

1.1 P.1 CHARTER

The Charter for the INCOSE Anti-Terrorism International Working Group (ATIWG) was developed on September 18, 2001. The Charter will be reviewed and approved by the INCOSE Technical Board (ITB) in the near future. This is the first Working Group established under the Systems Engineering Initiatives Technical Board Committee (SEITC).

The ATIWG will be initially led by a Steering Committee cited below. All interested members of INCOSE form the initial core of membership for the ATIWG.

1.1.1 P.1.1 BACKGROUND

At the INCOSE Workshop, held in Mesa, Arizona, in January 2001, a small group of members of the Systems Engineering Applications Technical Committee (SEATC) met to discuss how to revitalize the activities of systems engineering in the entire INCOSE Technical Board. It was recognized that many of the INCOSE members join INCOSE for a few years and choose to drop INCOSE activities or take sabbatical leave from such activities yet remain as systems engineers in government, industry or academia. Most of these engineers are eager to progress in the systems engineering profession, to contribute to its development, and to be part of an organization that takes on challenges greater than any individual could accomplish alone.

The products of the SEATC as well as the other TC's have demonstrated that the membership of INCOSE, if challenged, is willing to devote time and effort to the expansion and influence of the discipline of systems engineering. The INCOSE membership also contains the foremost experts in systems engineering demonstrated by the proliferation of textbooks, journals, INSIGHT communications, systems engineering projects being led by its members, and educational courses being taught by INCOSE members in universities throughout the world, The INCOSE leadership requested the SEATC to examine its activities and if possible suggest ways to replicate this success throughout the INCOSE Technical Board. One of the ideas to revitalize both the Technical Board and the entire membership was to create an initiative or a series of initiatives that could benefit from the expertise available within INCOSE

All of these developments have led to the initial creation of the briefing slides entitled the "INCOSE Revitalization Project" created by Jerry Bauknight, Patrick Sweeney and William Mackey on January 31, 2001. These slides are available for review by any INCOSE member from William Mackey (wmackey@csc.com).

Following the terrorist events of September 11, 2001, William Mackey called a meeting of Harry Crisp, Bill Ewald and himself to discuss the Revitalization Project ideas. At the urging of Harry Crisp and Bill Ewald, William Mackey agreed to create this Charter and to initiate activities to support the first revitalization project under a Working Group of the SEITC. This Anti-Terrorism International Working Group is devoted to a meaningful international effort by INCOSE members



to understand all facets of the issue by applying the multidisciplinary approach of systems engineering.

1.1.2 P.1.2 MISSION AND GOALS

Terrorism is the systematic use of terror as a means of coercion. It emerged as a concept in 1793-94 during the Reign of Terror in France, and since that time has been used by dissident groups to violently intimidate a population or government into granting their demands. The systematic use of violence has undergone a transformation since World War II and has made violence even more fearsome and inhuman. The calculated murder of political personalities and military personnel to achieve political objectives has given way to the random killing of innocent people and civilian populations.

The mission of the ATIWG is to demonstrate the use of systems engineering principles, techniques, and practices to the reduction and eradication of this international terrorism. The systems engineering approach is most amenable to such evaluations because of its use of multi-disciplines to examine all facets of the problem space. The terrorist activities of September 11, 2001 and many previous terrorist events in Japan, France, Scotland, Africa, the Middle East and the United States demonstrate that the terrorist groups have the ability to perform systematic analyses and use the sophisticated systems built by the industrialized countries against random innocent people at virtually any location on the globe. The creation of the Anti-Terrorist International Working Group is a call to all INCOSE members (and indeed all professional societies) to join us in achieving the strategic goal of eradicating terrorism by using our expertise in systems engineering and other disciplines.

The secondary goals are to:

- Revitalize the INCOSE Technical Board and membership
- Focus INCOSE's energy on issues of public service and need
- Demonstrate the value of systems engineering through its application to a public interest challenge
- Increase the influence and prestige of INCOSE to the international community
- Allow the INCOSE members to contribute to public interest challenge that cannot be addressed by any one or even a few individuals.

1.1.3 P.1.3 SCOPE AND OBJECTIVES

The chief means by which the ATIWG accomplishes its purpose is through evaluation, development and implementation of specific recommendations that can accomplished with primarily volunteered resources. The ATIWG will act much like the other existing WG's, except that it will coordinate and involve all INCOSE TC's in the selection, evaluation and solution of the anti-terrorist initiatives to be addressed by INCOSE.



The objectives include, but are not limited to, improving the people, processes, and resources used in addressing the public interest challenge as follows:

- People
- Involve all INCOSE Technical Committee's to some degree
- Recruit qualified systems engineers and multi-discipline individuals to membership and action
- Sponsor professional programs at INCOSE meetings to exchange systems engineering techniques and practices used in the solution of the anti-terrorist challenge
- Benefit the entire INCOSE membership through their involvement in the successful application of the systems engineering approach to the anti-terrorist challenge
- Processes
- Apply the systems engineering principles, techniques, and practices to the anti-terrorist challenge
- Improve the systems engineering processes from the experiences gained in their application to the anti-terrorist challenge
- Maintain forums at symposia, workshops and chapter meetings to exchange the status successful practices and processes used in addressing the anti-terrorist challenge
- Resources
- Complete most anti-terrorist projects with voluntary support
- Maintain a list of resources useful to systems engineers who agree to participate in the anti-terrorist challenge
- Identify automated tools and their capabilities useful in addressing the anti-terrorist challenge
- Facilitate interaction with other groups external to INCOSE also interested in addressing the anti-terrorist challenge

1.1.4 P.1.4 DESCRIPTION OF THE SKILLS REQUIRED TO ADDRESS THE ANTI-TERRORIST CHALLENGE

The ATIWG is an association of INCOSE members who are engaged in the practice of systems engineering in that include Federal and non-Federal international government agencies, small and large businesses in various SE& I and commercial industries, and the teaching of systems engineering practices in universities throughout the world.

