



INVITATION TO INCOSE SA OUTREACH EVENT IN KWAZULU-NATAL

Date & Time: **26th May 2016, 15:00 – 17:00**

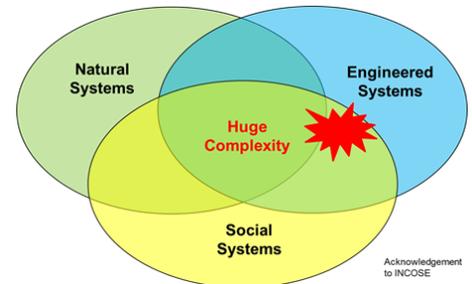
Venue: **Foredeck, [Royal Natal Yacht Club](#), Yacht Mole, Durban Harbour**

Format: **Presentation and Function (snacks and wines) are complimentary**

RSVP: **Richard Shaw – admin@incose.org.za**

Systems are ubiquitous – we are all immersed in systems of various natures in one way or another. It is no secret that the system complexity is steadily on the increase, especially so where Natural, Social and Engineered system domains overlap as illustrated alongside.

The International Council on Systems Engineering ([INCOSE](#)) has as its mission to share, promote and advance the best of systems engineering from across the globe for the benefit of humanity and the planet. The 500+ membership of the INCOSE South African Chapter ([INCOSE SA](#)) are primarily based in the Gauteng region, though a Western Cape Branch has been established to better serve the needs of members in the Western Cape.

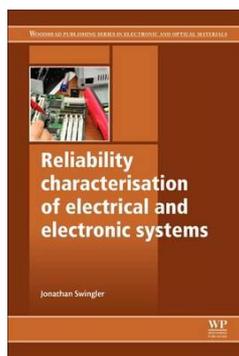


This outreach event is organised in order to assess the feasibility of establishing a KwaZulu Natal (KZN) Branch of the Chapter in order to better serve the needs of KZN members. **INCOSE SA cordially invites all persons/companies with an interest in the benefits of systems engineering to a complimentary event covering:**

- A brief overview of INCOSE and benefits for individual members and companies by INCOSE SA Chapter President, René Oosthuizen.
- A presentation on reliability engineering (residing in the Engineered Systems domain indicated in the diagram above) “**Reliability and stupidity: common mistakes in reliability engineering**” by guest speaker Albertyn Barnard.
- A function after the presentations to provide an opportunity for networking.

Abstract

The discipline of reliability engineering, which developed rapidly after the Second World War, has not kept pace with modern technology. Many reliability engineering activities practised today are outdated, misleading, or even fundamentally flawed. This may result in the execution of activities which cannot contribute to the primary objective of reliability engineering, which is the prevention of failure. Furthermore, other useful activities are often omitted from product development processes, which may increase the risk of releasing products and systems with inferior reliability.



This presentation starts with a concise discussion on the history, objectives and practice of reliability engineering, and continues to identify and discuss several mistakes frequently made by engineers. The presentation is based on the chapter titled “Reliability and stupidity: mistakes in reliability engineering and how to avoid them” in *Reliability Characterisation of Electrical and Electronic Systems* (Woodhead Publishing, 2015).

Biography

Albertyn Barnard holds the degrees M.Eng. (Electronics) and M.Eng. (Engineering Management) from the University of Pretoria, South Africa. He has provided consulting services in systems and reliability engineering to the defence, nuclear, aerospace, utilities and commercial industries since 1982. He provides training in reliability engineering to industry and at post-graduate level at the University of Pretoria.

He has presented numerous award-winning technical papers at international symposia, and is author of “Reliability and stupidity: mistakes in reliability engineering and how to avoid them” in *Reliability Characterisation of Electrical and Electronic Systems*.

Albertyn served as President of INCOSE SA in 2008, and established the INCOSE Reliability Engineering Working Group in 2011.

