

# NSV-1 System Interface Description

## Description

System interface description (NSV-1) addresses the composition and interaction of resources. For NMM, NSV-1 incorporates the human elements Posts, Organizations, and Roles.

A resource interaction is a simplified representation of a pathway or network, usually depicted graphically as a connector (for example, a line with possible amplifying information).

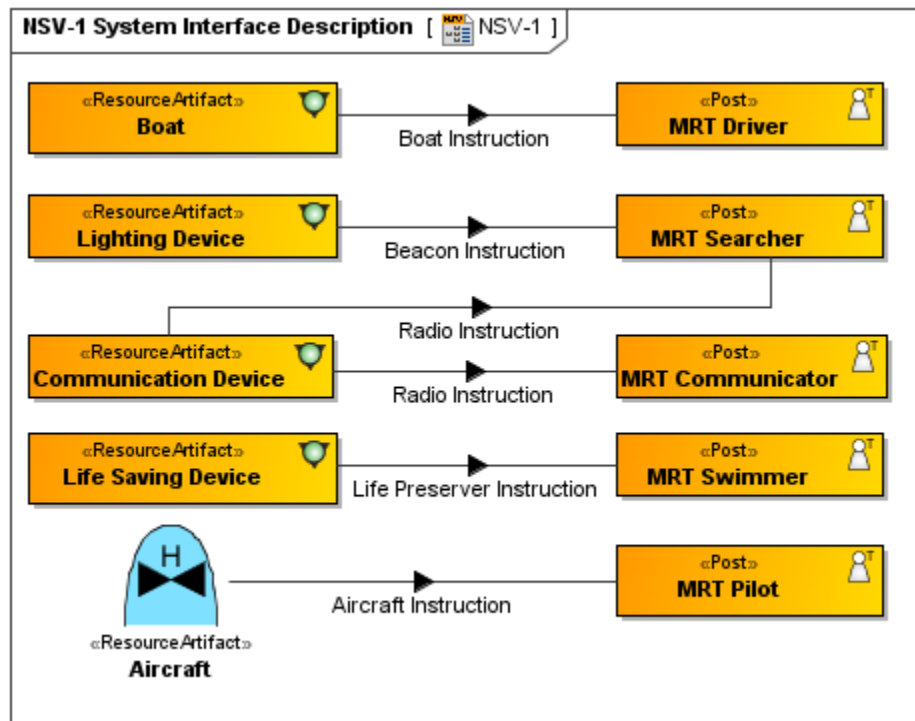
In addition, the Capability Configuration concept is used as a wrapper to bring together resources to satisfy a Capability.

