


# SAF User Documentation : F6\_SRQD System Requirement Definition Viewpoint

| Domain     | Aspect      | Maturity  |
|------------|-------------|---|
| Functional | Requirement | <br>released |

## Example

| #  | Id            | Name                       | Applied Stereotype                      | Text   | Requirement Derived FROM | Source |
|----|---------------|----------------------------|---|--|--------------------------|--------|
| 1  |               | Fire Detection             |   |  |                          |        |
| 2  | SYS-REQ-001   | 24/7 Forest Fire Detection | SAF_SystemFunctionalRequirement [Class] | The FFDS system shall allow a forest fire detection day & night. |                          | SDS    |
| 3  | SYS-REQ-002   | Forest Fire Detection      | SAF_SystemFunctionalRequirement         | The FFDS system shall allow a forest fire                        | CPBLTY-11 Fire Detect... | SDS    |
| 4  | SYS-REQ-002.1 | Smoke and Fire             | SAF_SystemFunctionalRequirement         | The FFDS system shall allow to detect                            |                          | SDS    |
| 5  | SYS-REQ-002.2 | Smoke and Fire             | SAF_SystemFunctionalRequirement         | When a forest fire is detected, the FFDS                         |                          | SDS    |
| 6  |               | Fire Prediction            |   |  |                          |        |
| 7  | SYS-REQ-004   | Forest Fire Spread         | SAF_SystemFunctionalRequirement         | In the event of a forest fire, the FFDS                          | CPBLTY-25 Propagati...   | SDS    |
| 8  |               | Fire Assessment            |   |  |                          |        |
| 9  | SYS-REQ-005   | Forest Fire Damage         | SAF_SystemFunctionalRequirement         | For evaluating the impacts of forest fire in                     |                          | SDS    |
| 10 |               | Fire Monitoring            |   |  |                          |        |
| 11 | SYS-REQ-003   | Forest Fire Evolution      | SAF_SystemFunctionalRequirement         | In the event of a forest fire, the FFDS                          | CPBLTY-12 Fire Monit...  | SDS    |

## Purpose

The System Requirement Definition Viewpoint specifies functions, non-functional properties, or constraints of the System. System Requirements are captured, the interrelationships between Functional and Non-Functional Requirements on the same level of abstraction and the traceability to Stakeholder Requirements are depicted.

## Applicability

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

## Presentation

A tabular format listing

- unique requirement ID, text, and attributes,
- traceability reference to Stakeholder Requirements,
- traceability reference to depended Requirements on the same level of abstraction.

## Stakeholder

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- [Hardware Developer](#)
- [IV&V Engineer](#)
- [Project Manager](#)
- [Software Developer](#)
- [System Architect](#)

## Concern

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- [What are the exchange requirements imposed on the system?](#)
- [What are the functional requirements imposed on the system?](#)
- [What are the non-functional requirements imposed on the system?](#)
- [What are the requirements of environmental conditions imposed on the system?](#)
- [What is the range of acceptable system performance, i.e. the critical, top-level performance requirements derived from the operational needs?](#)
- [Which System Requirements are derived from Stakeholder Requirements?](#)
- [Which are the interface requirements imposed on the system?](#)

## Profile Model Reference

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

- [SAF\\_F6\\_SRQD\\_Table](#)
- [SAF\\_StakeholderRequirement](#)
- [SAF\\_SystemFunctionalRequirementConstraint](#)
- [SAF\\_SystemFunctionalRequirement](#)
- [SAF\\_SystemNonFunctionalRequirement](#)
- [SAF\\_SystemRequirementDerivation](#)
- [SAF\\_SystemRequirement](#)

## Input from other Viewpoints

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### Required Viewpoints

- [Stakeholder Requirement Definition Viewpoint](#)

### Recommended Viewpoints

- [Operational Story Viewpoint](#)
- [Operational Context Exchange Viewpoint](#)
- [Operational Capability Definition Viewpoint](#)
- [Operational Process Viewpoint](#)

- Operational Context Interaction Viewpoint
- Operational Capability Mapping Viewpoint
- Operational Process Mapping Viewpoint