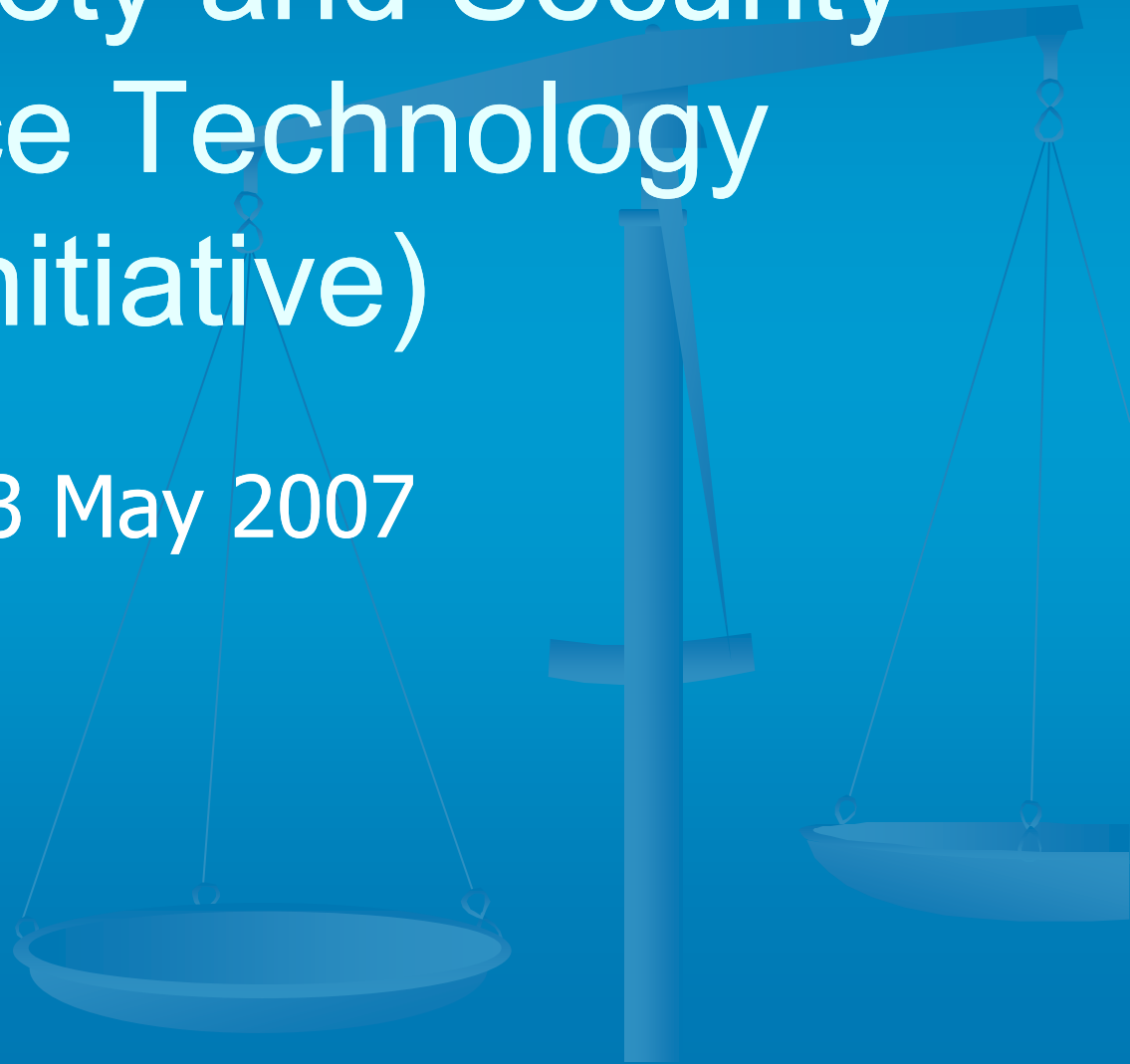


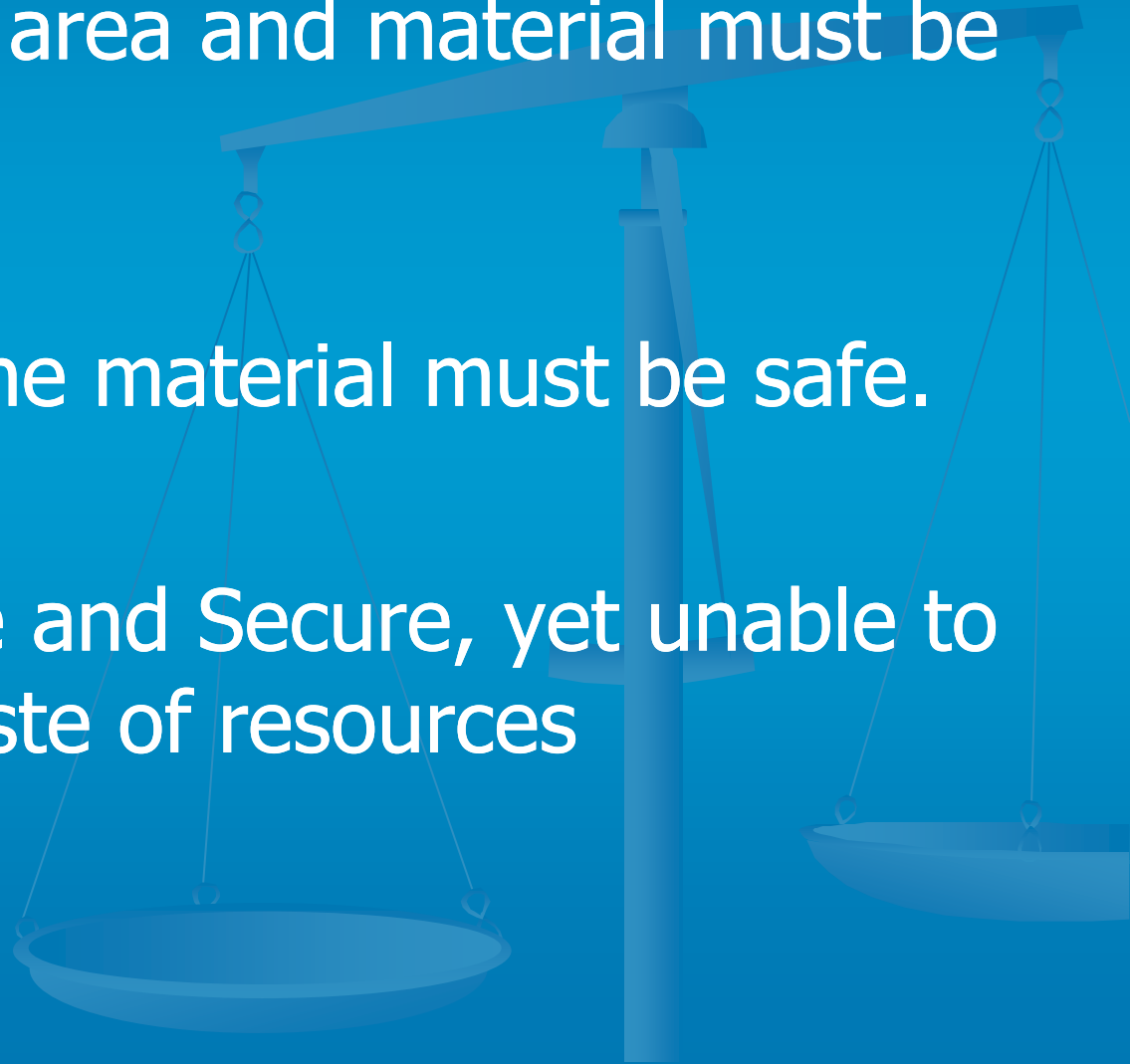
# SSIT (Safety and Security Interface Technology Initiative)

