




# SAF User Documentation : System Requirement Traceability Viewpoint

Domain	Aspect	Maturity
Functional	Traceability & Mapping	 released

## Example

**Legend**

- SAF\_SystemFunctionalRequirementRefinement
- SAF\_SystemRequirementDerivation

**Diagram**

The diagram illustrates the relationship between requirements and their supporting artifacts. It is organized into two main sections: a left sidebar for requirements and a right table for supporting artifacts.

**Left Sidebar (Requirements):**

- FFDS\_Requirement** (Folder icon)
  - Fire Detection** (Folder icon)
    - SYS-REQ-002 Forest Fire Detection**
  - Fire Monitoring** (Folder icon)
    - SYS-REQ-003 Forest Fire Evolution Monitoring**
  - Fire Prediction** (Folder icon)
    - SYS-REQ-004 Forest Fire Spread Prediction**

**Right Table (Supporting Artifacts):**

Supporting Artifact	SYS-REQ-002	SYS-REQ-003	SYS-REQ-004
<b>Detect and Report Fire (context FFDS_Requirement)</b>	1	2	
<b>Request sensor data (context FFDS_Requirement)</b>	1		
<b>Analyze FF data (context FFDS_Requirement)</b>	1		
<b>Stakeholder Requirement [CONOPS_Requirement]</b>			
<b>Capability [CEO FFDS Vendor]</b>			
<b>CPBLTY-11 Fire Detection</b>		1	1
<b>CPBLTY-12 Fire Monitoring</b>			1
<b>Capability [Fire Operations Expert]</b>			
<b>CPBLTY-25 Propagation Estimation</b>			1

**Relationships (Arrows):**

- SYS-REQ-002** is refined by **Detect and Report Fire** (pink arrow) and **Request sensor data** (blue arrow).
- SYS-REQ-003** is refined by **Analyze FF data** (pink arrow) and **CPBLTY-12 Fire Monitoring** (blue arrow).
- SYS-REQ-004** is refined by **CPBLTY-25 Propagation Estimation** (blue arrow).

## Purpose

The System Requirement Traceability Viewpoint specifies for every System Requirement the traceability to the functional domain level

- System Use Case
- System Capability
- System Context Definition
- System Context Exchange
- System Context Interaction
- System Process

- [System State](#)

## Applicability

---

The System Requirement Traceability Viewpoint supports the "System Requirements Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 [§4.3] and contributes to the System Requirements Traceability. The System Requirement Traceability Viewpoint also contributes to the System Requirements Verification and Traceability Matrix (RVTM).

## Stakeholder

---

- [Project Manager](#)

## Concern

---

- What is the rationale for this system requirement?
- Which Stakeholder Requirements are addressed by System Requirements?
- Which system interface is addressed by a system requirement?

## Presentation

---

A dependency matrix featuring relationships for every System Requirement to the functional domain level

- System Use Case
- System Capability
- System Context Definition
- System Context Exchange
- System Context Interaction
- System Process
- System State

## Profile Model Reference

---

The following Stereotypes / Model Elements are used in the Viewpoint:

- [SAF\\_SFV08b\\_View](#)
- [SAF\\_SystemFunctionalRequirement](#)
- [SAF\\_SystemFunctionalRequirementConstraint](#)
- [SAF\\_SystemFunctionalRequirementRefinement](#)
- [SAF\\_SystemNonFunctionalRequirement](#)
- [SAF\\_SystemRequirement](#)
- [SAF\\_SystemRequirementDerivation](#)
- [SAF\\_SystemRequirementDerivation](#)
- [SAF\\_SystemRequirementRefinement](#)

- [SAF\\_SystemRequirementRefinement](#)
- [SAF\\_SystemRequirementRefinement](#)

## Input from other Viewpoints

---

### Required Viewpoints

- [Stakeholder Requirement Viewpoint](#)
- [System Requirement Viewpoint](#)

### Recommended Viewpoints

- [System Use Case Viewpoint](#)
- [System Capability Viewpoint](#)
- [System Context Exchange Viewpoint](#)
- [System Context Interaction Viewpoint](#)
- [System Process Viewpoint](#)
- [System Functional Refinement Viewpoint](#)
- [System State Viewpoint](#)