your assessment of the Department's microelectronics needs, to include both legacy, state-of-the-practice, and state-of-the-art?**

Reliable access to microelectronics is critical to the Department's readiness and posture. Presently fielded systems, such as the F-35 and Unmanned Aerial Systems (UAS), require significant commercial and dual-use state-of-the-practice microelectronics. The Department also requires access to legacy microelectronics for specialized applications, such as radiation hardened electronics. If confirmed, I will work with all Department stakeholders on implementing strategies which address the challenges for each type of microelectronics to ensure access to assured resources.

112. **In your view, what role should the Department play in working with the interagency and industry to increase domestic production of dual use microelectronics?**

Dual use and commercial microelectronics, such as state-of-the-practice microelectronics, enable technologies, such as UAS and fifth generation fighters. While these are critical for the Department, they are only a small share of the overall market. If confirmed, I will work extensively and diligently with interagency partners, such as the Department of Commerce, to ensure that we enable U.S. industry to close the gap in production.

113.   If confirmed, what steps would you plan to take to support increased domestic production of dual use microelectronics?

A key enabler of our current warfighting capability is dual use and commercial microelectronics. Recent investments and work by USD (R&E) and proposed legislation are aimed at increasing investment and scale of chip manufacturing in the U.S. If confirmed, I will continue to support the Department's investments in dual use microelectronics and look for opportunities to enhance and accelerate the impact of these investments.

114.   What actions would you take to partner with the USD(R&E) on this issue?

If confirmed, I will promote enhanced collaboration between acquisition and sustainment and research and engineering on efforts to secure future access to new systems, while ensuring present and soon to be fielded systems have access to legacy microelectronics.

Defense Production Act

The Covid-19 pandemic and Operation Warp Speed saw the expanded use of Defense Production Act (DPA) authorities for DOD to support national emergencies and other contingencies.

115.   What do you see as the appropriate level of use of DPA for DOD support to domestic, non-conflict related use-cases?

The DPA provides a broad base of authorities for preparedness, response, and recovery from a national emergency. In any domestic, non-conflict national emergency undertaking, the deployment of DPA authority should be carefully tailored to the specific risk or threat it is intended to mitigate.

116.   What lessons has DOD learned from Operation Warp Speed on how to best utilize DPA authorities, and how have these lessons been institutionalized within DOD?

It is my understanding that Operation Warp Speed principally used authority under Title I of the Defense Production Act to obtain priority ratings. Nearly all DoD contracts already have priority ratings under DPA Title I, and this provides some measure of assurance that defense needs would continue to be met during a national emergency.

117. **How would you use DPA authorities to support prioritization of federal contracts in areas of key supply chain bottlenecks (ex. Microelectronics), if confirmed?**

As noted previously, DPA authorities should be carefully tailored to the specific problem they are intended to address, and nearly all DoD contracts already use DPA Title I ratings.

118. **In your opinion, to what extent and how should DOD best utilize DPA Title III authorities for loan guarantees, purchase commitments, and grants and subsidies to expand domestic production in areas of strategic interest?**

DPA Title III is among the most cost-effective, expedient, and practical alternative approach to meet the need. As important as it is to "build" domestic capacity, it is equally essential that the business case fundamentals (i.e., the "buy" side) will support the sustainment of a proposed undertaking. If confirmed, I would work with USD (A&S) to determine its applicability to mitigate DIB reliance on foreign capital.

119. **Are there sectors or items you believe should see expanded use of DPA Title III authorities to support domestic production?**

If confirmed, I will work with USD (A&S) to review the actions underway and in development for DPA Title III action to determine whether additional resources, authorities, or increased scope (e.g., sectors) are necessary.

Sustainment

The GAO has reported that operation & sustainment (O&S) costs account for about 70 percent of a system's total lifecycle costs, and that O&S costs are largely pre-determined by decisions made during the acquisition process, such as decisions about requirements, system design, and technical data. Given this, it is critically important that programs effectively consider and plan for the sustainment of a system early in the acquisition process.

120. **In your opinion, how well are the Department's acquisition programs planning for sustainment?**

While the Department understands the need for robust sustainment planning, there is always room for additional progress. If confirmed, I will work with the Services and Defense Agencies to ensure DoD continues to plan for sustainment and continues to instill comprehensive sustainment planning early in the acquisition life cycle for new programs. This includes refining sustainment planning for existing programs across all stages of a weapon system's lifecycle.

121. **If confirmed, what steps would you take to ensure acquisition programs are planning for sustainment early and often during the acquisition process?**

If confirmed, I will work to integrate sustainment planning into early stages of weapon system development. Comprehensive sustainment planning must be part of the early acquisition process and then continually refined throughout the weapons life-cycle. This ensures delivery readiness at best cost.

