









## SAF User Documentation : System Requirement Traceability Viewpoint

| Domain     | Aspect                 | Maturity  |
|------------|------------------------|---|
| Functional | Traceability & Mapping | <br>released |

### Example

| Legend  |  |  |   |   |   |   |   |   |   |   |   |   |   |  |  |
|---|--|--|---|---|---|---|---|---|---|---|---|---|---|--|--|
|  SAF_SystemFunctionalRequirementRefinement |  |  |   |   |   |   |   |   |   |   |   |   |   |  |  |
|  SAF_SystemRequirementDerivation           |  |  |   |   |   |   |   |   |   |   |   |   |   |  |  |
|   |  | <div><div></div></div> |   |   |   |   |   |   |   |   |   |   |   |  |  |
| FFDS_Requirement  |  |  | 1   | 2   | 1   | 1   | 2   |   |   |   |   |   |   |  |  |
| Fire Detection  |  |  | 1   |   | 1   | 1   | 2   |   |   |   |   |   |   |  |  |
| SYS-REQ-002 Forest Fire Detection   |  | 3  |  |   |   |  |  | 1 | 1 |  |   |   |   |  |  |
| SYS-REQ-002.1 Smoke and Fire Detection  |  | 1  |   |   |   |   |  |   |   |   |   |   |   |  |  |
| SYS-REQ-002.2 Smoke and Fire Alert  |  | 1  |   |   |  |   |   |   |   |   |   |   |   |  |  |
| Fire Monitoring   |  |  |   | 1   |   |   |   |   |   |   | 1   |   |   |  |  |
| SYS-REQ-003 Forest Fire Evolution Monitoring  |  | 1  |   |  |   |   |   | 1 | 1 |   |  |   |   |  |  |
| Fire Prediction   |  |  |   | 1   |   |   |   |   |   |   |   |   | 1   |  |  |
| SYS-REQ-004 Forest Fire Spread Prediction   |  | 1  |   |  |   |   |   | 1 |   |   |   | 1 |  |  |  |

### 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](#)