23 May 2007

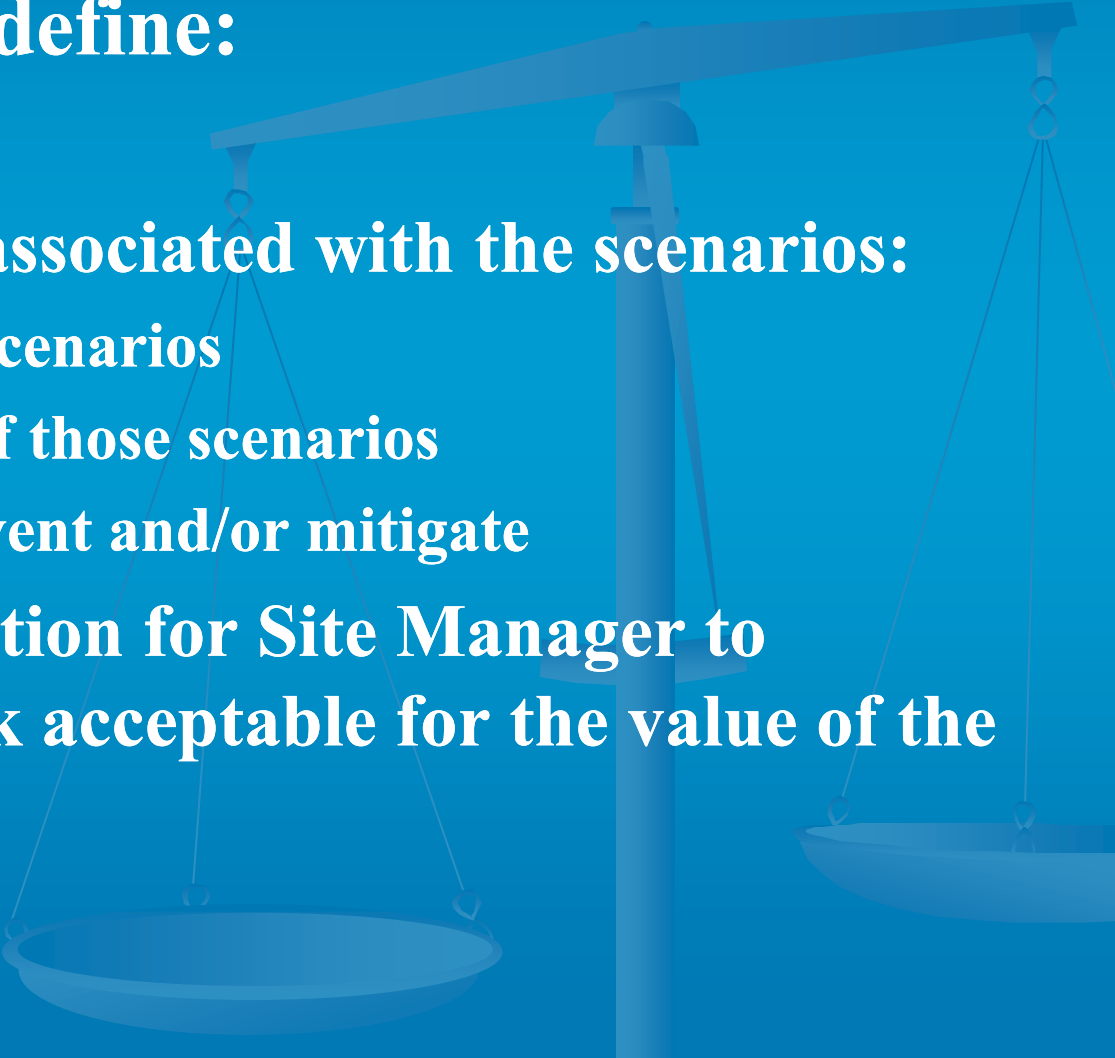


# Safety & Security a Joint Need

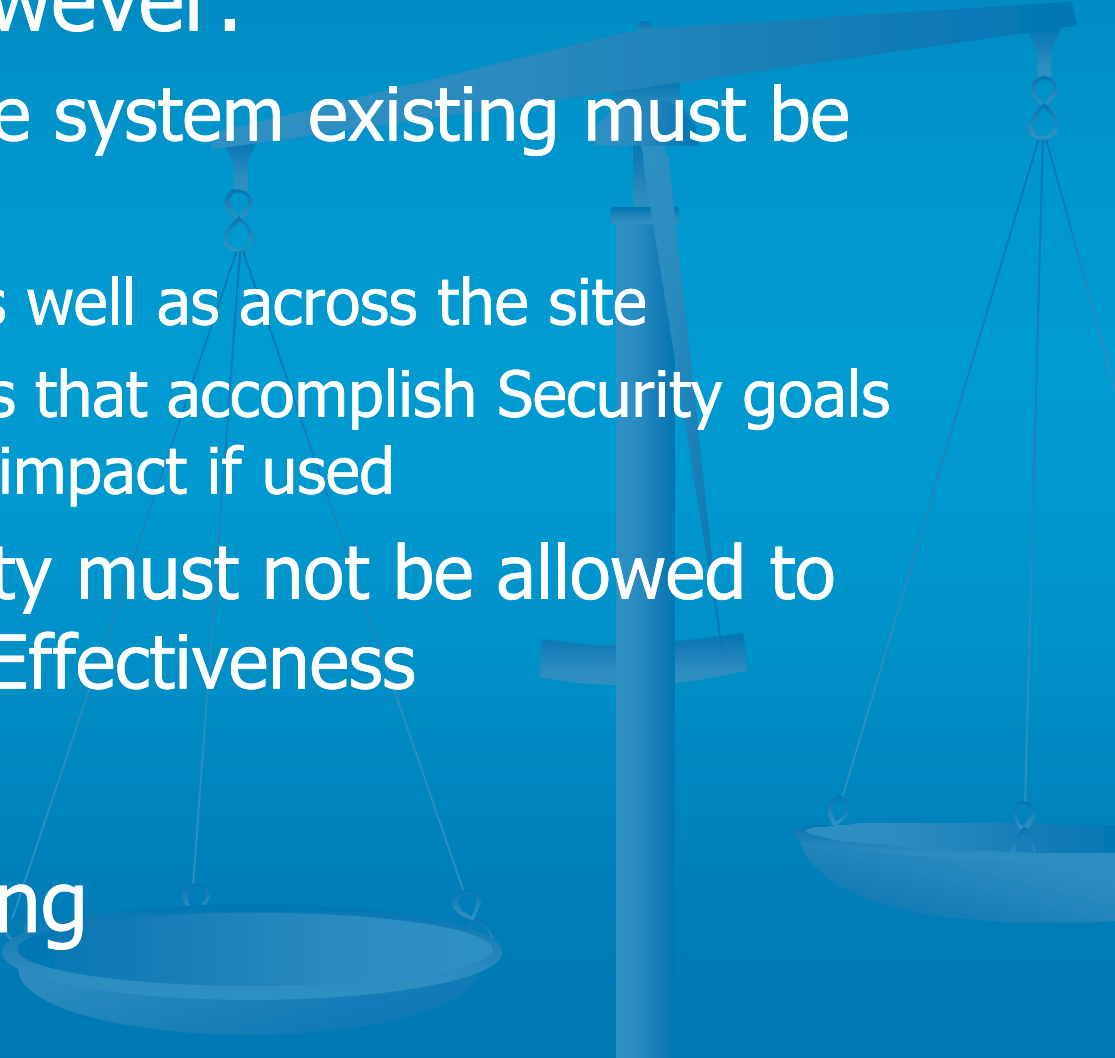
- To be Safe, the area and material must be Secure.
- While Secure, the material must be safe.
- To be both Safe and Secure, yet unable to operate is a waste of resources



# Approach Similarities? Yes.

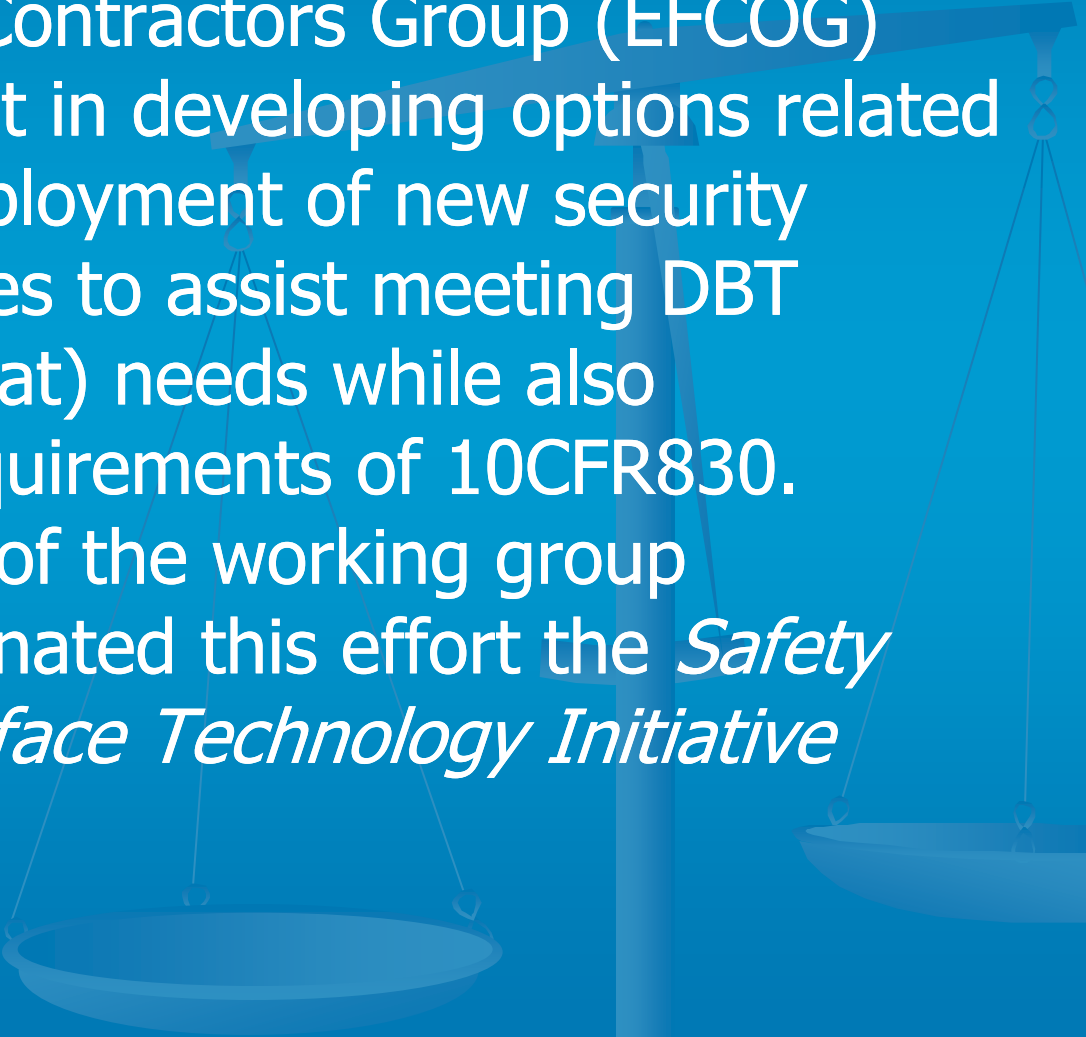
- **Both disciplines define:**
    - **Upset scenarios.**
    - **Determine risk associated with the scenarios:**
      - **Likely hood of scenarios**
      - **Consequences of those scenarios**
      - **Controls to prevent and/or mitigate**
    - **Provide information for Site Manager to determine of risk acceptable for the value of the operation.**
- 

# Approach Differences? Yes.

- Security deals with events that occur outside of DSA space, however:
    - Risk related to the system existing must be addressed
      - In each facility as well as across the site
      - Select the options that accomplish Security goals while minimizing impact if used
    - Changes for Safety must not be allowed to counter Security Effectiveness
  - Response profile
  - Information sharing
- 