The challenge to reduce and eradicate international terrorist activities is complex and involves many facets of human activity and expertise including the following:

- Economics
- Political Science



- Religions and Cultures
- Psychology and Sociology
- Geography and geology
- Military and defense
- International law
- Terrorism and Counter-terrorism
- Telecommunications and computer technologies and engineering
- Aviation and space technologies and engineering
- Intelligence collection, analysis and distribution
- Security engineering (administrative, communications, environmental, personnel, and physical)
- Biological, Chemical and Nuclear technologies and engineering

Expertise and study in all of these disciplines and yet to be identified skills will be necessary to understand the motives, objectives, strategies and operations of the terrorist groups. Most of these disciplines will also be required to identify the threats, vulnerabilities, and risks to the populations and systems employed by the industrialized countries. The strategies for mitigating and eradicating the risks through security measures and engineering will require expertise of a different nature.

1.1.5 P.1.5 THE ATIWG STRUCTURE AND CONCEPT OF OPERATIONS

The ATIWG is composed of volunteer members of INCOSE divided into meaningful areas of expertise as determined by the ATIWG Steering Committee. The ATIWG Steering Committee will consist of approximately six members chosen from the INCOSE Technical Board (ITB), the Board of Directors and the Corporate Advisory Board appointed by the INCOSE Technical Board Chairperson. Every attempt will be made to create a representative international membership on the Steering Committee according to the population of INCOSE members from each continent. The members of the ATIWG Steering Committee govern the policies and activities of the ATIWG.

The SEITC Chairperson with the approval of the INCOSE Technical Board Chairperson appoints the Chairperson of the ATIWG. If the ATIWG Chairperson is not yet appointed or resigns, the Technical Board Chairperson is the acting ATIWG Chairperson.

Therefore, the ATIWG Steering Committee provides the following member officers to the A:TIWG:

- Chairperson, appointed by the SEITC Chairperson and approved by the INCOSE Technical Board Chairperson for a 2-year term
- Cochairperson(s), appointed by the ATIWG Chairperson and approved by the SEITC Chairperson



- Secretary, appointed by the ATIWG Chairperson and approved by the SEITC Chairperson The responsibilities of the ATIWG Chairperson are as follows:
 - Direct ATIWG Steering Committee and ATIWG membership meetings
 - Coordinate logistics for such meetings
 - Ensure meeting minutes, agendas, and newsletters are prepared and distributed
 - Establish the annual goals for the ATIWG
 - Prepare committee reports as required
 - Interface with the INCOSE Technical Board and other working groups
 - Support coordination of the ATIWG activities

The ATIWG Chairperson assigns the responsibilities of the ATIWG Co-chairpersons and secretary.

1.1.6 P.1.6 MEMBERSHIP

Appointed members to the ATIWG Steering Committee includes as of October 12, 2001

William Mackey (301-794-2138 or wmackey@csc.com), TB Chairperson

Harry Crisp, INCOSE BOD and CAB member

Bill Ewald, INCOSE BOD and CAB member

Heinz Stoewer, TB Co-chairperson and Germany Chapter member

Allen Fairbairn, IEWG Cochairperson and UK Chapter member

David Cropley, Australia Chapter, SESA member

Jas Madhur, Vancouver, BC, Canada Chapter member

An ATIWG co-chairperson will maintain the membership list.

INCOSE members are invited to join the ATIWG in areas of their expertise

1.2 P.2 HISTORICAL LEGACY

Refer to Background – Section P.1.1



1.3 P.3 INITIAL OBJECTIVES AND FUTURE GOALS

The immediate objectives of the initial ATIWG Steering Committee are to:

- 1. Approve the Charter of the ATIWG.
- 2. Obtain commitments from the Anti-Terrorism International Working Group Steering Committee members

2 THE NEAR-TERM OBJECTIVES OF THE ATIWG STEERING COMMITTEE ARE TO

- Create a meaningful area of study for ATIWG membership
- Determine the products desired in such studies.
- Determine whether these products will be of any value and to whom.
- Determine whether the study or studies, if conducted, will have a reasonable probability of success if addressed by INCOSE
- Determine whether there are sufficient volunteer resources within INCOSE to address the issue
- Gain assistance through liaisons with other professional societies, industry organizations, government agencies, and/or other nations
- Build a tentative plan or road map and develop metrics that will track success
- Recruit and populate the ATIWG study teams with persons having the desired expertise

2.1 P.4 LIST OF PRODUCTS

To be determined by the ATIWG Steering Committee



3 SIGNATURES

1st Level of Approval

Date

August 2011

Technical Director, INCOSE