

Control System Security Certification Organization

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Study Sponsors

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Proposed CSSCO Mission

- **Facilitate the independent testing and certification of control system products to a defined set of control system security standards;**
- **Use existing control system security industry standards where available, develop interim standards where they don't already exist, and adopt new standards when they become available;**
- **Accelerate the development of industry standards that can be used to certify that control systems products meet a common set of security requirements.**

Benefits to End-Users

- ◆ **Increased probability that the whole (or system or solution) will operate as expected**
- ◆ **Reduced costs and time commitment in product selection and acceptance.**
- ◆ **Products are more secure 'out of the box'.**
- ◆ **Improved process reliability and safety.**

Benefits to Vendors

- ◆ **Facilitated improvements in implementations as the process uncovers ambiguities in products and standards.**
- ◆ **Accelerated convergence between the specifications and implementations.**
- ◆ **A single testing framework and an industry stamp of approval,**
- ◆ **Faster time to market and lower development and integration costs.**

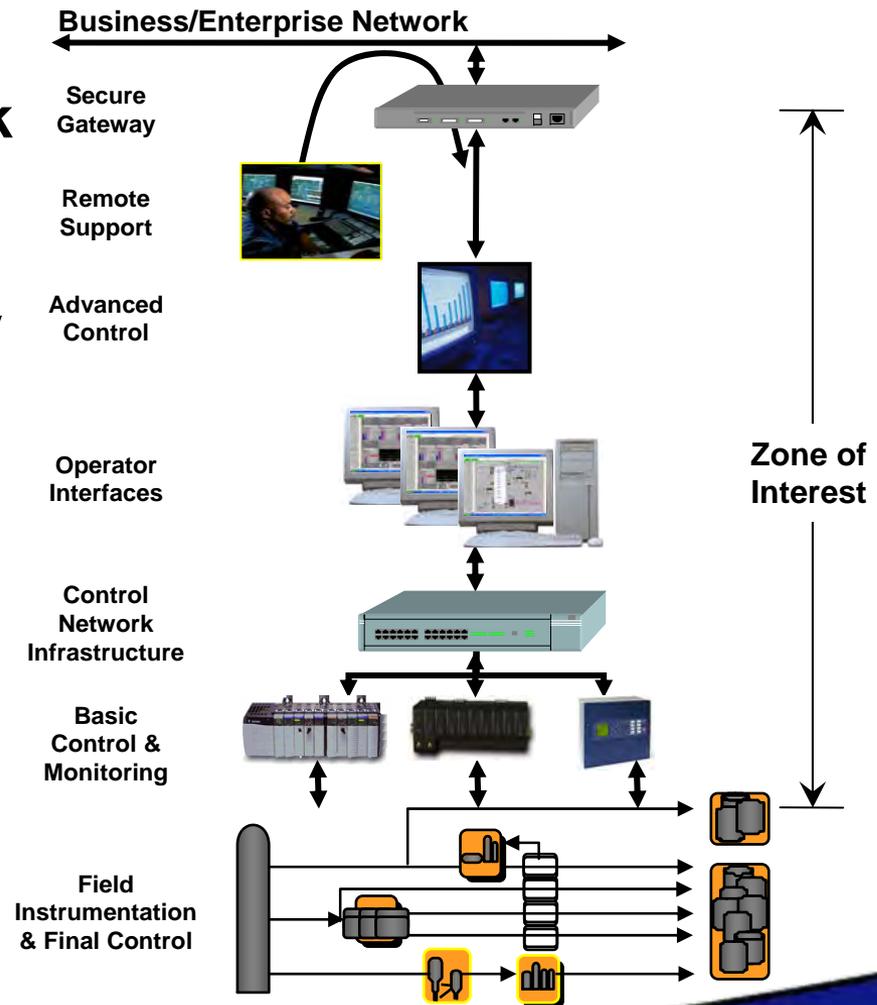
Benefits to Standards Bodies & Government

- ◆ **Facilitated improvements in specifications as the process uncovers ambiguities in standards**
- ◆ **Better, field-tested standards that are clearly being followed by industry.**

Products to Be Tested

- ◆ TOEs includes all network capable products that lie between the final field elements and the security gateway...