# NNSA Request

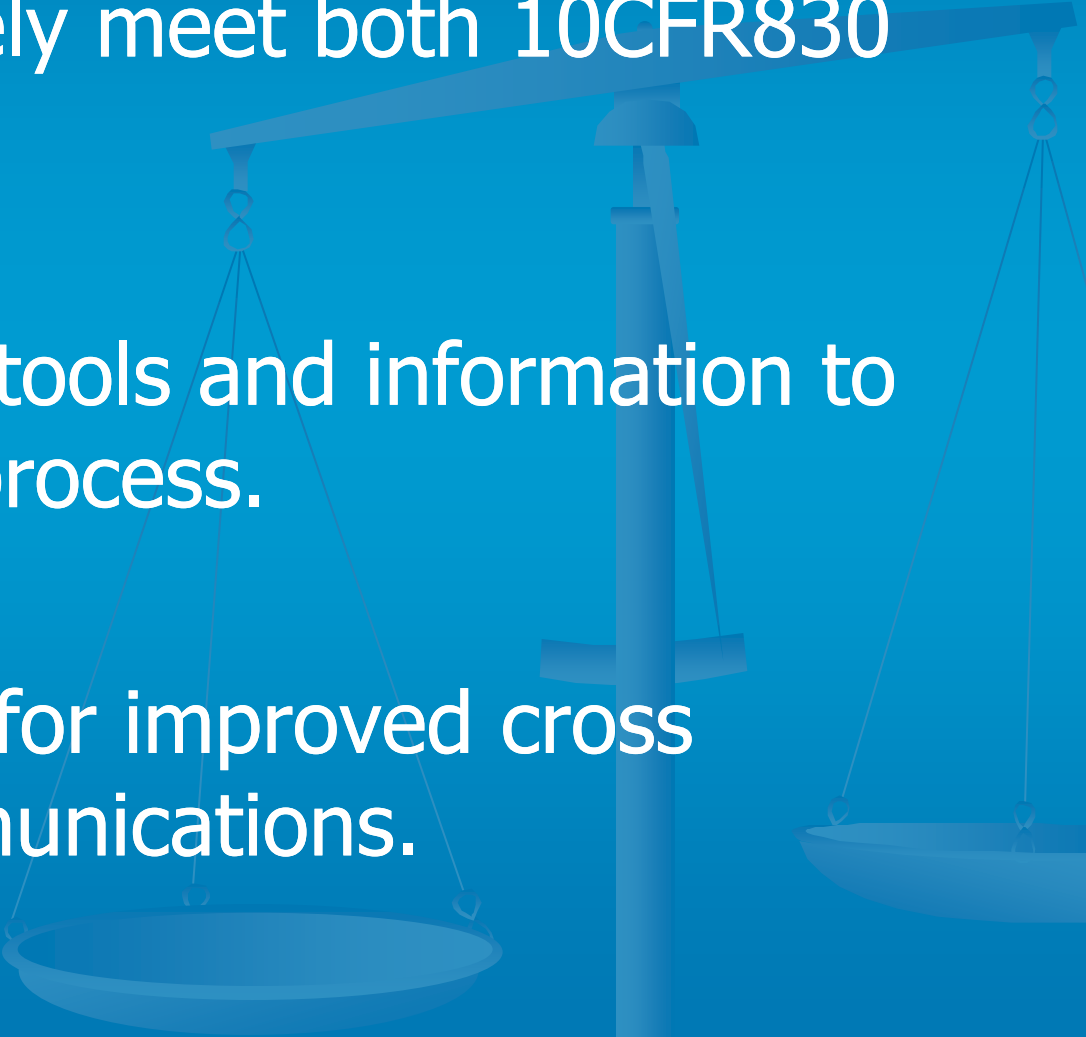
The Energy Facility Contractors Group (EFCOG) was asked to assist in developing options related to acceleration deployment of new security related technologies to assist meeting DBT (Design Base Threat) needs while also addressing the requirements of 10CFR830. NNSA NA-70, one of the working group participants, designated this effort the *Safety and Security Interface Technology Initiative* (SSIT).



# History of Efforts

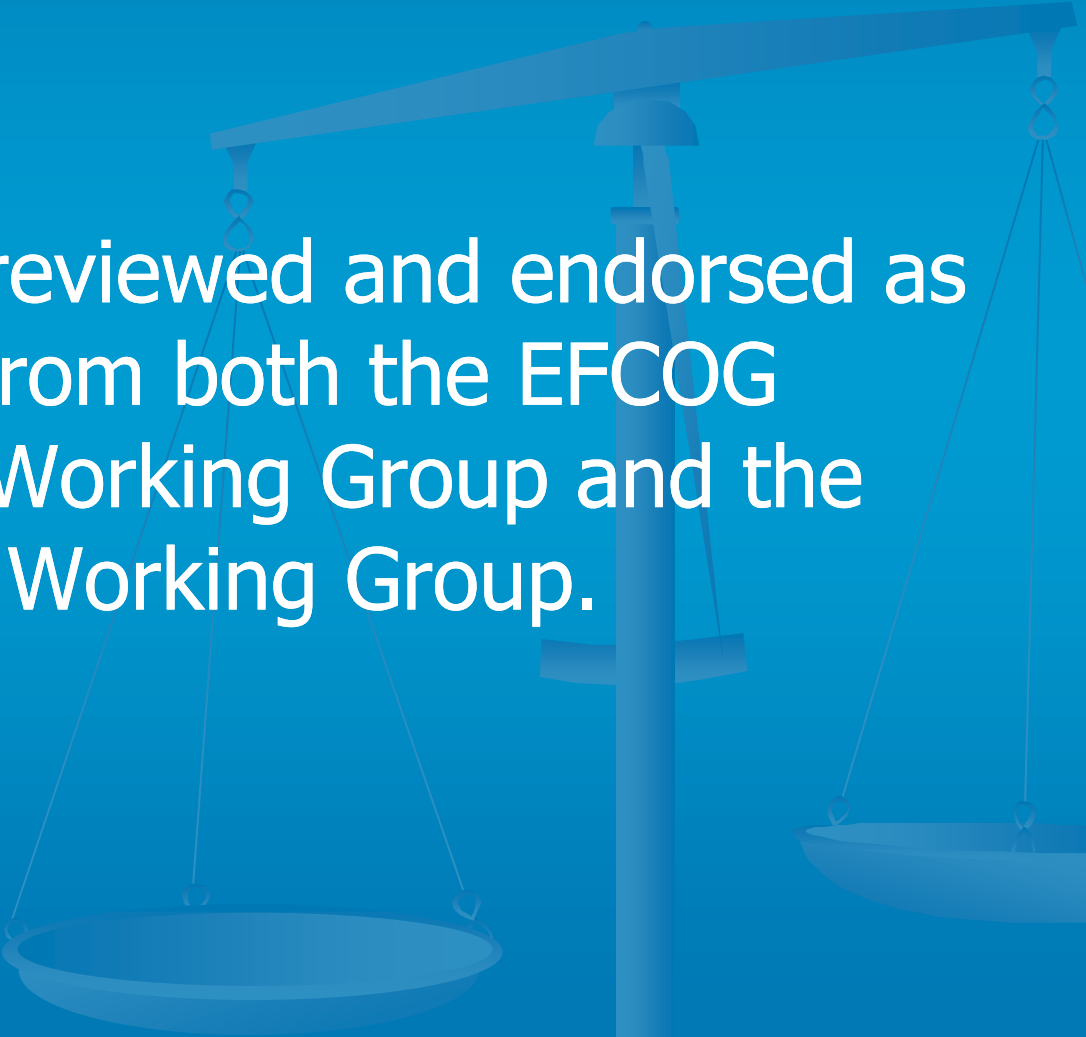
- Classified workshops held jointly by EFCOG SAWG and SWG. Drivers were discussed and a core team established. Core team established.
- Meeting with DOE ESE in February 2006
- Subsequent efforts refined approach and topical paper.
- A pilot technology transfer was conducted:
  - What information was 'transportable'
  - Format for information sharing
- Presentation to the NSIE (National Security Information Exchange) to Complex Security Managers given in August 2006.
- TROSSI Formally Transmitted to DOE in August 2006.

