SV-5b Operational Activity to Systems Traceability Matrix

Description

The SV-5b addresses the linkage between described in SV-1 Systems Functionality Description and Operational Activities specified in OV-5a Operational Activity Decomposition Tree or OV-5b Operational Activity Model. The SV-5b depicts the mapping of systems and, optionally, the capabilities and performers that provide them to operational activities. The SV-5b identifies the transformation of an operational need into a purposeful action performed by a system or solution.

During requirements definition, the SV-5b plays a particularly important role in tracing the architectural elements associated with system requirements to those associated with user requirements.

The intended usage of the SV-5b includes:

- Tracing system requirements to user requirements.
- Tracing solution options to requirements.
- Identification of overlaps or gaps.

Implementation

SV-5b can be represented using a SV-5b diagram which is a non-editable Dependency Matrix. Systems are used as row elements and Operational Activities are used as column elements.

	Find Victim	🕎 Monitor Health	Process Warning Order	🔷 Receive Distress Signal	$\langle\!\!\!\!\!\!\!\rangle$ Recover Victim(Track Info Out : Updated Location)	🖒 Rescue	Search	🕎 Send Distress Signal	Send Warning Order	🔷 Transit To SAR Operation
⊡ <mark>=-</mark> SV-2				2				6		
Oistress Beacon										
CSM System										
O Frequency Scanner										
🔘 Link 16								\times		
🔘 Link 16 Terminal										
🔘 Naval Ship										
🔘 Receiver										
🔘 Signal Processor										
🔘 Track Interface										
Transmitter										
🔿 Voice Radio				X				\times		

The SV-5b is generally presented as a matrix of the relationship between systems and activities and can be a summary of the Operational Activity to System Function Traceability Matrix (SV-5a). The SV-5b can show requirements traceability with Operational Activities on one axis of a matrix, the System Functions on the other axis, and with an X, date, or phase in the intersecting cells, where appropriate.

Related elements

- System
- Function
- Operational Activity
- Activity Performed By Performer
- Implements

Related procedures

Creating SV-5b matrix