

Dr. Ted Woodward, program manager, DARPA STO

Dr. Ted K. Woodward joined DARPA in January 2015 as program manager in the Strategic Technology Office. Dr. Woodward has a background in optical and radio frequency (RF) devices, systems and networks for diverse applications. His research interests generally concern the use of optical and RF technology for sensing and communications, and include high-capacity networked systems in particular. Relevant technologies include photonics, millimeter wave RF, distributed coherent signaling (e.g., multiple-input and multiple-output, MIMO), signal processing methods and host platforms, and networking.

Prior to joining DARPA, Dr. Woodward served more than eight years as a chief scientist in the Applied Research division of Applied Communication Sciences (ACS) (formerly Telcordia Advanced Technology Solutions). In this capacity, he served as principal investigator for numerous internal and external programs in optoelectronics, communications, networking, nonlinear optics, millimeter wave communications, MIMO and RF photonics, including DARPA-sponsored PhASER, Mobile Hotspots and 100G RF links projects. He led internal R&D efforts in broadband access technology and LIDAR and remote sensing research.

Prior to ACS, Dr. Woodward was co-founder and vice-president of Hardware Engineering at Internet Photonics, Inc. After the company was acquired by Ciena Corporation, Dr. Woodward became a senior director of engineering. During that combined five-year period, he co-invented and was responsible for developing many successful dense wavelength division multiplexing (DWDM) optical transmission and switching products.

Dr. Woodward began his career as a member of technical staff at Bell Laboratories Research in Holmdel, New Jersey, where for more than 12 years he conducted research in optoelectronic devices, full custom mixed signal Si and III-V circuits, optoelectronic very-large-scale integration (VLSI) technology and optical communication methods and systems culminating in the spin-off formation of Internet Photonics.

Dr. Woodward holds a Bachelor of Science in physics from the University of Texas at Austin, and a Master of Science and Doctor of Philosophy in applied physics from the California Institute of Technology. He is a member of the American Physical Society and a senior member of the IEEE as well as several affiliated societies