# Goal

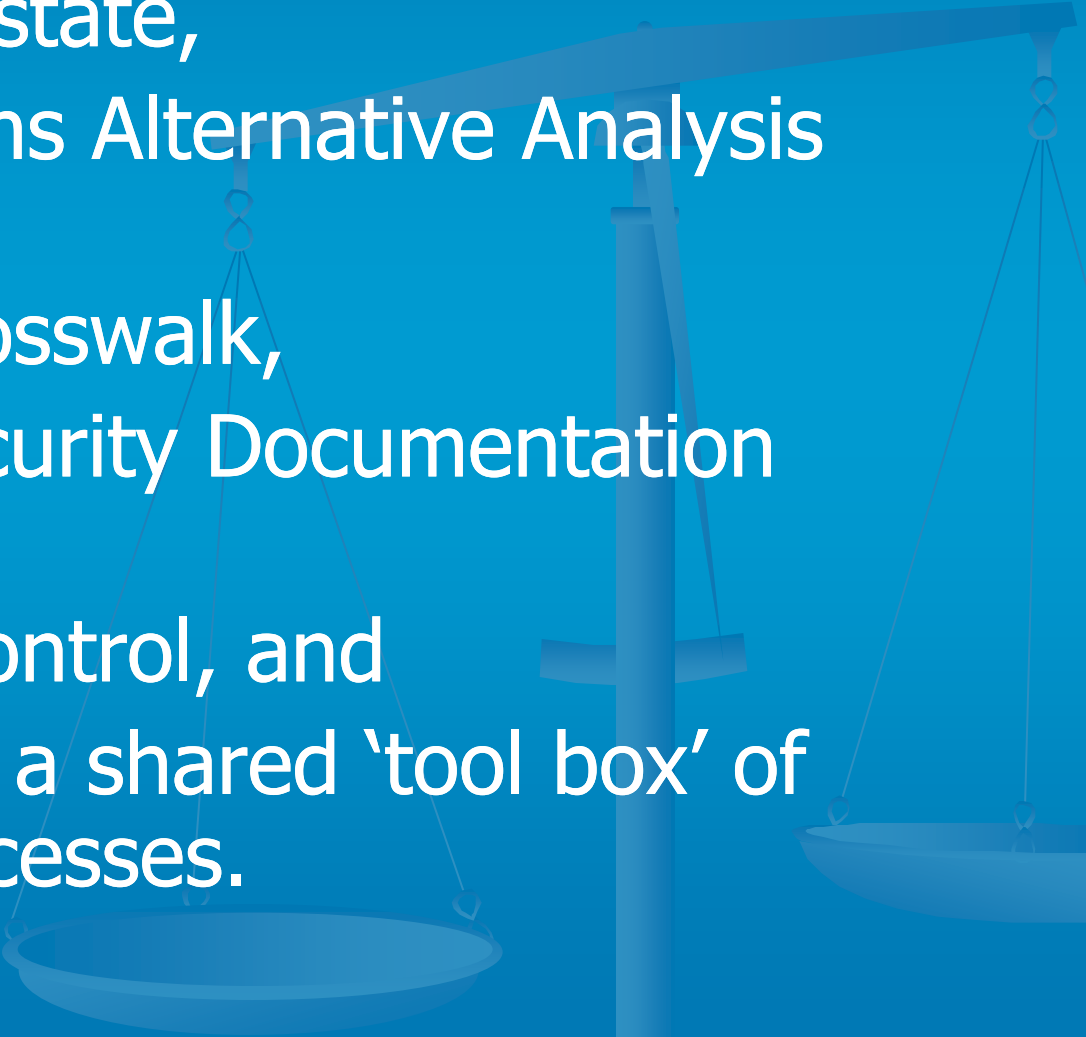
- How to effectively meet both 10CFR830 and the DBT.
  - How to provide tools and information to streamline the process.
  - How to provide for improved cross functional communications.
- 

# Joint Effort

The TROSSI was reviewed and endorsed as a joint product from both the EFCOG Safety Analysis Working Group and the EFCOG Security Working Group.

