

**INCOSE TECHNICAL BOARD**  
**LIAISON ADVISORY STATEMENTS**  
**(INCOSE-TA-2003-002-01)**

**Approved by the INCOSE Technical Board on May 29, 2003**

**A. Name of Liaison Effort -**

ISO/IEC/JTC1/SC7/WG10 liaison

**B. INCOSE Liaison Representative –**

The specific Liaison Representative is to be determined.  
Kenneth V. Crowder will be acting as a temporary PoC.

**C. INCOSE point of contact and participants – (Temporary)**

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**D. Description of proposed standard or liaison activity**

TR15504 (Process Capability Evaluation) is preparing to enter a revision cycle. The revision cycle for this Technical Report is expected to include expanding 15504 to contain portions (or all) of the ISO 15288 system life cycle and to more fully reflect accepted Systems Engineering processes.

**E. INCOSE's level of participation**

TR15504 is a mature document that was developed based on a software centric point of view. Currently it does not contain a broader structured approach to evaluating Systems Engineering processes. TR15504 was originally developed with using IS12207 (Software Life Cycle Processes) as the basis for it, consequently its software “feel.”.

**F. Justification, including relevance to INCOSE and its members**

Expands INCOSE role as an internationally recognized and respected participant in development of international standards that include Systems Engineering as a component.

**G. Objectives satisfied or to be satisfied**

Unknown

**H. Dependencies, risks, and issues**

Unknown

### **I. Anticipated schedule**

Attend two Working Group meetings each year. Meetings are conducted in 2<sup>nd</sup> and 4<sup>th</sup> quarter of each year.

### **J. Relationship to existing/planned collaborations and other standards activities**

Integrated with two other current ISO/IEC activities that INCOSE is participating in:

1. Liaison to ISO/IEC/JTC1/SC7/WG7 (Life Cycle standards)
2. The recently initiated cooperative activity with IEEE to update the IEEE 1220 System Engineering standard for submittal to ISO/IEC as an international standard.

### **K. Relationship to INCOSE Technical Operating Plan, if any**

Unknown

### **L. Expected Duration of Effort**

No known termination date to liaison effort for ISO/IEC/JTC1/SC7/WG10 support.

### **M. INCOSE privileges and other benefits (e.g. price discounts, name/logo on cover, etc.)**

None known other than intangibles like:

- a) INCOSE gets access to early drafts of the proposed new document (because of our Standards Tech Committee Key Review Group;
- b) INCOSE participates in shaping the goals and objectives for development of the upgraded document.

### **N. Draft Joint Working Agreement (or plan for developing), as required**

Unknown.

### **O. Key Issues and INCOSE Advisories**

Background – TR15504 is an accepted standard that is used for the capability evaluation of processes. In the ISO community it is required that an approved standard have an update/revision effort that is initiated approximately every five years. It is now that time for TR15504 to be revised. However TR15504 was originally developed based on the foundation of the software information technology world. It is recognized that when this standard proceeds through its next revision there is a need to expand beyond software and to include selected Systems Engineering processes. Consequently following is a list of key issues that should be addressed during this revision.

Issue #1 – Planning and implementing the revision effort during the next five years.

Committee Position and INCOSE Advisory – It is critical that a well thought out plan and approach to implementation of the revision effort be prepared and vetted with all of the WG10 National Bodies. This plan is a key step in assuring that all current WG10 members recognize the long-term (five years at least) commitment that they must engage in for the success of the IS15504 revision effort.

Issue #2 – Development of “use cases” for the revised IS15504.

Committee Position and INCOSE Advisory – Encourage development of the use cases to help guide the development of the next revision, particularly since it will be expanded to include Systems Engineering processes. These use cases should span the spectrum of possible ISO users, in terms of application domains, technical disciplines, and functional specialties. It should also span the spectrum of industry, government, and academia.

Issue #4 – Identifying how to efficiently and effectively develop the revised IS15504 in parallel with the ongoing harmonization effort of IS15288 and IS12207.

Committee Position and INCOSE Advisory – This issue addresses the intimate intertwining of concurrent revising IS15504, IS15288 and IS12207. It is felt that there should be some sort of process established whereby as WG10 and WG7 both proceeds through their separate revision activities that they both have a coordination and integration step performed.

Issue #5 – Making the revision processes compatible with process capability assessment standards, e.g., CMMI/SE/SW.

Committee Position and INCOSE Advisory – The issues of process improvement, process metrics, and capability assessment as identified in other accepted process capability evaluation standards. In particular the revised IS15504 must ensure that approaches to Systems Engineering evaluation be included.

Approved by the INCOSE Technical Board William F. Mackey, Chairman

Date: May 29, 2003