Stakeholder Requirement Viewpoint

Domain	Aspect	Maturity
Operational	Requirement	released

Example

#	Id	Name	Imposing Stakeholder	Text	Refining Operational Story	Satisfied By
1		Forest Authority Expert				
2		Capability				
3	CPBLTY-16	24/7 Availability	*Forest Authority Expert*	The system shall be available 24/7. Rational: A forest fire could occur anytime.		Detect and Notify Fire
4		Quality				
5	STK-REQ-QLT-21	Forest Size	*Forest Authority Expert*	The system shall be scalable for forest up to the size of 500 million hectare.		Detect and Notify Fire
6	STK-REQ-QLT-22	False Alarm (false negative)	*Forest Authority Expert*	The probability of false alarms must be lower than 5 %. Rational: A forest fire alarm triggers a lot of expensive actions.		Detect and Notify Fire
7	STK-REQ-QLT-23	Size of Fire	*Forest Authority Expert*	The system shall be able to detect fire areas of at least 50 square meter initiating reactive actions to cope the fire.		Detect and Notify Fire
8		Fire Operations Expert				
9		Capability				
10	CPBLTY-17	Propagation Estimation Capability	*Fire Operations Expert*	The system shall have the ability to predict the fire spread.		Detect and Notify Fire
11		Quality				
12	STK-REQ-QLT-24	Geolocation	*Fire Operations Expert*	The system shall be able to locate fires with an accuracy of 100 meter.		Detect and Notify Fire
13	STK-REQ-QLT-25	Fire Alert Notification Time	*Fire Operations Expert*	The system shall be able to report a verified fire within 5 seconds. Rational: Every second counts when fighting a forest fire.		Detect and Notify Fire
14		Capability [CEO FFDS Vendor]				
15	CPBLTY-11	Fire Detection	*CEO FFDS Vendor*	The system shall have the ability to detect fire areas.	Fire Detection and Notification	
16	CPBLTY-12	Fire Monitoring	*CEO FFDS Vendor*	The system shall have the ability to monitor fire areas.	Fire Detection and Notification	
17	CPBLTY-12.1	Area of Interest Monitoring	*CEO FFDS Vendor*	In the event of a forest fire the system shall have the ability to monitor a specific area of interest.	Fire Detection and Notification	
18	CPBLTY-14	Data Collection	*CEO FFDS Vendor*	The system shall have the ability to provide collected data for further analysis.	Fire Detection and Notification	
19	CPBLTY-15	Data Storage	*CEO FFDS Vendor*	The system shall have the ability to store the collected data.		
20		Capability [Nepalese Official]				
21	CPBLTY-18	Forest Fire Detecting and Monitoring Capability	*Nepalese Official*	The system shall have the ability to detect and monitor forest fires.		Detect and Notify Fire
22	CPBLTY-19	Forest Fire Pattern Research Capability	*Nepalese Official*	The system shall have the ability to research forest fire pattern(s) in order to trace the origin and development of a fire.		Detect and Notify Fire
23	CPBLTY-20	Burnt Forest Area Damage Assesment Capability	*Nepalese Official*	The system shall have the ability to assess damage in burnt areas in order to base post-fire assessment and management decisions on this information.		Detect and Notify Fire

Purpose

The Stakeholder Requirement Viewpoint specifies all properties that the intended solution shall possess or expose from the perspective of the stakeholders. The Stakeholder Requirement Viewpoint determines capabilities, functions, non-functional properties, and constraints.

Applicability

The Stakeholder Requirement Viewpoint supports the "Stakeholder Needs and Requirements Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 [§ 4.2] and contributes to the identification of solution constraint(s).

Stakeholder

- Acquirer
- Customer
- Hardware Developer
- Supplier
- System Architect

Concern

- What are the normal and extreme environmental conditions for normal operation, for not operational, for storage and for transport?
- What are the requirements of environmental conditions imposed on the system?
- What are the requirements that a Stakeholder imposes on the system?
- What defines a valid solution towards the customer?
- What is the range of acceptable system performance, i.e. the critical, top-level performance requirements derived from the operational needs?

Presentation

Stakeholder requirements are structured in a way that the Stakeholder behind a requirement is identifiable. As appropriate, the identified Stakeholder Requirements are receiving a Derivation Link from the justifying model artefacts, namely Operational Performer, Operational Activity, and Operational Exchange. NOTE 1: "One requirement package for each Stakeholder" is a best-practice modeling rule. A package contains the requirements specific for one Stakeholder. NOTE 2: Even if different Stakeholder may have intersecting interests and / or concern(s) resulting in a similar set of requirements, each Stakeholder shall have its own set managed in a dedicated requirement package. requirements shall not be shared because of their different life cycles. Resolving duplications and conflicts is subject of the requirements analysis resulting in an agreed set of System Requirements.

Profile Model Reference

- Package [UML_Standard_Profile]
- SAF_SOV06a_View
- SAF_Stakeholder
- SAF_StakeholderRequirement
- SAF_StakeholderRequirementImposition
- SAF_StakeholderRequirementRefinement
- SAF_StakeholderRequirementRefinement

- SAF_SystemOfInterestConcern

Input from other Viewpoints

Required Viewpoints

- Stakeholder Identification Viewpoint

Recommended Viewpoints

- Operational Story Viewpoint
- Operational Performer Viewpoint