

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 | Recover Victim(Track Info Out : Updated Location) | Rescue | Search | Send Distress Signal | Send Warning Order | Transit To SAR Operation |
|-------------------|-------------|----------------|-----------------------|-------------------------|-----------------------------------------------------|--------|--------|----------------------|--------------------|--------------------------|
| SV-2 | 2 | | | | | | | 6 | | |
| Distress Beacon | | | | | | | | | | |
| ESM System | | | | | | | | | | |
| Frequency Scanner | | | | | | | | | | |
| Link 16 | | | | | | | | | | |
| Link 16 Terminal | | | | | | | | X | | |
| Naval Ship | | | | | | | | | | |
| Receiver | | | | | | | | | | |
| Signal Processor | | | | | | | | | | |
| Track Interface | | | | | | | | | | |
| Transmitter | | | | | | | | | | |
| Voice Radio | | | | X | | | | X | | |

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](#)