## Implementation

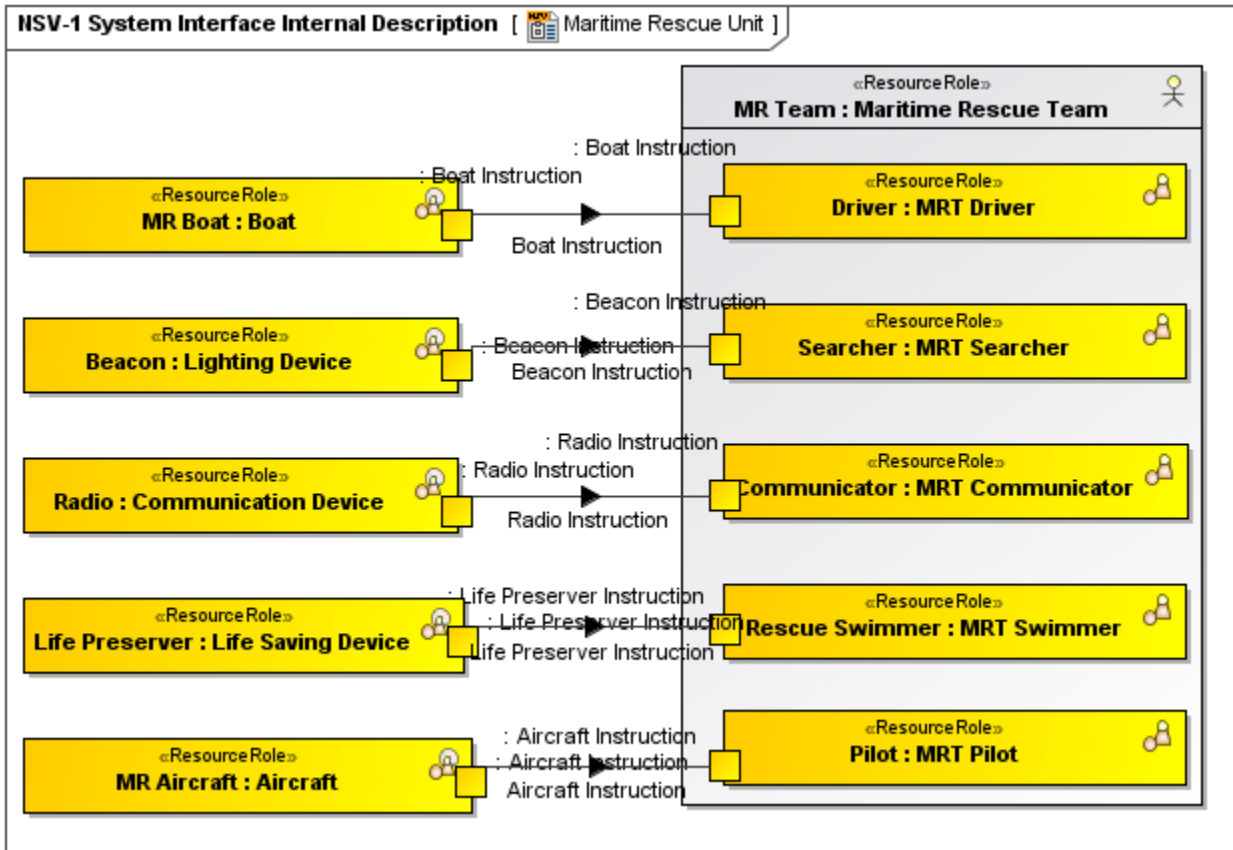
NSV-1 can be represented using:

- NSV-1 diagram which is based on the UML Class diagram.
- NSV-1 diagram which is based on the UML Composite Structure diagram.
- UML Class diagram.
- UML Composite Structure diagram.
- SysML Block Definition diagram.
- SysML Internal Block diagram.

## Sample



NSV-1 System Interface Description



NSV-1 System Interface Internal Description

#### Related views

An NSV-1 can optionally be adorned with nodes originally specified in an NOV-2. In this way, traceability can be established from the logical NOV structure to the physical NSV structure.

An interaction, as depicted in the NSV-1, is an indicator that information passes from one resource to another. In the case of systems, this can be expanded into further detail in an NSV-2. Resource Interactions are summarized in a Resource Interactions Matrix (NSV-3).

The functions performed by the resources are specified in an NSV-4 Resource Functionality Description, but may optionally be overlaid on the Resources in the NSV-1.

An Operational View (NOV) suite may specify a set of requirements – either as a specific operational plan, or a scenario for procurement. As NOV-2 and NOV-5 specify the logical structure and behavior, NSV-1 and NSV-4 specify the physical structure and behavior (to the level of detail required by the architectural stakeholders).

#### Related elements

- [Resource Artifact](#)
- [Software](#)
- [Capability Configuration](#)
- [Organization](#)
- [Post](#)
- [Resource Role](#)
- [Resource Interface](#)
- [Resource Port](#)
- [Resource Connector](#)
- [Capability](#)
- [Exhibits](#)
- [Fielded Capability](#)
- [Resource Port](#)
- [Resource Exchange Kind](#)
- [Control](#)
- [Resource Information](#)
- [Natural Resource](#)
- [System](#)

#### Related procedures

- [Creating NSV-1 diagram](#)
- [Creating Resource Interaction in NSV-1 diagram](#)