

1.0 INTRODUCTION

This section introduces the requirement specification document for the Ambulance Dispatch System. It provides the purpose and scope of the system. Any definitions and references are listed in this section as well as an overview of the remaining requirements specification document.

1.1 PURPOSE

This requirements specification document describes the functions and requirements specified for this Ambulance Dispatch System (ADS). This dispatch system is needed to help ensure that the ambulance dispatching company meets all federal mandates about the speed at which an ambulance is dispatched. In order to make this possible, the system greatly decreases the amount of paperwork that must be filed. This system shall also help the company ensure that they are providing an adequate amount of ambulances for each of their service areas by enabling the management to track the status of each ambulance and a log of ambulance activity.

1.2 SCOPE

The ADS shall assist the operators and dispatchers in quickly and efficiently dispatching ambulances to a 911-incident call. This system shall reduce the paperwork that is currently filed for each 911 call, which shall in turn help the company meet the federal mandates. This reduction of paperwork will allow the company to keep costs low. (These mandates state that an ambulance must be dispatched within an average of 3 minutes of a 911-incident call. The ambulance must arrive at the scene of the incident within an average of 11 minutes of its dispatch.) The ADS shall allow operators to input the 911 call information. The system shall assist the operator in determining the uniqueness of calls and assist the dispatcher in locating a nearby ambulance. The system prioritizes calls and allows the dispatcher to update the status of each ambulance. All 911 call information, ambulances dispatches, and ambulance status shall be logged and stored in a central computer database.