When faced with cost and schedule pressures during the acquisition process, some programs have reduced or deferred activities that would have improved long-term sustainment outcomes, in order to save money and time in the near term.

122. **How will you ensure acquisition programs make upfront investments that could help keep sustainment costs down and improve readiness, such as conducting reliability testing, designing for maintenance, and negotiating for technical data rights, among others?**

If confirmed, I will work with the Services and Defense Agencies to integrate sustainment analysis as part of initial weapon system design. This includes cost and reliability considerations, maintenance analysis, and access to data rights, where appropriate, to enable sustainment planning and system maintenance.

123. **How will you ensure lifecycle operation and support costs have appropriate visibility, as a key performance parameter or equivalent consideration, in DOD's acquisition system and budget presentations to Congress?**

If confirmed, I will work with the Services, Defense Agencies, and DoD staff to support rigorous sustainment analysis as part of weapon system design and development. Additionally, I will also work to ensure key performance parameters are reflected in pertinent budget presentations submitted to Congress.

124. **In your opinion, what opportunities exist to increase coordination and communication between the Department's acquisition and sustainment communities, to help ensure sustainment is adequately considered during the acquisition process?**

Continued coordination between the acquisition and sustainment communities in the past has helped the Department arrive at mutually beneficial strategies. If confirmed, I will work with both the acquisition and sustainment communities to ensure they continue to collaborate and share data to achieve optimal, data driven, mutually beneficial decisions.

125. **If confirmed, what steps will you take to ensure the Department's Major Defense Acquisition Programs and large Middle Tier Acquisition Programs effectively plan for sustainment?**

Sustainment and life cycle continue to be an integral part of weapon system design, development, and fielding. If confirmed, I will work with the Services, Defense Agencies, and OSD staff to ensure program offices are held accountable for sustainment outcomes regardless of acquisition pathways.

DOD has committed to rebuild its readiness to conduct large-scale combat operations against near-peer competitors such as China and Russia. The readiness of critical weapon systems relies on the quantity and timeliness of sustainment. However, sustainment challenges continue to impede readiness across the warfighting domains and military services.

126.   **What is your assessment of the sustainment challenges facing the Department's aviation fleets and what actions would you take to improve mission capable rates for these fleets?**

The Department's aviation fleets require a balance between cutting edge, world-leading aircraft and aging enduring assets. While many of our older platforms retain capability and have good mission capable rates, there are other platforms with obsolete components and a diminished support base.

If confirmed, I will drive innovative efforts to field enabling sustainment technology like conditions based maintenance plus, improving our organic industrial base capabilities and capacity to support higher fleet availability, advocate for digital twin initiatives, and apply rigorous sustaining engineering resources across the life cycle. I will also look at where our maintainers can make the greatest impact across our most capable platforms, while seeking Congress's support to divest legacy capability that does not contribute to the high end fight.

127.   **What is your assessment of the sustainment challenges facing the F-35 program and what steps should the Department take to mitigate or resolve those challenges to improve sustainment outcomes and availability of the aircraft?**

The Department must take steps to improve F-35 fleet readiness in a contested logistics environment, to meet readiness requirements and to reduce sustainment cost within the Services' broader tactical aircraft sustainment portfolios. The Department must mature the long-term F-35 sustainment strategy to support the National Defense Strategy. If confirmed, I will ensure that the F-35 program is closely managed to ensure that it supports the Military Services' and our international partners' sustainment requirements.

128.   **What are the most viable options for the Department to reduce F-35 sustainment costs?**

I understand the Department is conducting an initiative to evaluate supply chain pathfinders to reduce F-35 sustainment costs. This initiative leverages the Services' organic capacity to manage aspects of the F-35 supply chain, and is consistent with the Department's assessment of the proper balance between organic and contractor logistics support to achieve life cycle sustainment cost savings. If confirmed, I will work with the F-35 Joint Program Office and Military Services to review this initiative and identify additional opportunities to reduce sustainment costs.

129. **What steps should DOD take to ensure our ability to handle the current and expected volume of ship maintenance and modernization?**

If confirmed, I am committed to working with the Navy to improve the Department's ship maintenance and modernization capability and capacity. It's my understanding that the Navy's Shipyard Infrastructure Optimization Plan (SIOP) will improve the capabilities and capacity of the public shipyards, and I plan to learn more about how SIOP will better posture the Navy to meet the needs of the future fleet. Understanding the constraints in the supply chain, workforce, capacity and capability of the nation's ship repair infrastructure is critical to planning effective improvements.

130. **What are the biggest challenges in sustainment of software systems and embedded software in systems?**

The rapid growth and use of software systems and embedded software has demonstrated the need for the Department to engage early in acquisition processes to improve design and access to source code, increase use of modular open architecture, and develop processes that reduce sustainment cost. Investment in organic software laboratories is critical for us to keep pace with industry, enhance cyber resilience and remain ahead of our peers. If confirmed, I will work to ensure that we implement and share best practices across the acquisition and sustainment communities and work to develop and refine policies and oversight necessary to support sustainment of software systems.

