

# 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  |
|---|
| <ul style="list-style-type: none"><li>• System</li><li>• Function</li><li>• Operational Activity</li><li>• Activity Performed By Performer</li><li>• Implements</li></ul> |

## Related procedures

- [Creating SV-5b matrix](#)