Figure 1: Activity Diagram of a 911-Incident Call

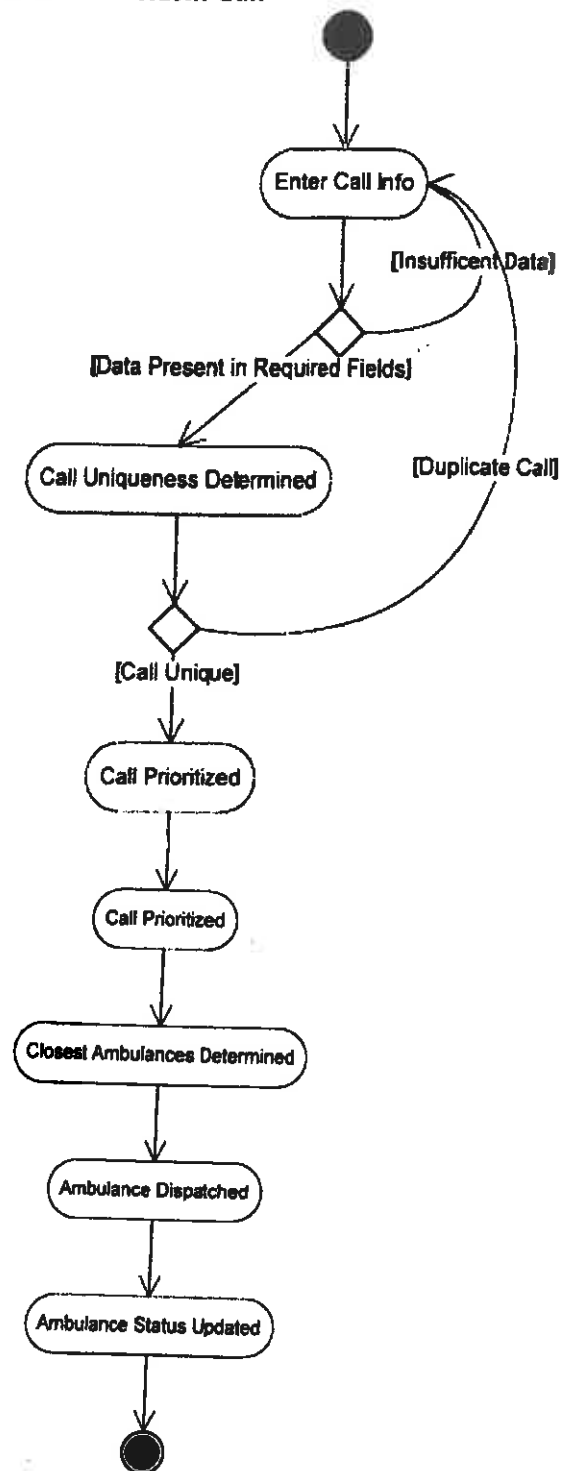
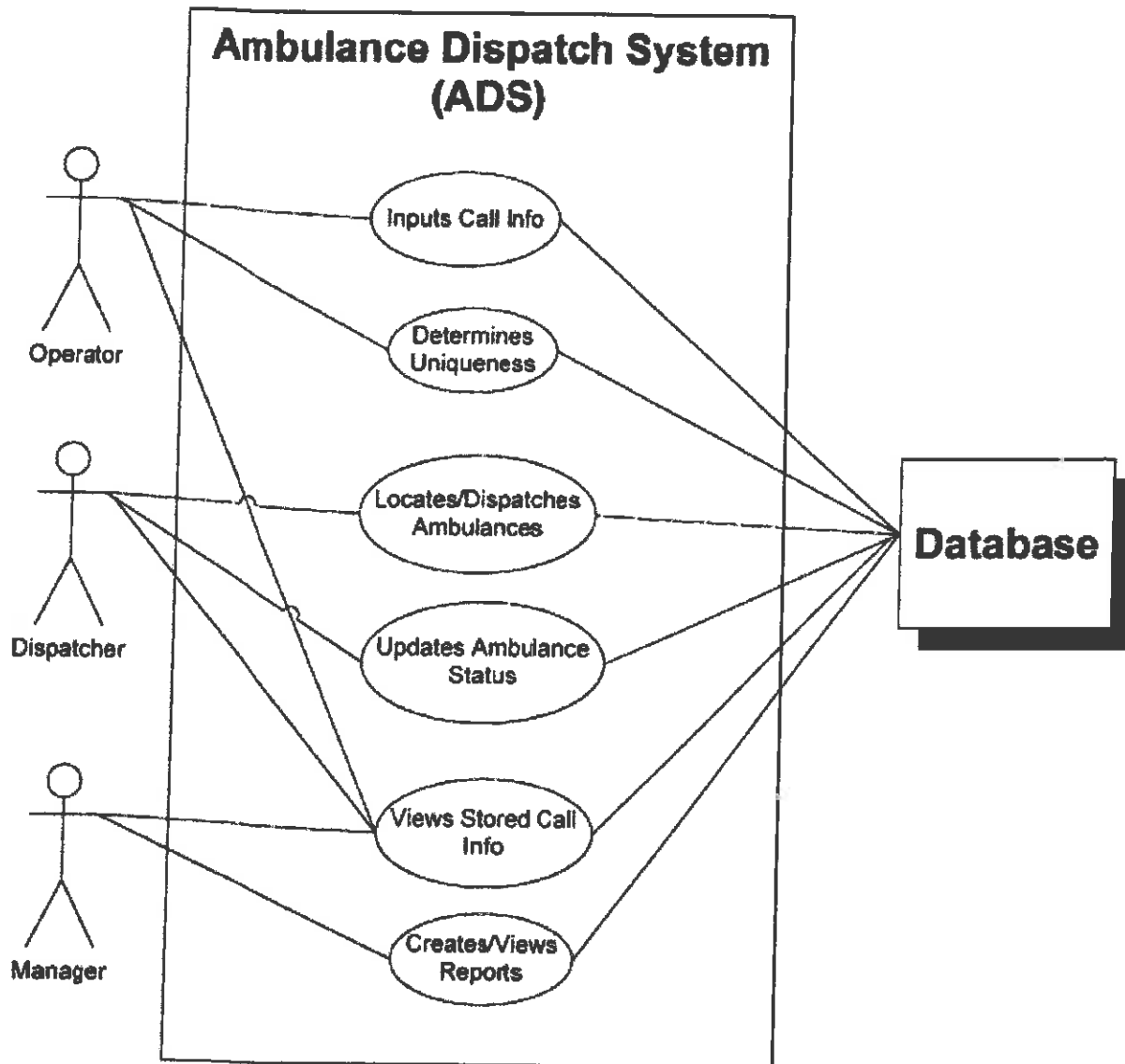


Figure 2: Use Case for Ambulance Dispatch System



5.0 REQUIREMENTS MASTER LIST

This section contains the listing of all requirements for the Ambulance Dispatch System. The list contains unique requirement numbers and names with a short description of each requirement. The following section describes these requirements in full detail.

- REQ 1: Operator Input** – The system shall allow the operator to input information relevant to a 911-incident call.
- REQ 2: Uniqueness of Call** – The system shall help determine the uniqueness of each 911-incident call.
- REQ 3: Prioritize Call** – The system shall prioritize the 911-incident call.
- REQ 4: Locate Available Ambulances** – The system shall find the nearest three Ambulances.
- REQ 5: Ambulance Status Update** – The system shall allow the dispatcher to update the status of each ambulance in the database.
- REQ 6: Ambulance Actual Time Update** - The system shall calculate the actual time it took the ambulance to arrive to the scene and to the hospital.
- REQ 7: Information Storage** – A database shall store all information to ensure quick access and security.
- REQ 8: Management Report** – The systems shall provide a mechanism for displaying results and statistics regarding the ambulance's service.
- REQ 9: Information Retrieval** – Users shall have the ability to access information regarding pervious calls.