131. **What are the biggest challenges in the sustainment of commercial technologies that are fielded to warfighters?**

Challenges to the sustainment of commercial technologies continue to be our acquisition process and the retention of intellectual property (IP) data rights. Recent reform actions have helped to streamline our acquisition process, but there are still structural challenges remaining, which we must continue to refine and improve. Acquiring, licensing, and managing the appropriate IP and technical data is vital to ensure DoD systems remain operational, sustainable, upgradable, and affordable. If confirmed, I will work with the OSD staff and SAEs to better enable our workforce to exploit innovative technologies both more easily and rapidly.

Facilities Sustainment

In fiscal year 2020, DOD reported a deferred maintenance backlog of $137 billion, which equates to about 12 years of facility sustainment funding at fiscal year 2020 levels.

132. **What approach will you take to address this backlog and to ensure that facility sustainment funding is sufficiently prioritized and funded? Please specify aspects of the approach such as increased funding, elimination of excess infrastructure and infrastructure in failing condition.**

If confirmed, I will work with the Military Departments and Comptroller to advocate for the appropriate level of resourcing to ensure critical missions are not jeopardized due to

inadequate Facility Sustainment Restoration and Modernization funding. Additionally, I will urge the Military Departments to identify opportunities to eliminate underutilized facilities or those in the worst condition.

DOD's facility sustainment funding primarily focuses on mission-critical facilities. Given the chronic underfunding of facility sustainment, lower-priority facilities, such as unaccompanied housing (barracks) and childcare centers, have experienced increased deterioration-to the point where they need more costly repairs to prevent their failure.

133.	**What actions, if any, will you take to fund facilities that have been treated as lower priority, such as unaccompanied housing and childcare centers—but are facilities that contribute directly to service members' and their families' quality of life—to assure their continued availability?**

Quality of life facilities are essential to the readiness of DoD. If confirmed, I will work with the relevant OSD organizations who oversee these programs to identify approaches to prioritize quality of life facilities to inform the Military Departments' budget development.

Logistics

The war in the Ukraine has highlighted the need for logistics interoperability in a contested environment. One of the Joint Staff Strategic Imperatives is on Contested Logistics.

134.	**What will you do, as DUSD(A&S) to improve the department's ability to conduct logistics in a contested environment?**

The Department's logistics presence and posture enables the nation to project and sustain the force in contested domains. I understand the Joint Staff has an on-going effort to develop contested logistics concepts within the JWC. If confirmed, I will work closely with the Joint Staff to understand the insights gained and transformation necessary to support acceleration of technologies, logistics, and broader capabilities required to meet mission objectives in that setting.

135.	**What will you do to ensure that equipment used by deployed US forces will be logistically interoperable with partners and allies?**

If confirmed, maintaining ready and interoperable forces and capabilities will be among my highest priorities. The United States' global network of alliances and partnerships is a strategic advantage our competitors cannot match. If confirmed, I will pursue interoperability with allies and coalition partners to ensure systems are able to provide and accept data, information, materiel, and services to and from allies and partners. I will also ensure that equipment procured for U.S. forces is interoperable with the equipment of our allies and partners.

136.   What would you do to address the challenges of modernizing the services' maintenance and logistic depots? What would be your priorities?

I am aware of several initiatives within the Department to posture the OIB to support current and future complex and technically advanced maintenance requirements. These include the Military Services' Infrastructure Optimization Plans and a number of OIB workforce development programs. If confirmed, I will work with senior leaders within the Department and Military Services to provide robust oversight of these efforts and ensure they are adequately resourced.

137.   Over the last several years, the DOD has submitted significant reprogramming requests for the DLA Working Capital Fund. What will you do to ensure this does not keep happening?

The Department must balance the solvency of the Defense Working Capital Fund (DWCF), readiness of the force, and the health of the defense industrial base. My understanding is that the Department has taken actions to maintain the DLAWorking Capital Fund cash position to include reducing overall inventory levels and managing the frequency of replacement part purchases. However, current energy prices and inflation may require reprogramming actions to ensure the Department retains buying power to meet requirements. If confirmed, I will work to improve the condition of the DWCF in close collaboration with the Under Secretary of Defense (Comptroller) and Congress.

Contracting for Services

In FY 2019, the Department obligated about $190 billion on services acquisitions, which accounted for nearly half of the Department's total contract obligations. The GAO has identified a number of shortcomings with the Department's management of services contracts and has placed this oversight challenge on its High Risk list since 2001.

