1.

§ Name: Register camera

§ Pre/Entry-condition

* Camera must be on and broadcasting.

§ Trigger

* The administrator clicks “Register Camera” button.

§ Post/Exit-condition

* A pop-up message appears saying registration successful. Camera information is added to the list of registered camera in the system.

§ Main flow of events – identify all data elements

1. The administrator clicks the “Register Camera” button.
2. A window displays the list of broadcast IDs of cameras.
3. The administrator selects the camera and clicks the “Add” button.

§ Exceptions and alternate actions

§ Special requirements – if any

2.

§ Name: An event is detected by the camera.

§ Pre/Entry-condition

* The camera is registered and broadcasting live to the system.

§ Trigger

* An event occurs in the camera's line of sight.

§ Post/Exit-condition

* The event is uploaded to the web application for the administrator to observe.

§ Main flow of events – identify all data elements

1. An event occurs in the camera's line of sight.
2. The camera detects the occuring event.
3. The system uploads the footage of the event to the web application.

§ Exceptions and alternate actions

* If the event occurs out of the cameras line of sight, the camera will not detect the event.

§ Special requirements – if any

3.

§ Name: The camera automatically classifies an event.

§ Pre/Entry-condition

* An event was detected and uploaded to the web application.

§ Trigger

* The web application receives footage of a detected event.

§ Post/Exit-condition

* The camera has classified the event in the system and updates the learning algorithm.

§ Main flow of events – identify all data elements

1. An event was detected by the camera.
2. The system uploads the footage of the event to the web application.
3. The algorithm classifies the event automatically into one of four categories.

§ Exceptions and alternate actions

* If the footage is of a normal behavior event, the footage is scrapped.

§ Special requirements – if any

4.

§ Name: An alarm is triggered.

§ Pre/Entry-condition

* The administrator monitoring the system receives footage of an event.

§ Trigger

* The administrator clicks the “Notify Bus Driver” button.

§ Post/Exit-condition

* The alarm is triggered inside of the bus.

§ Main flow of events – identify all data elements

1. Footage of an event has been uploaded to the web application.
2. The administrator monitoring the system sees the footage and classifies it as abnormal behavior.
3. The administrator clicks the “Notify Bus Driver” button.
4. The alarm is triggered inside of the bus.

§ Exceptions and alternate actions

§ Special requirements – if any