



Wrocław, 22nd October, 2019

Seminar on The Knowledge, Skills and Attitudes Conductive to High Performance Engineering

5.30 pm **Registration**

6.00 pm – 7.00 pm **Welcome & Lecture “The Knowledge, Skills and Attitudes Conductive to High Performance Engineering” – Robert Halligan**

Engineering is a team sport. And like football, the performance of the team is governed by the knowledge, the skills and the attitudes (KSAs) of the team members. The KSAs for engineering relate to the traditional engineering streams of technology, mathematics and physics; the systems engineering stream of knowing how to go about applying the former in a way conducive to success; and the soft skills of team members such as communication and emotional intelligence that distinguish a high performance team from a mob.

A variety of engineering competency frameworks exists. In this presentation, Robert will overview existing systems engineering competency frameworks, including the new and very significant INCOSE Competency Framework. After questions, he will present a recommended framework, drawing on the other frameworks where applicable, explain the reasons for his recommendations, and invite further questions.

7.00 pm – 8.00 pm **Networking & Discussions**

Tutorial arranged by INCOSE Poland and PPI. The event will be held at Wrocław University of Science and Technology (Politechnika Wrocławska), 11/17 Janiszewskiego St., Wrocław, C-3 building, 22 (groundfloor).

For registration send e-mail to info@incose.pl (first & last name, institution, phone)

October 18th is the final date for registration.

Robert Halligan

Robert Halligan is an executive professional engineer, manager and engineering practitioner, renowned internationally for his role in the practice and improvement of technology-based projects. He is highly sought after as a consultant for his considered expertise.

The passion Mr. Halligan brings to systems engineering, and how to translate it into enterprise improvement, have benefited countless organizations worldwide: private, government and academic.

Since earning his qualifications in communications engineering at the Royal Melbourne Institute of Technology (now RMIT University), Mr. Halligan has gained experience in almost every definable business sector, over a broad spectrum of technologies.

He has performed engineering, engineering management and project management roles in private enterprise, including large transnational corporations (Rockwell, Andrew Corporation), and in the intelligence area of the public sector. Products and systems developed by Mr. Halligan over many years have achieved commercial success in the United States and in Australia, and remain in use today.

Application areas in which Mr. Halligan has significant experience are communications, medical products, aviation, consumer products, energy, land transportation, space and defense.

Mr. Halligan has led numerous requirements analysis efforts, on projects of up to \$1 billion. As a hands-on engineering manager, he is expert in the strengths and weaknesses of a wide range of commercial and specification standards. He has consulted extensively in the area of requirements quality and its relationship to project risk and has prepared or reviewed well over one hundred significant requirements specifications.

Clients served by Mr. Halligan for PPI include Boston Scientific Corporation (USA), Raytheon (USA), Medela (USA), Ximedica (USA), GDLS (USA, Canada), MDS Sciex (Canada), Smiths Aerospace (USA), Mitsubishi (Japan), BAE Systems (UK), Aerosystems International (UK), Tellabs Inc (USA), Kongsberg Defence (Norway), GE Medical Systems (USA), Cochlear (Australia, Belgium), Alcatel, EADS (Germany), Thales (the Netherlands, Australia), Gentex, Department of Defence (Australia), Airservices Australia (Australia), NATS (UK), Nokia (Poland), Boston Scientific (USA), HAVELSAN (Turkey), and many, many others.

Mr. Halligan is a Past President of the Systems Engineering Society of Australia. He was an Australian delegate to the ISO WG7 developing the international system life cycle processes standard, ISO/IEC 15288, and led the delegation of the International Council on Systems Engineering (INCOSE) to ISO/IEC JTC1 SC7 on software and systems engineering. Mr. Halligan was a key reviewer of EIA 632 (Engineering of Systems) and EIA 731 (Systems Engineering Capability Model). He co-chaired the launch in Nashville, TN of the latter standard. He was a contributor of content to EIA/IS 632 and its successor in the area of requirements quality, and to IEEE 1220 in the area of functional analysis. Mr. Halligan served as Director (International) of INCOSE.

Among his achievements, Mr. Halligan has led five systems engineering capability assessments, between other consulting engagements and an extensive program of public and on-site training in systems engineering and related topics such as technical reviews and audits, requirements analysis, specification writing, and project risk management. He conducts this program on six continents.