

# SV-4 Systems Functionality Description

## Description

The SV-4 addresses human and system functionality.

The primary purposes of SV-4 are to:

- Develop a clear description of the necessary data flows that are input (consumed) by and output (produced) by each resource.
- Ensure that the functional connectivity is complete (i.e., that a resource's required inputs are all satisfied).
- Ensure that the functional decomposition reaches an appropriate level of detail.

The Systems Functionality Description provides detailed information regarding the:

- Allocation of functions to resources.
- Flow of resources between functions.

The SV-4 is the Systems Viewpoint model counterpart to the OV-5b Activity Model of the Operational Viewpoint.

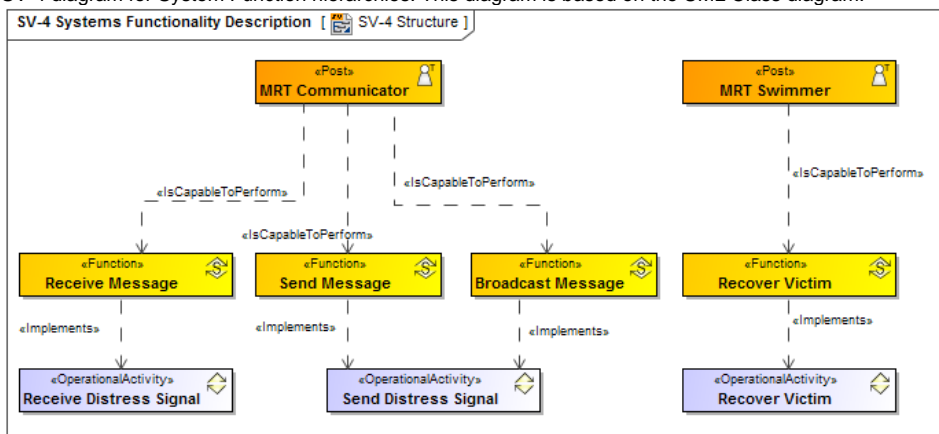
The intended usage of the SV-4 includes:

- Description of task workflow.
- Identification of functional system requirements.
- Functional decomposition of systems.
- Relate human and system functions.

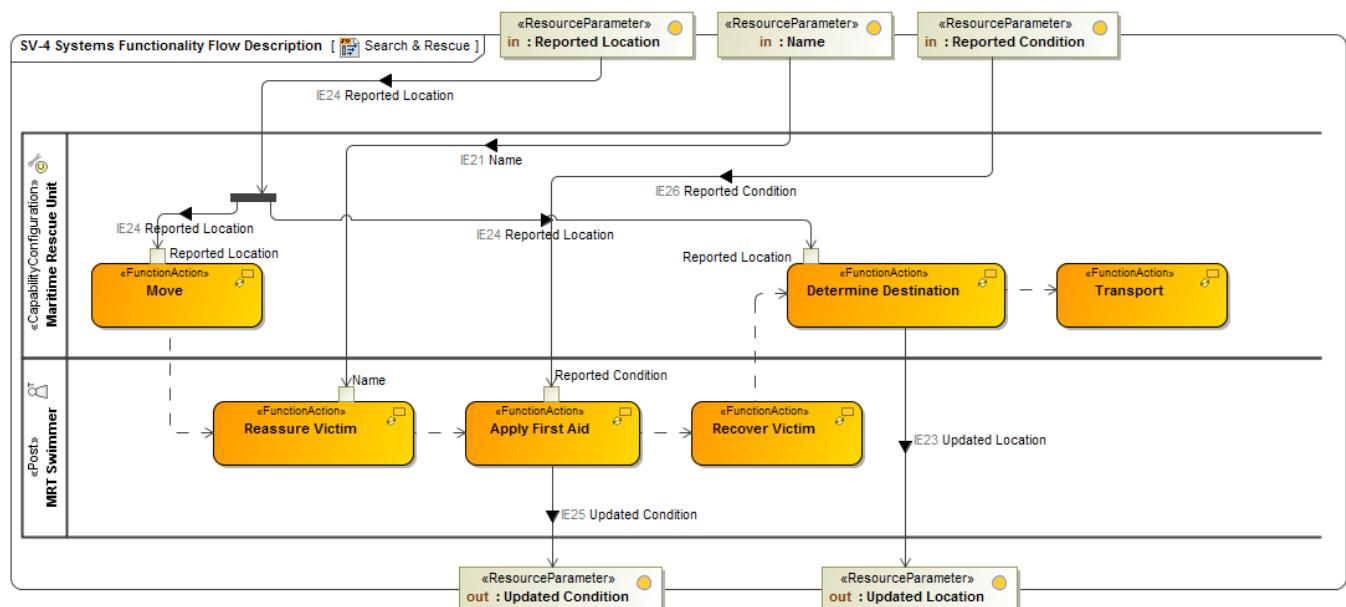
## Implementation

SV-4 can be represented using:

- SV-4 diagram for System Function hierarchies. This diagram is based on the UML Class diagram.



- SV-4 diagram for System Function flows. This diagram is based on the UML Activity diagram.



- UML Class diagram.
- UML Activity diagram.
- SysML Block diagram.
- SysML Activity diagram.

The SV-4 is the behavioral counterpart to the [SV-1 Systems Interface Description](#) (in the same way that [OV-5b Operational Activity Model](#) is the behavioral counterpart to [OV-2 Operational Resource Flow Description](#)).

#### **Related elements**

- [Function](#)
- [Capability Configuration](#)
- [Natural Resource](#)
- [Resource Architecture](#)
- [Resource Artifact](#)
- [Software](#)
- [Organization](#)
- [Post](#)
- [Person](#)
- [Is Capable To Perform](#)
- [Resource Exchange](#)
- [Geo Political Extent Type](#)
- [Resource Information](#)
- [Function Action](#)
- [Function Control Flow](#)
- [Function Object Flow](#)

#### **Related procedures**

- [Creating SV-4 Systems Functionality Description diagram](#)
- [Creating SV-4 Systems Functionality Flow Description diagram](#)
- [Creating Resource Exchange in SV-4 Systems Functionality Flow Description diagram](#)
- [Applying military symbols](#)
- [Creating Process Flow Diagrams From Compositions or Aggregations Defined in Process Diagrams](#)