

## TOOLKIT: REQUIREMENTS HIERARCHY

### Creating an Innovation Strategy

Requirements hierarchies are often used to trace requirements in software development. You can find and use any framework, but I recommend the one below because it smoothly links *business requirements* to *design and technical requirements*. The solution paper uses a fictitious Coast Guard example to get you started.

**Department Mission** [Organization's mission statement]

**Component Mission** [Unit's mission statement]

**Mission Need/Capability Gap** [Make a statement about a capability missing or lacking but which is required to satisfy the component mission. Can read like a strategic goal or objective, or problem statement.]

**Capability Requirement** [Make a statement of capability required to satisfy the mission need or close the capability gap. Should read like a solution statement.]



**Performance Requirement** [Make a statement of outputs or outcomes which satisfy the capability requirement. May be multiple statements, but must be complementary.]

**Functional Requirement** [Make specific statements of what a solution should do to satisfy the performance requirement. Requires multiple statements.]

**Design Requirement** [Make specific statements of how the solution should be designed to meet functional requirements. Requires multiple statements.]

**Material Requirement** [Make specific statements of people, processes, tools, materials, etc. required to satisfy design requirements. Requires multiple statements.]

