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 nodes 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. Resources are used as row elements and Operational Activities are used as column elements.

| | Coordinate Other Agencies [Oper | 🔆 Find Victim [Operational Viewpoint | Firefight [Operational Viewpoint: | 🔶 Investigate Reports Of MissingPe | 🔶 Monitor Health [Operational View | 🔆 Process Warning Order [Operatio | 🔶 Provide continuous radar surveilla | 🔶 Provide emergency towing cover i | 🔶 Provide Medical Assistance [Oper | 🔶 Receive Distress Signal [Operatio | 🔶 Recover Victim [Operational View | 🔶 Rescue [Operational Viewpoint: | 🔶 Search [Operational Viewpoint::0 | 🔶 Search & Rescue(: Medical Cond | 🔆 Send Distress Signal [Operational | 🔆 Send Warning Order [Operational | \diamondsuit Solve incident involving chemicals \dots | 🔶 Solve incidents in all areas of inho | 🔆 Transit To SAR Operation [Opera | 🔂 Transport Patient [Operational Vi | 👌 Treat Patient [Operational Viewp |
|-----------------------|---------------------------------|--------------------------------------|-----------------------------------|------------------------------------|------------------------------------|-----------------------------------|--------------------------------------|------------------------------------|------------------------------------|-------------------------------------|------------------------------------|----------------------------------|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|---|--|-----------------------------------|-------------------------------------|------------------------------------|
| ⊡ <mark>—</mark> SV-2 | | | | | | | | | | 1 | | | | | 2 | | | | | | |
| 👽 Distress Beacon | | | | | | | | | | | | | | | | | | | | | |
| 👽 ESM System | | | | | | | | | | | | | | | | | | | | | |
| V Frequency Scanner | | | | | | | | | | | | | | | | | | | | | |
| 👽 Link 16 | | | | | | | | | | | | | | | 4 | | | | | | |
| 👽 Link 16 Terminal | | | | | | | | | | | | | | | | | | | | | |
| 👽 Naval Ship | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 👽 Signal Processor | | | | | | | | | | | | | | | | | | | | | |
| 👽 Track Interface | | | | | | | | | | | | | | | | | | | | | |
| 👽 Transmitter | | | | | | | | | | | | | | | | | | | | | |
| 🔍 Voice Radio | | | | | | | | | | 2 | | | | | 4 | | | | | | |

The SV-5b is generally presented as a matrix of the relationship between system resources 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

- Resource Artifact
- Function
- Operational Activity
- Is Capable To Perform
- Implements

Related procedures

- Creating SV-5b matrix
- · Resources to Capabilities Mapping matrix
- Using Implied Relations