138.   What is your assessment of the Department's ability to manage its services contracts?

The Department's ability to manage services contracts reflects the performance of contracting officers and their designated representatives. If confirmed, I will review the policies and guidance provided to contracting officers and contracting officer's representatives (CORs) to ensure that contracts are appropriately managed. I will also review assignment and training requirements for CORs to ensure that they have the skills and tools necessary to perform necessary contract management functions.

139.   If confirmed, what steps would you take to improve the Department's ability to strategically assess and manage its requirements for services contracts?

If confirmed, I will work to strategically improve the requirements process for service contracts by infusing decisions with improved data to inform tradeoff decisions. This

assessment will require working closely with the Services to leverage review processes they may already have in place.

140.   What steps would you take, if confirmed, to improve the quality of data collected on services contracts and the analysis performed on such data, so as to better understand and control spending on service contracts and improve management of these activities?

I believe the Department should continually improve its ability to collect, disseminate, analyze, and use data to support decision makers. If confirmed, I will work to ensure decision makers have the data they need to assess key requirements and funding tradeoff decisions and evaluate the success of the resulting tradeoffs. I expect the data that they will need will come not only from Department-wide repositories of awarded contract documents, but also from their own systems for services requirements, financial management, contract writing, and contract management.

141.   What do you believe is the most important factor in determining whether a service role should be performed by government or contractor personnel, i.e., cost, flexibility, efficiency, ability to meet mission, or some combination thereof?

Functions that are inherently governmental must be performed by government personnel. Where activities are commercial, they can be performed by contractor personnel subject to the forces of competition. If confirmed, I would work with the personnel community to ensure the appropriate factors are considered for the specific service including a balanced and cost effective mix of labor and/or other factors depending on the specific requirement being considered.

Acquiring Commercial Technology

Since the end of the Cold War, Congress and successive leaders in DOD have recognized that the technological superiority and modernization that is critical to national security increasingly takes place in the commercial sector, and that in many technical areas, the pace of commercial technological advance is much quicker than that of the government.

142.   In your view, does DOD adequately consider commercially available solutions to meet its requirements?

The Department's ability to leverage commercially available solutions is dependent on the way it specifies its requirements. I believe the Department can do better, both in market research to inform development of its requirements and in using common, commercial technical (or open) standards in contract specifications. This will allow system developers to select the best available technology solutions.

143.   Are there new ways to reward and incentivize the acquisition workforce and programs to choose commercial solutions, if available?

The ability of the acquisition workforce to choose commercial solutions depends on the ability of the requirements community to write requirements that do not bias the solution set. The entire DOD culture needs to shift to a focus on open systems architectures and the ability to insert new technology, including commercial solutions. I will work with leadership throughout the Department to support a culture of innovation and flexibility.

144.	**In your view, how should the USD(A&S) work with the Chairman of the Joint Requirements Oversight Council to promote the acquisition of commercial technologies?**

I believe there should be a close partnership between USD(A&S), the Vice Chairman of the Joint Chiefs of Staff, and their counterparts in the Services to modernize DoD's requirements system. We need a system that integrates operational needs "requirements pull" with commercial solutions "tech push," informed by experimentation, via a collaborative, iterative approach to exploit new technologies and adapt our ways of fighting.

145.	**Do you believe that current bid protest processes are adequate to enable commercial firms to protest DOD acquisition decisions that may be inconsistent with the statutory preference for commercial products?**

If confirmed, I will ensure that the acquisition process is sufficiently transparent to provide all potential sources with timely awareness of acquisition decisions. I am committed to a process that offers providers of commercial products a fair opportunity to compete for DoD contracts.

146.	**Do you believe the Department is making the best use of both Part 12 and Part 15 of the Federal Acquisition Regulations in developing acquisition strategies for programs?**

If confirmed, I will look to use the most appropriate tools and techniques for each acquisition. I will assess each acquisition strategy to determine whether it is best to use FAR Part 12 commercial procedures, where price competition is paramount, or Part 15, contracting by negotiation, which is appropriate for more complex acquisitions.

Federal Acquisition Regulations and statutes establish a clear preference for commercial capabilities, products, and services wherever commercial solutions are able to reasonably meet DOD's needs at reasonable cost. Faithfully pursuing this preference is all the more important today when commercial technological innovations could play a pivotal role in great power competition. Section 807 of the Fiscal Year 2022 National Defense Authorization Act requires the USD(A&S) and the Chairman of the Joint Requirements Oversight Council to jointly assess the impediments and incentives for pursuing commercial capabilities, products, and services wherever commercial solutions are able to reasonably meet DOD's needs at reasonable cost.

147.   If confirmed, based on your experience, how do you believe DOD could improve its adoption of commercial solutions?

I am aware of the requirement for the Department to assess impediments and incentives to improve the acquisition of commercial products and services. I look forward to working with USD(A&S) to improve adoption of commercial solutions.

