



INCOSE Reliability Engineering Working Group Charter

1 PURPOSE

Reliability engineering should be practised as an integral part of systems engineering. However, a publication such as the INCOSE Systems Engineering Handbook contains almost no information on reliability engineering. The purpose of this working group is therefore to establish a forum for systems and reliability engineers to engage in collaborative efforts to address reliability engineering from a systems engineering viewpoint.

2 GOAL

Specific goals for this working group include a review of reliability engineering content in INCOSE publications, identification of areas for improvement, and development of new products. The format of these products will be determined at a later stage (e.g. recommended improvements to the INCOSE Systems Engineering Handbook or stand alone publications). Research (e.g. reliability engineering good practices) is not envisaged to achieve these goals. However, research is not excluded from future working group activities.

3 SCOPE

The Reliability Engineering Working Group will address reliability engineering as it relates to systems engineering throughout the system life-cycle. The single factor differentiating this working group from other similar professional groups will be the focus on reliability engineering from a systems engineering viewpoint.

4 SKILLS AND EXPERTISE REQUIRED

Skills and expertise required for success include cooperation from knowledgeable and experienced members in industry, academia and government. Many of these individuals can be found outside of INCOSE, but it should be possible to recruit them to become INCOSE members. Cooperation with other professional societies may be necessary, and will be managed on an ad hoc basis.

5 MEMBERS, ROLES AND RESPONSIBILITIES

Lead: Albertyn Barnard

Responsibilities: Status reporting to Assistant Director (Process Enabler)
Chair at working group meetings
Coordinate and direct activities
Recruitment of members
Working group member database
Working group website
Owner of LinkedIn INCOSE Reliability Engineering Group

Co-Lead(s): Tony Lockwood

Members: To be listed in member database

6 OUTCOMES (PRODUCTS/SERVICES)

Products from this working group will initially relate to documents published to improve on the current reliability engineering content (as can be seen in the INCOSE Systems Engineering Handbook).

7 APPROACH

The general approach of this working group will be to conduct 1) continuous electronic communication throughout the year, and 2) annual meetings at the INCOSE International Workshop. Decision making will be based on broad consensus by the working group members.

8 MEASURES OF SUCCESS

This working group should ultimately be measured by the contribution it makes towards improvement of reliability engineering awareness and competence of systems engineers. In order to achieve this, the working group has to be supported by members contributing to the success of the group. Specific measures of success include:

- At least 30 members (of which approximately 10 should be active members)
- Members should be representative of various industry sectors
- Members should be representative of different stages of the system life-cycle

9 RESOURCE REQUIREMENTS

Resources required to attain success include typical infrastructure support (e.g. telecommunications, Microsoft LiveMeeting, GoToMeeting, etc). It is envisaged that INCOSE South Africa will contribute to expenses of the chair for the initial few years.

It is possible that formal cooperation with other professional societies will be beneficial, and that this cooperation may require a Memorandum of Understanding or Memorandum of Agreement.

10 DURATION

This working group will remain in effect until rescinded by the signatory.

11 SIGNATURES



Working Group Chair

Date 21 September 2012

1st Level of Approval

Technical Director, INCOSE

Date

2nd Level of Approval

Chairman, INCOSE Board of Directors

Date

Revision history

Date	Revision	Description	Author
15 Apr 2011	1.0	Initial document	Albertyn Barnard
21 Sep 2012	1.1	Co-lead name added, minor text changes	Albertyn Barnard