CG Operational Requirements Overview for Industry

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What Is an Operational Requirement?

Operational Requirements provide a bridge between the operational oriented view of the system to the set of performance requirements which are stated in terms of engineering characteristics required to define the solution.

High Level (qualitative)

- Strategic Goals
  - DHS Goals/Missions
  - USCG Goals/Missions

- Operational Requirements
  - Mission Need/Capability Gap – CAI, MNS
  - Operational Requirement – CONOPS, ORD

- Technical Requirements
  - Performance Requirement, Functional Specification,
    Design Specification, Material Specification

Each lower-level requirement must be traceable to a higher-level requirement

Low Level (quantitative)

- The Sponsor (representing the operators) develops operational requirements consistent with organizational missions.
- The Program Manager with the Engineering Technical Authorities and Acquisitions community, develops technical requirements and specifications

DHS Joint Requirements Council

Requirements Docs

Traceable

Feasible

Cost

Informed

Analysis

ID

Validate

Need
Requirements Documents

- **Capability Analysis Report (CAR):** Identifies Capability Gaps
  Documents results of a Capability Analysis, identifies a gap(s) or redundancy, provides Requirement traceability, and recommends MNS (materiel) or NMCR (non-materiel) solution.

- **Mission Needs Statement (MNS):** Identifies basis of a Materiel Solution(s).
  Formal description of strategic need for a capability. States type of materiel solution required to close mission capabilities gap. Links gap to investment.

- **Concept of Operations (CONOPS):** System of Systems Document.
  Describes the asset or system proposed by the MNS in terms of how it will be used, how it works with other assets, & user needs it will fulfill.

- **Operational Requirements Document (ORD):** What the capability must be able to do.
  Formal statement of required performance & related operational parameters for a proposed executable & affordable concept or system.
Who: “A Requirements Officer’s Internal View”
Who: “Industry’s View”

- Where does your company concentrate resources?
- What is the right allocation of resources in this environment?
- Which area can your business shape effectively?
Industry Influence Opportunities

Operational Requirements are a **Sponsor Driven Process** influenced by many factors. **How can you support the Sponsor?**

- **Capability Analyses:**
  - Are you participating in government funded studies from the Coast Guard either organic or through FFRDC’s such as RAND and MITRE?
  - These studies shape service strategy and resource decisions.

- **Research and Development:**
  - Are you aware of the work of the CG Research and Development Center and DHS Science and Technology?

- **Market Awareness:**
  - Are you reaching CG sponsors at tradeshows, demonstrations, or other pitches?
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Questions & Discussion

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