148.   In your view, can improvements be made without mandates and additional processes?

If confirmed, I will assess our process and identify what changes, if any, are necessary.

Intellectual Property/Technical Data Rights

149.   Do you believe that DOD has sufficiently implemented intellectual property (IP) best practices to ensure that the government has appropriate access to IP and technical data to give proper return on investments in federal research and development (R&D), retain the ability to re-compete programs to control costs, and exercise better control over program sustainment costs?

The Department has made strong strides in the implementation of IP best practices and must continue to make addressing IP a high strategic priority. This issue must be addressed to ensure that sustainment costs are more affordable and to ensure DoD can take full advantage of industry's faster pace in technology innovation. If confirmed, I will work with USD(A&S) and Office of General Counsel to ensure IP and technical rights are considered early in the acquisition process.

150.   If confirmed, what adjustments would you make to DOD's practices in negotiating IP and technical data rights for programs to improve DOD's ability to develop, procure, and sustain new systems and technologies affordably?

If confirmed, I will work with USD(A&S) to improve our training for the DoD acquisition workforce to take greater advantage of agile tools and techniques, and fully implement modular open systems approaches in DoD programs.

151.   Do you think that the Department of Defense has appropriate access to technical data packages for weapons systems and software in development and sustainment?

The determination of whether the Department has obtained appropriate access or delivery of the technical data and software is dependent on the specific circumstances for each program. If confirmed, I will place greater emphasis on planning for data and software needs throughout the program life cycle, and ensure such planning is happening earlier, especially (when applicable) during the competitive phases of a program.

152.   In your view, is it worth spending more money in programs earlier in order to obtain technical data packages?

Technical data or computer software should be acquired earlier in the program life cycle. By doing so, the Department should be able to leverage the competitive environment in early phases of the program to acquire the needed data or software by spending less money, not more, than seeking to acquire those same items later without the benefit of competitive pricing.

153.   How will the use of open systems architectures and acquisition strategies improve the Department's ability to modernize and sustain its systems?

The use of modular open systems approaches (MOSA) should be a key aspect of the Department's approach to implementing flexible, tailored IP strategies. MOSA allows greater tailoring and flexibility when allocating IP rights to better balance DoD and industry return on investment in individual system components, and is enabled more efficiently by the emerging best practices in digital engineering.

154.   Does the Department need a different approach to access to technical data when dealing with primarily commercial companies?

I believe it is important to first understand how the Department is implementing its IP policies for commercial technologies. I understand the DoD policy is generally to acquire the same data and software deliverables and license rights that are provided to commercial customers, except in cases when DoD's needs require additional or specialized arrangement—which are to be negotiated by mutual agreement with the vendor. If implemented appropriately, this policy should be effective at allowing the Department and commercial vendors to leverage best commercial practices, including negotiating specialized licenses when doing so is a better balance of the parties' interests.

Reform of the Protest Process

155.   To what extent do you think that the time required to settle protests warrants reform to protect the interests of both industry and the government?

The right to protest is important to ensure transparency and fairness in the procurement process. If confirmed, I will review relevant data, along with recent DoD studies and reports to the Congress, to assess whether regulations and policies should be reformed to reduce the time required to resolve protests.

156.   Do you have any recommendations to improve the protest process?

If confirmed, I will work with the USD(A&S) to review the previously submitted recommendations and determine if there are any additional recommendations that would improve the protest process.

Small Business

157.   **If confirmed, what steps would you take to increase the participation of small businesses in the defense technology and industrial base?**

If confirmed, I will support A&S's work to enhance participation of small businesses in the defense technology and industrial base by increasing outreach to small businesses including new entrants, ensuring the acquisition workforce is conducting effective market research to maximize the use of small business set-asides and improving dissemination of information to small businesses on upcoming procurement opportunities. I will collaborate with others in the Department to apply those opportunities more holistically alongside other small business activities.

158.   **In your view, what are the biggest barriers that prevent small businesses from becoming prime contractors to the Department?**

I believe some of the biggest barriers to small business include difficulty navigating the defense acquisition process and complex structure of DoD, often lengthy procurement timelines from opportunity announcement to contract award, and limited access to information on upcoming procurement opportunities.

159.   **Do you believe the Department is using all available authorities to provide small businesses the opportunity to subcontract with existing prime contractors to ensure programs of record have access to the most advanced and effective technologies?**

Although the DoD manages various small business programs that assist with opportunities to subcontract with existing prime contractors, I believe these programs can be better applied to ensure the Department has the most advanced and effective technologies. If confirmed, I will work to better leverage these programs through internally increasing awareness about the value of creating more connectivity between programs such as Small Business Innovation Research (SBIR) Program, Small Business Technology Transfer (SBTT) Program, Mentor Protégé Program and programs of record, Procurement Technical Assistance Program and the Indian Incentive Program.