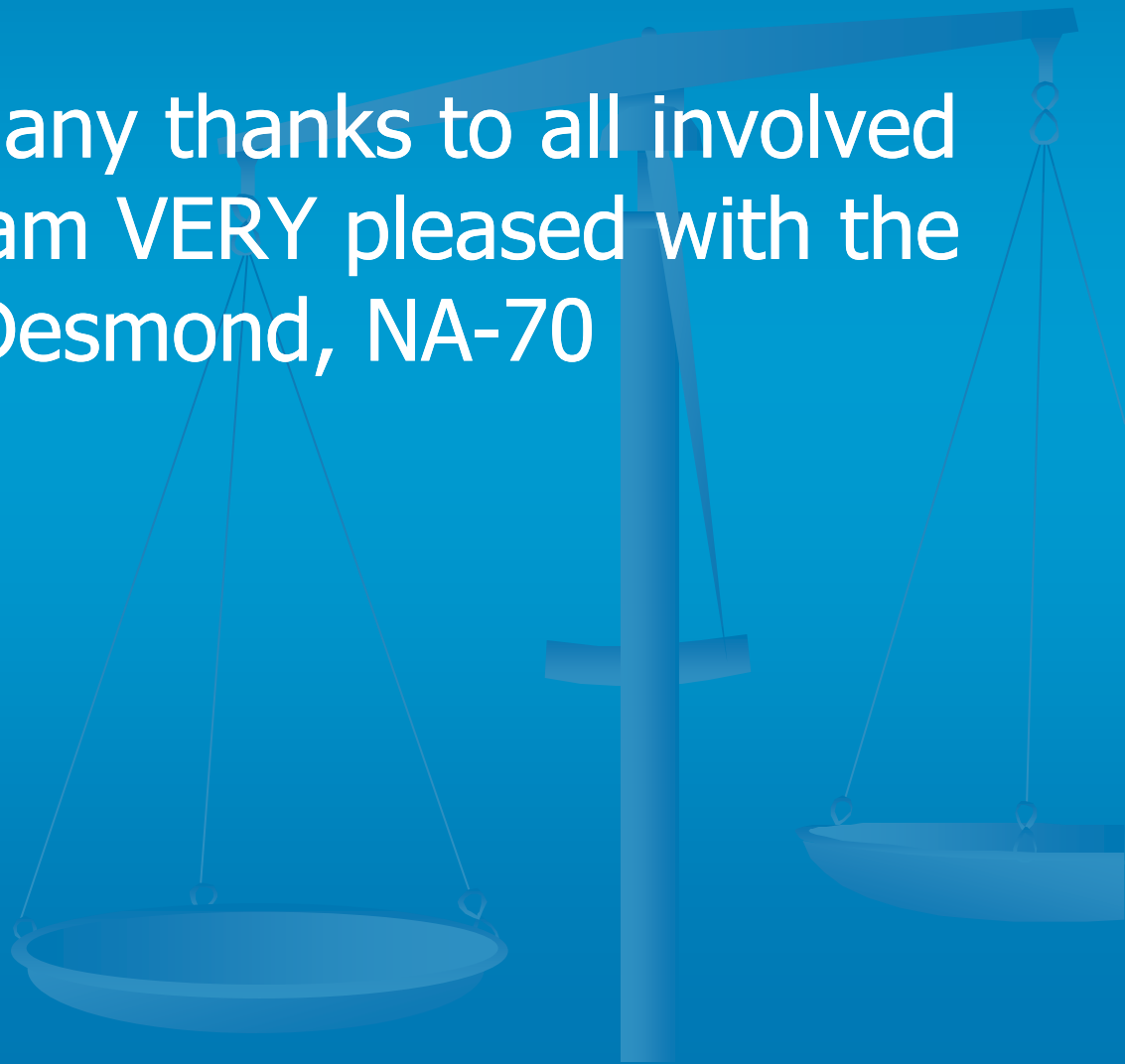


# TROSSI Contents

- Drivers and Endstate,
  - Control Selections Alternative Analysis Process,
  - Terminology Crosswalk,
  - Safety Basis/Security Documentation Integration,
  - Configuration Control, and
  - Development of a shared 'tool box' of information/successes.
- 

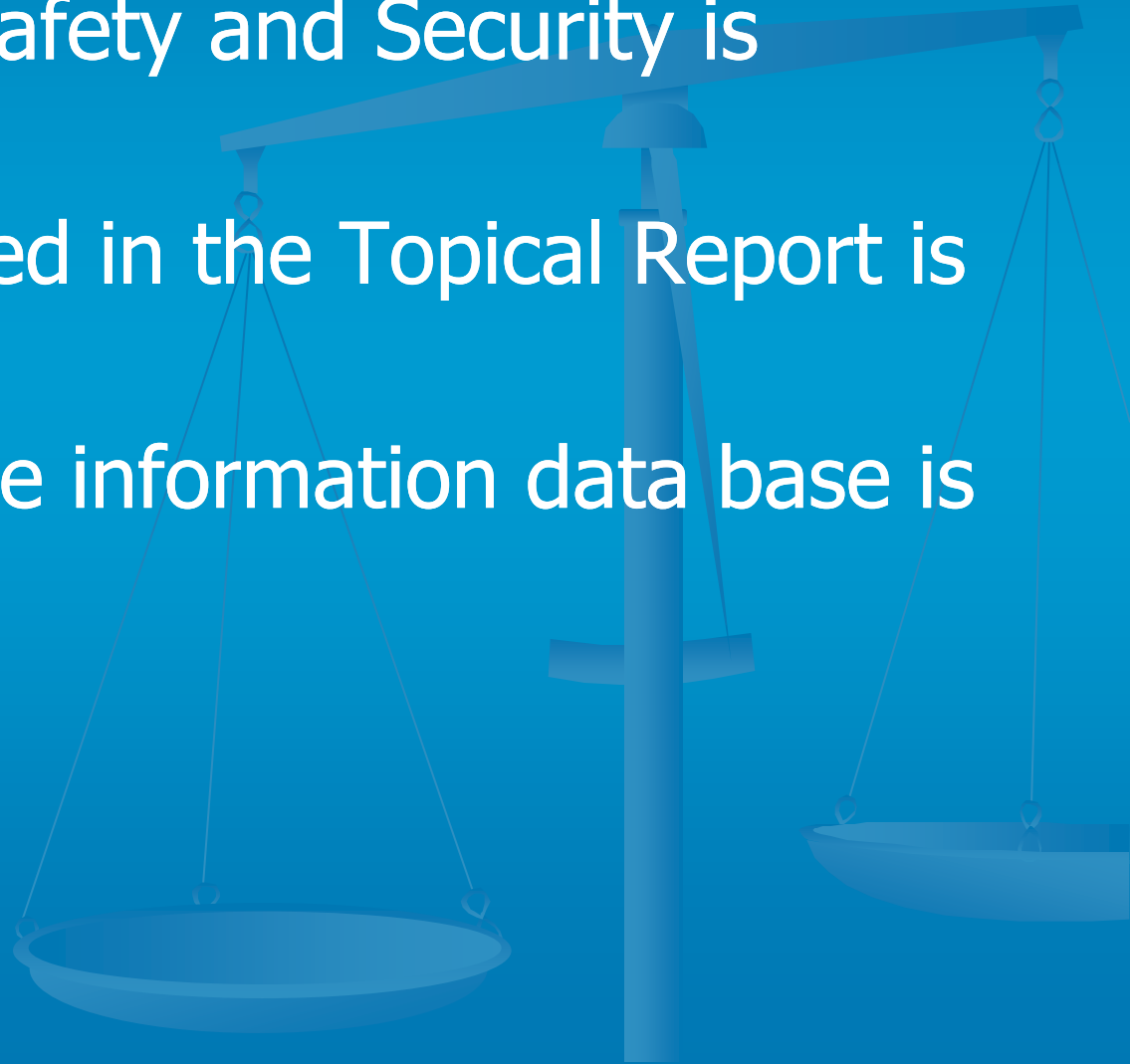
# Reception of Report

“This is terrific. Many thanks to all involved in the effort. I am VERY pleased with the results.” – Bill Desmond, NA-70




