Tat Soon Yeo
Professor, National University of Singapore

Domain: Electrical engineering
Years in systems engineering: 25+
Year joined INCOSE: 2006
Role in INCOSE: Director for International Growth 2007-2013

For INCOSE, you were the director for international growth for five years. What were your goals?

At the time, INCOSE’s presence in Asia and other less-developed regions was limited. Thus, my immediate goals were to consolidate existing footholds and to spearhead INCOSE’s penetration into Asia and Latin America. One of my biggest achievements was establishing strong INCOSE footholds in China and India.

What has been one of your most interesting and/or challenging systems engineering project?

In the late 1980s and early 1990s, I was engaged as a consultant by Singapore’s Land Transport Authority to oversee the electromagnetic compatibility of railway equipment and aviation equipment to extend the railway lines to Singapore’s Changi airport. Integrating the requirements of two major transportation service equipment is a challenge but within my domain of expertise.

You were the founding director of the Temasek Defence Systems Institute, a joint establishment between National University of Singapore and the US Naval Postgraduate School. Please explain the purpose of this organization?

In 2001, I was tasked to form the Temasek Defence Systems Institute (TDSI) to provide holistic system-level education for Singapore’s military officers, defence engineers and scientists.

The emphasis is not limited to the system perspective or integration of defence technologies, but also the integration of operations across the tri-service staff to improve efficiency and cut down inter-departmental barriers.

This was a different challenge as I had to consolidate curricula that touched the different aspects of military technologies, from missile propulsion to integrated logistic support to information assurance. Many of these areas are outside my domain and I had to rally support from other experts to come up with a workable curricula.

I was the founding director until stepping down in 2013.