160.   **If confirmed, what steps would you take to ensure that small businesses that provide goods and services to the Department of Defense are monitored and supported when facing financial pressures that challenge their viability?**

My understanding is that the Military Services' and Components' Offices of Small Business Programs maintain constant communication with industry associations and small businesses on a variety of issues. The Office of Small Business Programs (OSBP) within A&S also sets policies and provides programs to support small business across a range of challenges. Additionally, Procurement Technical Assistance Centers (PTACs) work closely with the Department on monitoring small businesses around the country and communicating the challenges they face. If confirmed, I will work with OSBP and the PTACs to ensure that we supporting small businesses and small business programs.

161.   What do you see as the benefits of diversifying the defense industrial base through more engagement with small and disadvantaged businesses?

Small business participation in defense procurements as prime and subcontractors is vital to the defense mission, competition, and the health of the DIB. Small businesses represent the majority of new entrants into the DIB and their growth creates a pipeline of the next generation of suppliers with diverse capabilities to support the DoD mission.

162.   What recommendations would you have to improve the Department's use of the Small Business Innovation Research programs to develop and field new, advanced capabilities?

Small businesses are a critical part of the DIB. The USD(R&E) oversees the SBIR and STTR programs. If confirmed, I will work with my counterpart in OUSD(R&E) to ensure the Department's effective use of the SBIR/STTR programs.

Acquisition Workforce Education and Training

A well-trained and empowered acquisition workforce is a critical enabler in the implementation of acquisition reform and in the management of acquisition programs.

163.   What is your assessment of the Department's acquisition workforce, both in terms of its capacity and capability? Does the Department have enough acquisition professionals with the right skills?

A capable and agile acquisition workforce is critical to delivering necessary and cutting-edge capabilities to our warfighters. Over the last several years, the Department has made significant efforts to develop the skills of its acquisition professionals through upskilling and recruitment. If confirmed, I will carefully examine the results of these efforts and collaborate with the Services and Components to understand their concerns. Additionally, I will look across the Department to identify the specialty knowledge areas and skills the workforce requires to operate in the current threat environment. I anticipate we will need to study how we can make the best use of existing talent in addition to how we recruit, develop, and retain top performers.

If confirmed, I will assess our capacity and skill needs to ensure the Department has the right number of acquisition professionals—equipped with the appropriate skills—to deliver overmatch capabilities to the warfighter.

164.   If confirmed, what steps would you take to ensure the acquisition workforce is fully trained on new acquisition authorities and best practices, so that it can make informed decisions about when and how to use the different acquisition pathways and tools?

If confirmed, I look forward to working with the Service and Component Acquisition Executives, functional leaders, and the leadership at Defense Acquisition University

(DAU) to ensure the acquisition workforce is both empowered and trained to make full use of its available authorities, pathways, and tools.

165.   If confirmed, what steps would you take to empower program managers to execute acquisition programs and hold them accountable for how their decisions contributed to program performance, including over the life of the system?

I believe program managers will be successful if they are empowered to execute their programs using all of the currently available legal and policy authorities as well as functional support. Fundamentally, program managers are accountable for cost, schedule, and performance of their programs. If confirmed, I will work with USD(A&S) and the SAEs to ensure the program managers have the training they need to be successful and the robust oversight to ensure they are appropriately accountable for performance.

166.   What is your assessment of the Department's training, education, certification, and credentialing programs for the acquisition workforce?

Delivering the latest in technologies and capabilities to the warfighter, requires a workforce that can respond to a variety of rapidly evolving threats. Operating in this environment calls for professionals who can think critically and apply novel approaches to challenges. This requires DoD to ensure we have the training and learning resources that focus on new and emerging areas, spread across an entire career, not just during the first few years on the job. It is my understanding that DAU, the Services, and Components are collaborating to better meet the training needs of the workforce. If confirmed, I will work with the USD(A&S) and my staff to review such efforts to make sure we have effective planning and investments.

167.   What role should the Department play in ensuring that there is an adequate supply of technical talent available for the Department and industry partners to meet the challenges of the future?

The most important resource of any organization is the talent of its employees. The Defense Acquisition is significantly oriented toward science, technology, engineering and mathematics (STEM) fields. Strengthening the pipeline of STEM talent is a national need and must be a priority as we revitalize the national security workforce. Additionally, new and emerging fields—including biotechnology, artificial intelligence, quantum sciences, renewable energy platforms, directed energy, and hypersonics, to name a few—will likely represent key talent investment areas for the Department.

If confirmed, I will work across the Department and with industry to examine possibilities for accelerating and growing the pipeline of talent in key technology areas and broadly across STEM fields.

