The Honorable Dr. Douglas C. Schmidt
Director, Operational Test and Evaluation
Office of the Secretary of Defense

Dr. Douglas C. Schmidt was sworn in as Director, Operational Test and Evaluation (DOT&E) on April 8, 2024. A Presidential appointee confirmed by the United States Senate, he serves as the senior advisor to the Secretary of Defense on operational and live fire test and evaluation of Department of Defense weapon systems. DOT&E provides direct and independent reporting to Congress to give them unbiased, unvarnished assessments of system performance.

Prior to DOT&E, Dr. Schmidt served as the Cornelius Vanderbilt Professor of Engineering in Computer Science, the Associate Chair of Computer Science, and a Senior Researcher at the Institute for Software Integrated Systems at Vanderbilt University. He was also a Visiting Scientist at the Software Engineering Institute at Carnegie Mellon University, where he served as the Chief Technology Officer from 2010 to 2012.

From 2010 to 2014, Dr. Schmidt was a member of the Air Force Scientific Advisory Board, where he served as vice chair of studies on cyber situational awareness for Air Force mission operations and on sustaining hardware and software for U.S. aircraft. He also served on the advisory board for the joint Army/Navy Future Airborne Capability Environment initiative. From 2000 to 2003, Dr. Schmidt served as a program manager in the Defense Advanced Research Projects Agency (DARPA) Information Exploitation Office (IXO) and Information Technology Office (ITO).

Dr. Schmidt is an internationally renowned and widely cited researcher whose work focuses on patterns, optimization techniques, and empirical analyses of object-oriented and component-based frameworks and model-driven engineering tools that facilitate the development of distributed real-time and embedded (DRE) middleware frameworks and mobile cloud computing applications on parallel platforms running over wireless/wired networks and embedded system interconnects. His recent research focused on prompt engineering techniques and patterns that enhance the accuracy and

expressiveness of large language models and generative augmented intelligence platforms.

He has published 10+ books and over 700 papers in top technical journals, conferences, and books covering a range of topics, including high-performance communication software systems, parallel processing for high-speed networking protocols, and DRE middleware with Common Object Request Broker Architecture (CORBA), Real-time Java, object-oriented patterns for concurrent and distributed systems, concurrent and networked software for mobile devices, and model-driven engineering tools.

Dr. Schmidt served as the co-chair for the Software Design and Productivity (SDP) Coordinating Group of the Federal Government's multi-agency Information Technology (IT) Research and Development Program, the collaborative IT research effort of the major Federal science and technology agencies. The SDP Coordinating Group formulates the multi-agency research agenda in fundamental software design. Dr. Schmidt also served as the Deputy Director of the DARPA ITO, where he helped to set the national IT research and development agenda and manage the autonomous systems, network-centric command and control systems, distributed real-time and embedded systems, and augmented cognition.

In addition to his academic research, teaching, and government service, Dr. Schmidt has three decades of experience developing DRE middleware, model-driven engineering tools, and mobile cloud computing apps. He has led the development of the ADAPTIVE Communication Environment (ACE), which is a set of widely used, freely available object-oriented frameworks that contain a rich set of components that implement patterns for mission-critical DRE systems.

Dr. Schmidt received Bachelor and Master of Arts degrees in Sociology from the College of William and Mary and Master of Science and Doctorate degrees in Computer Science from the University of California, Irvine.