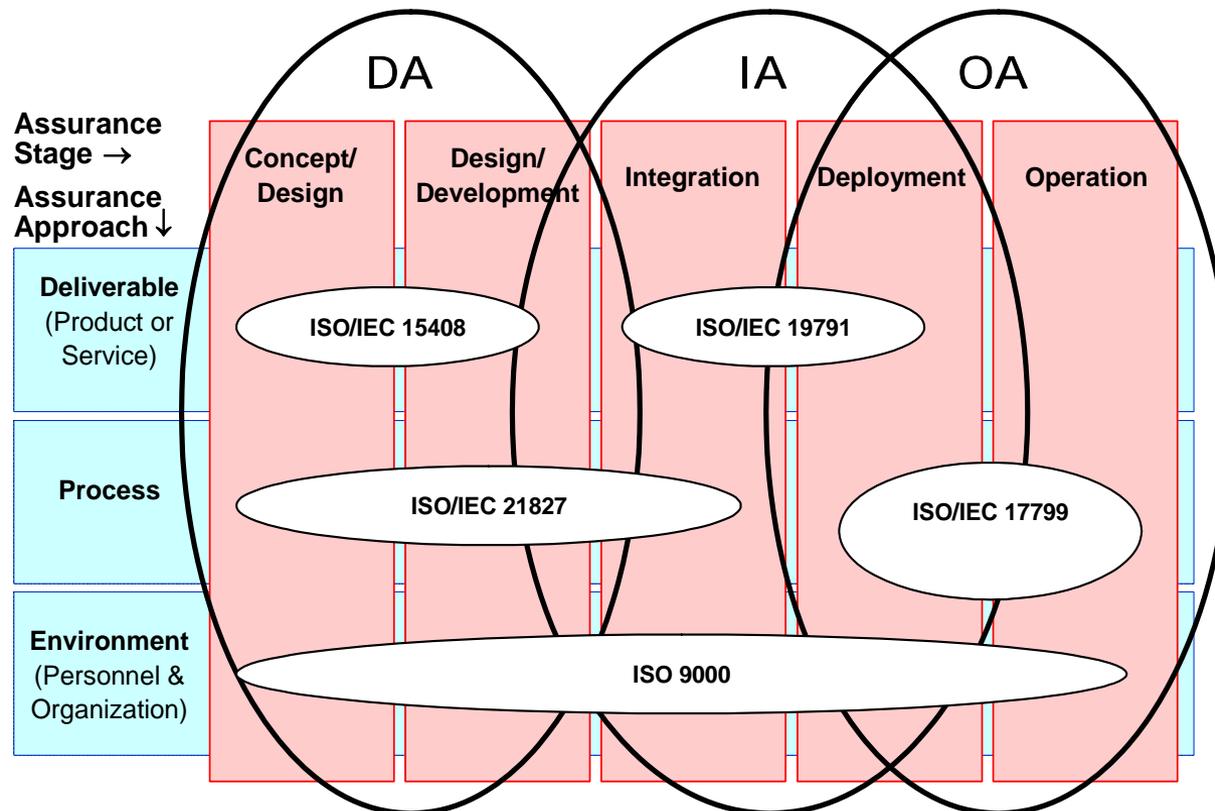
- controllers,
- network switches,
- HMI platforms and software
- programming stations



Do We Need Another Security Organization?

- ◆ Eleven different organizations currently creating SCADA security standards
- ◆ Do we need another?

Framework for Understanding Industrial Security Standards



Slide courtesy of Dr. Hans Daniel

Standards, Certification and Conformity Assessment

- ◆ **Conformity Assessment - Ensuring compliance to a standard.**
- ◆ **Certification is one type of conformity assessment.**
- ◆ **Can be far more complex than standards creation.**
- ◆ **Need to balance between completeness and expediency.**

Specific Goals for a CSSCO

- ◆ **Goal #1: Development of Interim Standards**
- ◆ **Goal #2: Creation of a Conformity Assessment Process**
- ◆ **Goal #3: Enabling and Managing Conformity Assessment Services to Industry**

