

# SAF User Documentation : System Requirement Viewpoint

Domain	Aspect	Maturity
Functional	Requirement	released

## **Example**

System-Requirement-Viewpoint-primary-example.svg

## **Purpose**

The System Requirement 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 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

- Hardware Developer
- IV&V Engineer
- Project Manager

- Software Developer
- System Architect

#### Concern

- · What are the Interface Requirements imposed on the system?
- · 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 Stakeholder Requirements are addressed by System Requirements?

#### **Profile Model Reference**

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

- SAF\_SFV06a\_View
- SAF StakeholderRequirement
- SAF SystemFunctionalRequirement
- SAF\_SystemFunctionalRequirementConstraint
- SAF SystemNonFunctionalRequirement
- SAF\_SystemRequirement
- SAF SystemRequirementDerivation
- SAF SystemRequirementDerivation

# Input from other Viewpoints

#### **Required Viewpoints**

• Stakeholder Requirement Viewpoint

### **Recommended Viewpoints**

- Operational Story Viewpoint
- Operational Context Exchange Viewpoint
- · Operational Capability Viewpoint
- · Operational Process Viewpoint
- · Operational Interaction Viewpoint
- Operational Capability Mapping Viewpoint
- · Operational Process Mapping Viewpoint