

## SAF User Documentation : System Requirement Traceability Viewpoint

Domain	Aspect	Maturity
Functional	Traceability & Mapping	 released

### Example

Legend											
<div><div>↗</div> SAF_SystemFunctionalRequirementRefinement</div> <div><div>↘</div> SAF_SystemRequirementDerivation</div>		<div><div>📁</div> Detect and Report Fire (context FFDS)</div> <div><div>🔍</div> Request sensor data (context FFDS)</div> <div><div>🔍</div> Analyze FF data (context FFDS Context)</div> <div><div>🔍</div> Alert fire (context FFDS Context)</div> <div><div>🔍</div> Retrieve sensor data (context FFDS)</div> <div><div>🔍</div> Provide Sensor Data (context FFDS)</div> <div><div>📁</div> StakeholderRequirement [CONOPS_</div> <div><div>📁</div> Capability [CEO FFDS Vendor,</div> <div><div>🔍</div> CPBLTY-11 Fire Detection</div> <div><div>🔍</div> CPBLTY-12 Fire Monitoring</div> <div><div>📁</div> Capability [Fire Dept. Operati</div> <div><div>🔍</div> CPBLTY-25 Propagation Estimati</div>									
<div>📁 FFDS_Requirement</div>											
<div>📁 Fire Detection</div>		1	2	1	1	2					
<div>🔍 SYS-REQ-002 Forest Fire Detection</div>	3	↗			↗	↗	1	1	↘		
<div>🔍 SYS-REQ-002.1 Smoke and Fire Detection</div>	1					↗					
<div>🔍 SYS-REQ-002.2 Smoke and Fire Alert</div>	1			↗							
<div>📁 Fire Monitoring</div>			1							1	
<div>🔍 SYS-REQ-003 Forest Fire Evolution Monitoring</div>	1	↗					1	1	↘		
<div>📁 Fire Prediction</div>			1								1
<div>🔍 SYS-REQ-004 Forest Fire Spread Prediction</div>	1	↗					1			1	↘

SYS-REQ-004 Forest Fire Spread Prediction

### 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

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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).

## Presentation

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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

## Stakeholder

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- [Project Manager](#)

## Concern

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- [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?](#)

## Profile Model Reference

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

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

## Input from other Viewpoints

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## 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](#)