168.   What specific steps would you take to improve the effectiveness of the Defense Acquisition University?

Developing the skills and abilities of the workforce is key to delivering capabilities for our warfighters. It is my understanding that DAU is undergoing a significant transformation in the way it develops and delivers training—including streamlining requirements to create additional opportunities for job and role-based training.

If confirmed, I will work closely the USD(A&S) and with DAU to assess its current transformation initiative and ensure its supporting activities are aligned to strategic workforce readiness needs.

169.   **What specific steps would you take to assess and ensure the Defense Acquisition Workforce Development Account (DAWDA) is adequately resourced to meet the needs of the Department?**

DAWDA is a critical tool to ensure the acquisition workforce has the skills and training needed in a dynamic and evolving threat environment. If confirmed, I would work with the USD(A&S) to review the processes in place to assess workforce development, retention, and recruitment needs, and ensure the requested budget levels meet requirements. I would also ensure DAWDA resources are allocated to meet the urgent requirements of the Department.

170.   **How would you engage with the Congressionally-mandated Acquisition Innovation Research Center (AIRC) to perform research on acquisition issues of interest, and to engage a future workforce for defense acquisition?**

AIRC is an important mechanism to enable evidence and data-driven decision making to drive improvement in defense acquisition. I believe it is important to understand how the AIRC supports and enables the A&S mission. If confirmed, I will work with the USD(A&S) and ASD for Acquisition (ASD(A)) to gain greater knowledge of the center, its research and ongoing projects.

Nunn-McCurdy Process

The Nunn-McCurdy process, as established by sections 4371-4377 of title 10, United States Code, has not been revisited since Congress and the Department began implementing significant acquisition reforms five years ago.

171.   **Given recent acquisition reforms, is the Nunn-McCurdy process still an appropriate and effective mechanism for reporting to Congress on troubled acquisition programs?**

If confirmed, I will work with USD(A&S) and ASD(A) to review the Nunn-McCurdy process and recommend changes, as appropriate. This process remains a significant metric and an important process for major defense acquisition program reporting and accountability.

172. **Do you perceive a need for changes to the Nunn-McCurdy process, such as expanding its scope beyond major defense acquisition programs or adjusting the thresholds for significant and critical breaches?**

If confirmed, I will work with USD(A&S) and ASD(A) to review the Nunn-McCurdy process to determine if changes are necessary. At this time, it is my understanding that thresholds for significant and critical breaches are appropriate and do not think a change is needed.

173. **If confirmed, what principles would guide your thinking on whether to recommend terminating a program that has experienced significant or critical cost growth under Nunn-McCurdy?**

Program decisions must balance between delivering warfighter capability and controlling further cost growth. Programs that experience significant or critical cost breaches must present a credible plan to meet performance requirements at acceptable cost levels. If confirmed, I will work with USD(A&S) and ASD(A) to use the principles of the Nunn-McCurdy law itself along with data driven analyses to inform my recommendation.

Nuclear Deterrence

If you are confirmed, you will support the USD(A&S) in overseeing recapitalization of the nuclear triad, which is rapidly aging out. The B-2 and B-1 bombers are being replaced by the B-21 bomber. The Air Launched Cruise Missile is being replaced by the Long Range Stand-Off Weapon (LRSO). The Minuteman III is being replaced by the Sentinel Intercontinental Ballistic Missile Weapon System. The *Ohio*-class ballistic missile submarine is being replaced by the *Columbia*-class ballistic missile submarine. The B-21, Sentinel, LRSO and *Columbia*-class submarines are Major Defense Acquisition Programs that will have to operate well into the 2070s. These are in addition to efforts to sustain, recapitalize in the near term, and design a Next Generation Nuclear Command, Control and Communications (NC3) system.

174. **Do you support the B-21, LRSO, Sentinel and *Columbia*-class programs?**

Yes, the on-time modernization of all three legs of our nuclear triad is critical. If confirmed, I will work with USD(A&S) to support modernization of the nuclear forces and associated systems.

175. **Please describe what you see as the major acquisition issues with each of the above.**

The U.S. nuclear deterrent is the bedrock of our strategic deterrence, and modernizing our nuclear forces is a critical national security priority. If confirmed, I will review our modernization programs with USD(A&S) to understand any associated acquisition challenges, and I will work with leadership through the Department, Congress, and our

industry partners to ensure our modernization programs deliver the capabilities needed to meet the dynamic security environment.

176.   **Do you support sustaining, recapitalizing, and designing the Next Generation NC3 systems?**

Our NC3 system underpins our entire nuclear deterrent, and must reliably ensure the President can exercise command and control of our nuclear forces—even under the most stressful circumstances. If confirmed, I will work with USD(A&S) to support sustainment, recapitalization and design of the Next Generation NC3 systems. A reliable and modern NC3 is essential to ensuring a safe, secure and effective nuclear deterrent.