# Results of Pilot

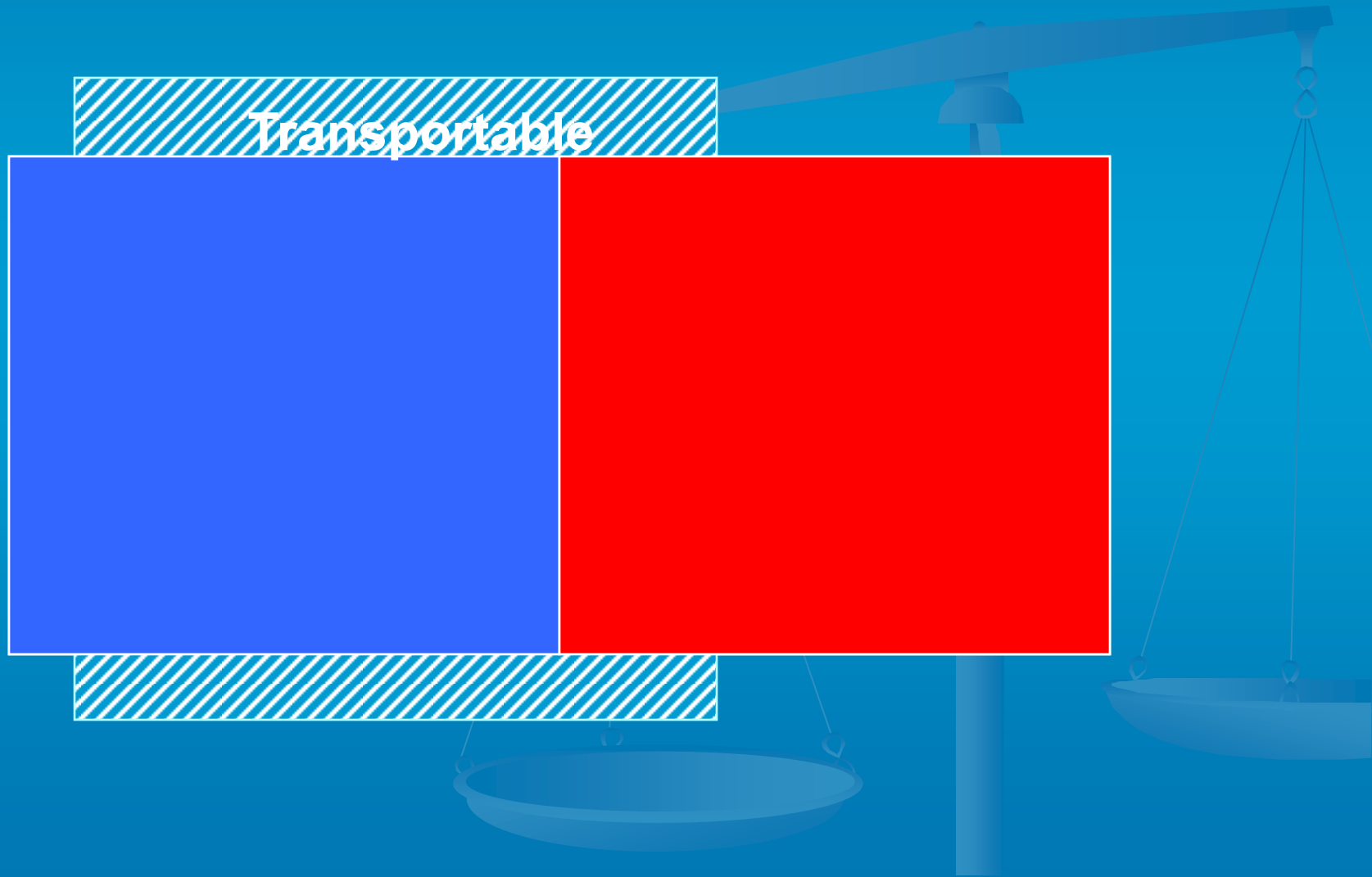
- Integration of Safety and Security is possible
- Process described in the Topical Report is useful and valid
- Need for a viable information data base is reinforced




# Types of Data that is Transportable

- 
- Control derivation
  - Hazard and accident analysis data
  - Test and failure data
  - Alternative analysis reports
  - Product, performance, & procurement specifications
  - Design and installation packages
  - FMEAs
  - Reliability and maintainability data
  - Analysis of inadvertent discharge
  - Software QA
  - Application considerations
  - Readiness process
  - Training
  - Equivalency analysis for modifications
  - System Specifications
  - Structural analysis for mounted designs
  - Credited controls