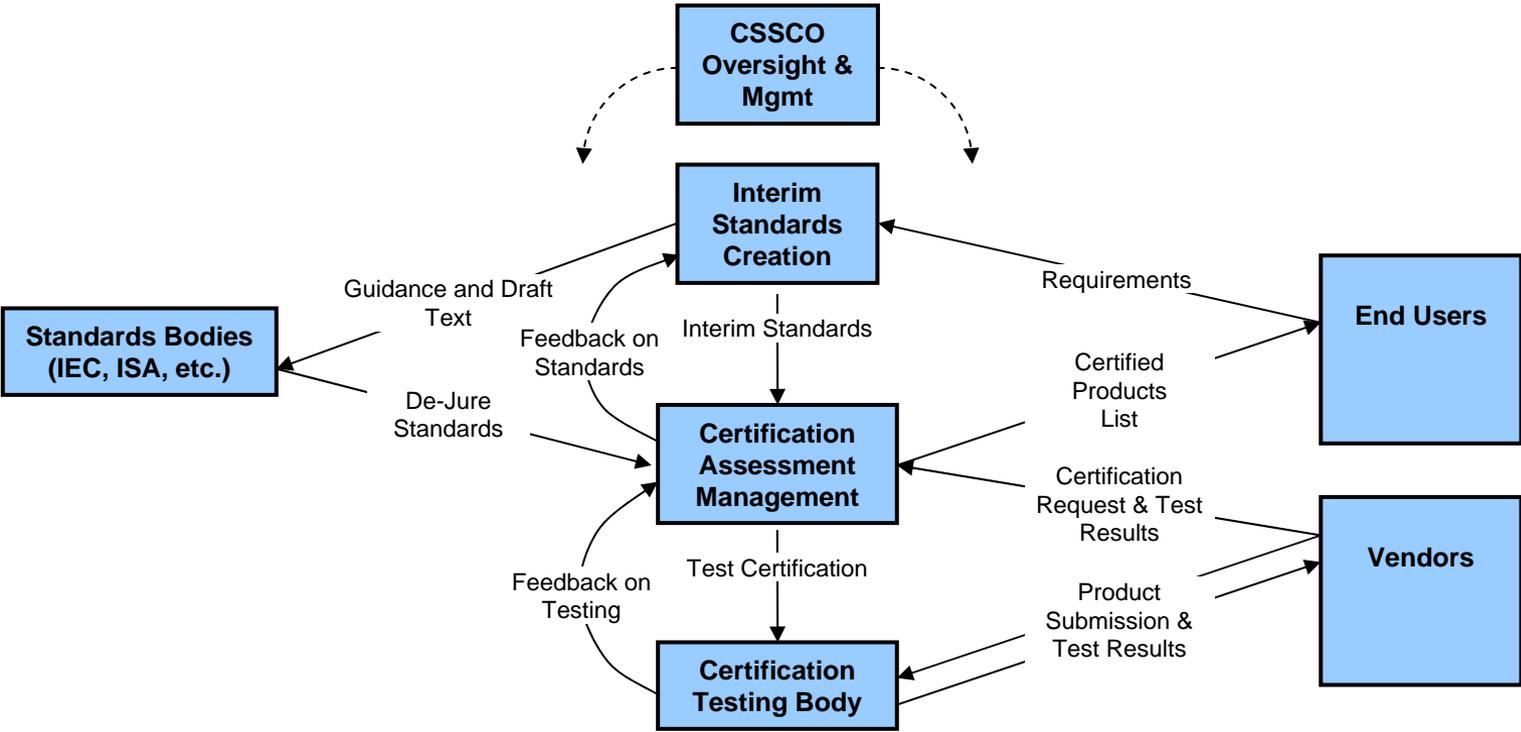
Critical Success Factors:

- ◆ **Clear Definition of the Value Proposition for Stakeholders**
- ◆ **Brand Management and Trust**
- ◆ **Ensuring Technical Relevance**
- ◆ **Not Reinventing Processes, Guidelines and Policies**

Seven Steps

- ◆ **Formation**
- ◆ **Definition of Technical Direction**
- ◆ **Development of Standards and Profiles**
- ◆ **Definition of Certification Program**
- ◆ **Implementation of Certification Program**
- ◆ **Operation of Certification Programs**
- ◆ **Evolution of CSSCO**

Creating a Control Systems Security Certification Body



Next Steps

◆ March-April

- Proposal to initial consortium members from ISA via the Automation Standards Compliance Institute
 - Engaging The Open Group as partner
- Finalize scope and budget

◆ May-September

- Recruit founding members
- Establish technical roadmap
- Establish working groups and start work

Questions?