177.   **Please describe what you see as the major acquisition issues with each element.**

Ensuring nuclear deterrence and modernizing our Nation's nuclear forces is a critical national security priority. Modernizing our NC3 capabilities requires relatively modest funding but is crucial to strategic deterrence. We must maintain our existing NC3 capability while simultaneously delivering a reliable and modern NC3 enterprise. If confirmed, I will work with the USD(A&S) to review major NC3 recapitalization efforts, including the development, production, and fielding of space, air, ground, and maritime infrastructure, platforms, terminals, and key enablers of hardening and cybersecurity. Further, I will work with leadership throughout the Department, Congress, and our industry partners to provide robust and survivable Next Generation NC3 systems.

Sexual Harassment

In responding to the 2018 DOD Civilian Employee Workplace and Gender Relations survey, approximately 17.7 percent of female and 5.8 percent of male DOD respondents indicated that they had experienced sexual harassment and/or gender discrimination by "someone at work" in the 12 months prior to completing the survey.

178.   **What is your assessment of the current climate regarding sexual harassment and gender discrimination in the Office of the USD(A&S)?**

OUSD(A&S) has zero tolerance for sexual harassment or gender discrimination and is aligned with the Secretary Austin's and Deputy Secretary Hicks' emphasis on eliminating sexual harassment and gender discrimination. If confirmed, I will ensure that these critical priorities are embedded through the A&S workplace and operations.

179.   **In your view, is the civilian workforce harassment prevention and response training for civilian employees in the Office of the USD(A&S) adequate and effective?**

It is my understanding that civilian employees in OUSD(A&S) are required to complete mandatory training on sexual harassment, like all Federal employees. If confirmed, I will

review A&S's training programs and policies for preventing and responding to harassment to ensure that they are adequate and effective.

180.   **In your view, does the Office of the USD(A&S) program for response to complaints of harassment or discrimination provide appropriate care and services to civilian employee victims?**

It is my understanding that the OUSD(A&S) program for response to complaints of harassment and discrimination aligns with the Department's. When harassment concerns are raised, OUSD(A&S) conducts a prompt, thorough, and impartial inquiry into the matter, and if misconduct is substantiated, disciplinary action is taken without delay.

If confirmed, I will review OUSD(A&S)'s programs and policies for responding to incidents and complaints to ensure that they provide effective protections, care, and avenues of recourse for A&S employees.

181.   **If confirmed, what actions would you take were you to receive or otherwise become aware of a complaint of sexual harassment or discrimination from an employee of the Office of the USD(A&S)?**

We have an obligation to our workforce and the DoD to have zero tolerance for sexual harassment or gender discrimination. If I am confirmed and I receive a complaint from an employee, I would take immediate action to ensure that their complaint is appropriately investigated and addressed consistent with Federal law and Department policies. I would ensure that this employee is treated fairly and with respect and that they have access to the support they need as they navigate the process.

Congressional Oversight

In order to exercise legislative and oversight responsibilities, it is important that this committee, its subcommittees, and other appropriate committees of Congress receive timely testimony, briefings, reports, records—including documents and electronic communications, and other information from the executive branch.

182.   **Do you agree, without qualification, if confirmed, and on request, to appear and testify before this committee, its subcommittees, and other appropriate committees of Congress? Please answer yes or no.**

Yes.

183.   **Do you agree, without qualification, if confirmed, to provide this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs such witnesses and briefers, briefings, reports, records—including documents and electronic communications, and other information, as may be requested of you, and to do so in a timely manner? Please answer yes or no.**

Yes.

184.   **Do you agree, without qualification, if confirmed, to consult with this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs, regarding your basis for any delay or denial in providing testimony, briefings, reports, records—including documents and electronic communications, and other information requested of you? Please answer yes or no.**

Yes.

185.   **Do you agree, without qualification, if confirmed, to keep this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs apprised of new information that materially impacts the accuracy of testimony, briefings, reports, records—including documents and electronic communications, and other information you or your organization previously provided? Please answer yes or no.**

Yes.

186.   **Do you agree, without qualification, if confirmed, and on request, to provide this committee and its subcommittees with records and other information within their oversight jurisdiction, even absent a formal Committee request? Please answer yes or no.**

Yes.

187.   **Do you agree, without qualification, if confirmed, to respond timely to letters to, and/or inquiries and other requests of you or your organization from individual Senators who are members of this committee? Please answer yes or no.**

Yes.

188.   **Do you agree, without qualification, if confirmed, to ensure that you and other members of your organization protect from retaliation any military member, federal employee, or contractor employee who testifies before, or communicates with this committee, its subcommittees, and any other appropriate committee of Congress? Please answer yes or no.**

Yes.