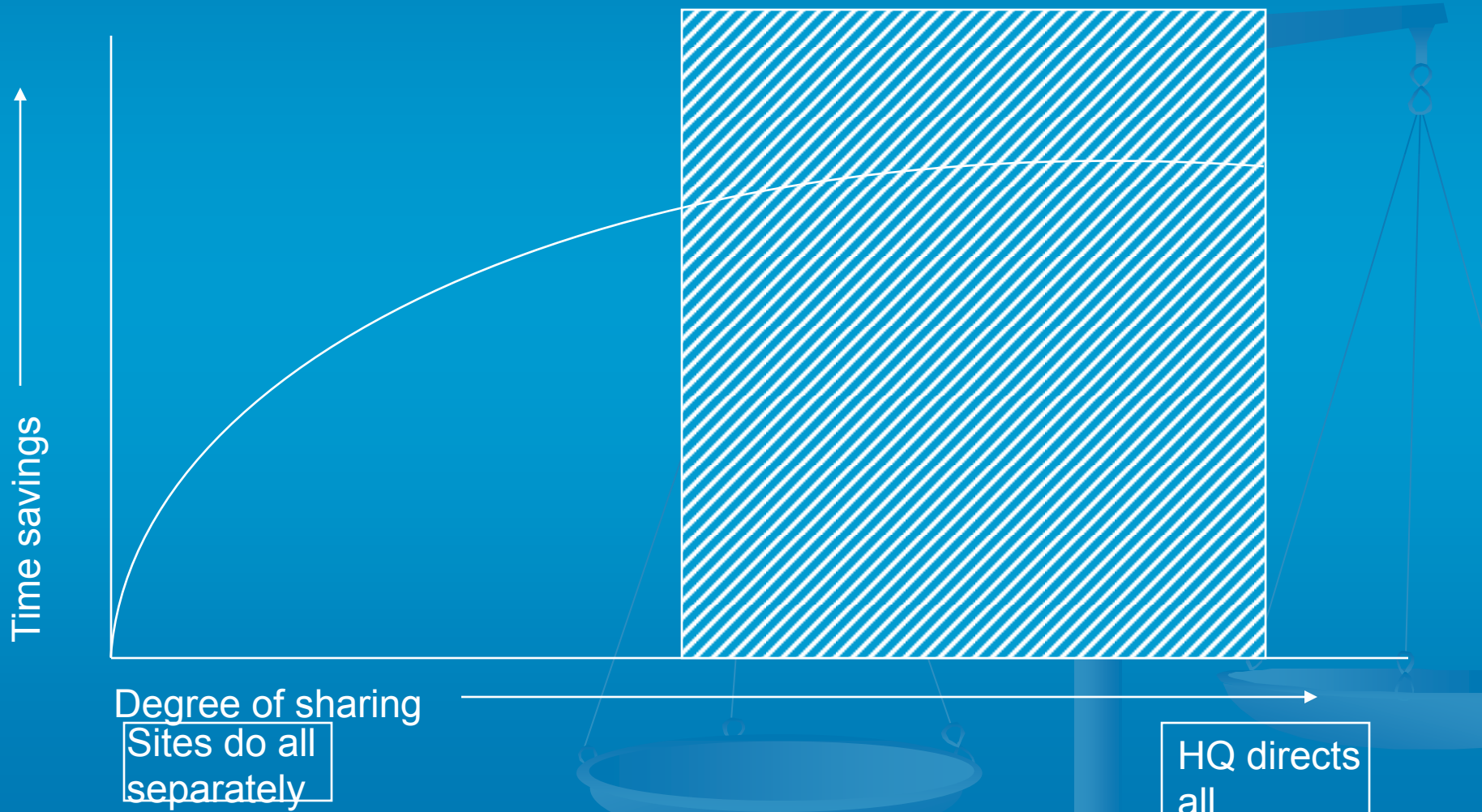
# Initiators and Consequences



# Toolbox: Development, Data Capture, Data Sharing

- The process must identify the following:
    - Data elements needed to develop package of security systems options
    - Key decisions and relevant data used for approval
    - How DOE can pre-approve key features of systems and assurance features are portable with minimal additional evaluation
    - Update of performance data for the security technology
- 

# Efficiencies to Be Realized



- Security in a box

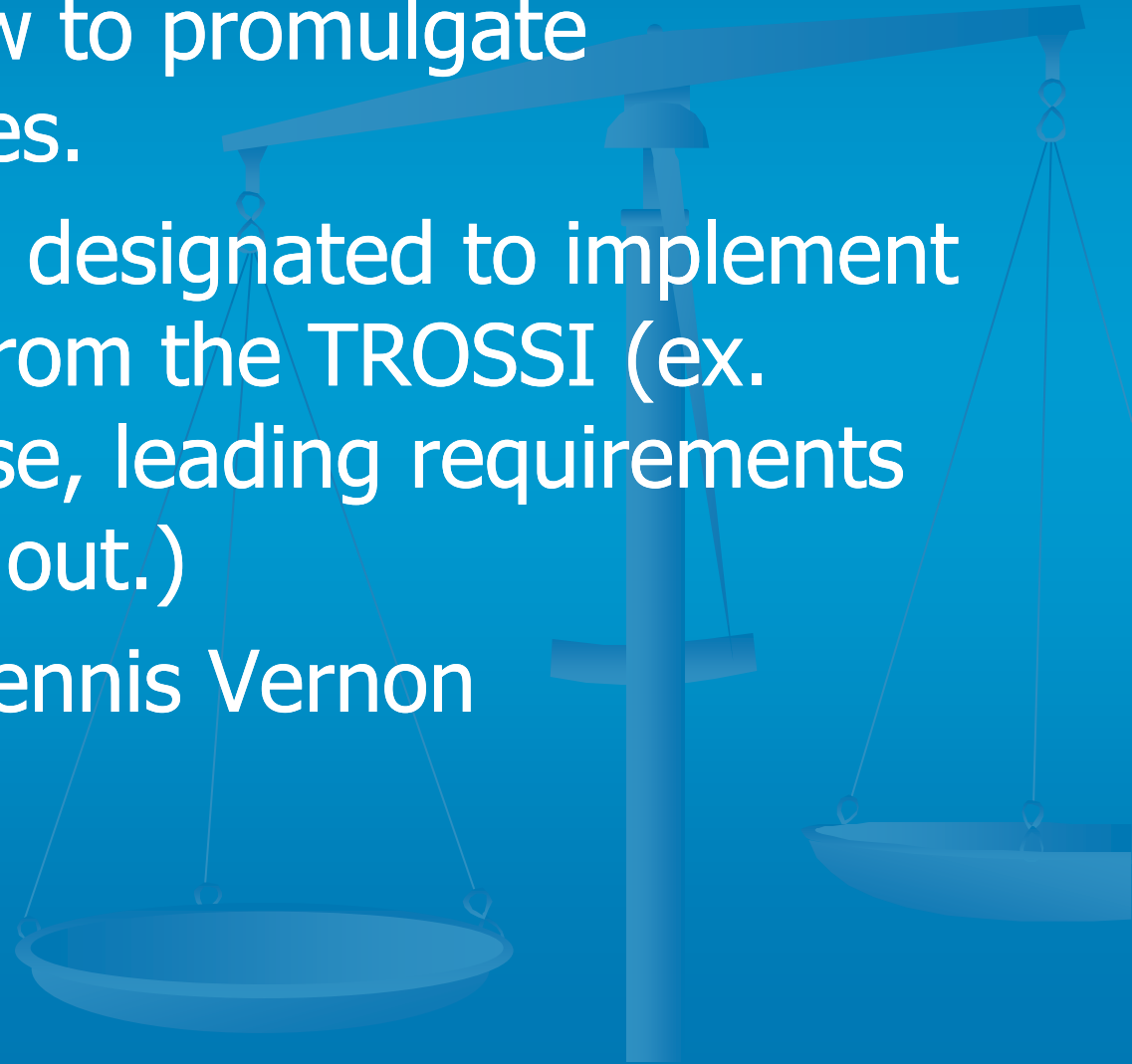


- Polutaiton of data base



# Path Forward

- Deciding on how to promulgate Guidance/Desires.
- NA 72 has been designated to implement adopted ideas from the TROSSI (ex. Shared data base, leading requirements for systems roll out.)
- NA 72 lead is Dennis Vernon



# Conclusion



- Further EFCOG assistance has been offered to NA 72 lead.
- Anyone desiring a copy of the TROSSI, contact your SAWG Steering Group Members or SWG representative, or send email to:

[carrollkj@y12.doe.gov](mailto:carrollkj@y12.doe.gov)

# OPERATIONS

