## Scenario

Purpose: Scenario that describes how the rescue robot operates.

Individual: Operator for Emergency Service

## Scenario:

- 1. The rescue robot is activated from a computer device by the operator.
- 2. The operator input the location where rescue robot is needed.
- 3. The rescue robot drives autonomously to the location.
- 4. A sensor is embedded in the rescue robot to detect changes in travel mode, if it detects sea, it changes to sea travel mode, and it detects road, it also changes back to road travel mode.
- 5. At the location where the rescue robot is needed, there are cameras embedded in the rescue robot. These cameras are used capture the environments, and send the images or video streaming to a remote server, and can be used to analyze the situation of the disaster and the kind of help that can be rendered, in which the operator can then decide to override the autonomous function of the rescue robot to be manually controlled remotely.
- 6. Alternatively, based on the images capture, the rescue robot also has some image processing ability using machine learning and artificial intelligence to process the

moving pictures, and inferred if there are humans who need rescuing, or if delivering first-aid equipment to nearby victims is enough, or life-jackets and other type of rescues.

- 7. After rendering its intended service, the rescue robot drives autonomously back to the initial location.
- 8. Alternatively, the operator can override the autonomous function, and set the location to return to, manually from the remote server.