

# L3 Node Interactions

## Description

The L3 Node Interactions view addresses operational information exchanges between nodes. Information exchanges provide further detail of the interoperability requirements associated with the operational capability of interest. The focus is on information exchanges that cross the capability boundary.

Although the primary purpose of this view is to specify information exchanges, an L3 may also list flows of materiel, energy and human resources.

The L3 view may be used to:

- Define operational concepts.
- Elaborate capability requirements.
- Define collaboration needs.
- Associate capability with a location.
- Define Problem space.
- Operational planning.
- Analyze Supply chain.
- Secure models – e.g. domain-based security & entity trust models.

## Implementation

The L3 view can be represented using:

- L3 Node Interactions table.

| #  | Operational Exchange Item | Sending Node         | Receiving Node       | Producing Operational Activity | Consuming Operational Activity |
|----|---------------------------|----------------------|----------------------|--------------------------------|--------------------------------|
| 1  | Request                   | Tactical C2 Node     | SAR Asset Controller |                                |                                |
| 2  | Control Order             | Tactical C2 Node     | Rescue Node          |                                |                                |
| 3  | Control Order             | Tactical C2 Node     | Search Node          |                                |                                |
| 4  | Warning Order             | Search Node          | Place Of Safety      | Send Warning Order             | Process Warning Order          |
| 5  | Medical Condition         | Search Node          | Rescue Node          | Monitor Health                 | Provide Medical Assistance     |
| 6  | Task                      | SAR Asset Controller | Search Node          |                                |                                |
| 7  | Task                      | SAR Asset Controller | Rescue Node          |                                |                                |
| 8  | Distress Signal           | Person In Distress   | Search Node          | Send Distress Signal           | Receive Distress Signal        |
| 9  | Distress Signal           | Person In Distress   | Rescue Node          | Send Distress Signal           | Receive Distress Signal        |
| 10 | Distress Signal           | Person In Distress   | Monitoring Node      |                                |                                |
| 11 | Track Info                | Monitoring Node      | Tactical C2 Node     |                                |                                |

- L3 Node Role Interactions table.

| Criteria          |             |                                      |              |                      |                                |                      |                                |                                |
|-------------------|-------------|--------------------------------------|--------------|----------------------|--------------------------------|----------------------|--------------------------------|--------------------------------|
| Scope (optional): |             | Drag elements from the Model Browser |              | Filter:              | Regular Inherited / Aggregated |                      |                                |                                |
| #                 | Exchange ID | Operational Exchange Item            | Sending Role | Sending Node         | Receiving Role                 | Receiving Node       | Producing Operational Activity | Consuming Operational Activity |
| 1                 | OE1         | IE5 Warning Order                    | Searcher     | Search Node          | POS                            | Place Of Safety      | Send Warning Order             | Process Warning Order          |
| 2                 | OE2         | IE8 Medical Condition                | Searcher     | Search Node          | Rescuer                        | Rescue Node          | Monitor Health                 | Provide Medical Assistance     |
| 3                 | OE2         | IE8 Medical Condition                | Searcher     | Search Node          | Rescuer DS                     | Rescue Node          | Monitor Health                 | Provide Medical Assistance     |
| 4                 | OE2         | IE8 Medical Condition                | Searcher     | Search Node          | Rescuer NS                     | Rescue Node          | Monitor Health                 | Provide Medical Assistance     |
| 5                 | OE3         | IE6 Distress Signal                  | Victim       | Person In Distress   | Rescuer                        | Rescue Node          | Send Distress Signal           | Receive Distress Signal        |
| 6                 | OE3         | IE6 Distress Signal                  | Victim       | Person In Distress   | Rescuer DS                     | Rescue Node          | Send Distress Signal           | Receive Distress Signal        |
| 7                 | OE3         | IE6 Distress Signal                  | Victim       | Person In Distress   | Rescuer NS                     | Rescue Node          | Send Distress Signal           | Receive Distress Signal        |
| 8                 | OE4         | IE6 Distress Signal                  | Victim       | Person In Distress   | MN                             | Monitoring Node      |                                |                                |
| 9                 | OE6         | IE3 Track Info                       | MN           | Monitoring Node      | TC2N                           | Tactical C2 Node     |                                |                                |
| 10                | OE7         | IE4 Control Order                    | TC2N         | Tactical C2 Node     | Searcher                       | Search Node          |                                |                                |
| 11                | OE8         | IE2 Request                          | TC2N         | Tactical C2 Node     | SAR AC                         | SAR Asset Controller |                                |                                |
| 12                | OE9         | IE1 Task                             | SAR AC       | SAR Asset Controller | Rescuer                        | Rescue Node          |                                |                                |
| 13                | OE9         | IE1 Task                             | SAR AC       | SAR Asset Controller | Rescuer DS                     | Rescue Node          |                                |                                |
| 14                | OE9         | IE1 Task                             | SAR AC       | SAR Asset Controller | Rescuer NS                     | Rescue Node          |                                |                                |
| 15                | OE10        | IE1 Task                             | SAR AC       | SAR Asset Controller | Searcher                       | Search Node          |                                |                                |
| 16                | OE11        | IE6 Distress Signal                  | Victim       | Person In Distress   | Searcher                       | Search Node          | Send Distress Signal           | Receive Distress Signal        |

- L3 spreadsheet report.

## Related elements

- [Operational Role](#)
- [Operational Exchange](#)
- [Operational Information](#)
- [Natural Resource](#)
- [Operational Activity](#)

## Related procedures

- [Creating L3 Node Interactions table](#)