Automated Wireless Asset Tracking for Underground Mines

Use Case Specification: Broadcast Text

Version 1.0

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 10/10/14 | 1.0 | Completed use case. | Philip Kurowski |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table of Contents

1. Brief Description 1

2. Participating actor 1

2.1 User 1

2.2 Coordinator 1

3. Entry conditions 1

3.1 User logged in 1

3.2 The TMS is online 1

4. Flow of Events 1

4.1 Start up 1

4.2 Enter message content 1

4.3 Confirm & Send 1

5. Exit Conditions 1

5.1 Coordinator receives message 1

6. Quality requirements 1

6.1 <Quality requirement one> 1

Use Case Specification: Broadcast Text

# Brief Description

A person using the TMS can broadcast a text message to members with an end device. The message is encapsulated and sent through the ZigBee network to the appropriate member.

# Participating actor

## User

The TMS system user.

## Coordinator

The central node of the ZigBee network. The coordinator contains all information of routers in the mine and is able to return their location and end device connections.

# Entry conditions

## User logged in

The user has completed the LogIn use case.

## The TMS is online

The network is active and the TMS server is connected to the coordinator.

# Flow of Events

## Start up

* The user initiates the use case by selecting the Send Text option from the messaging module.

## Enter message content

* The user is presented with an input dialog for a text message and whether or not the message is a broadcast or an alert

## Confirm & Send

* Message content is confirmed
* The message is encapsulated and sent to the coordinator

# Exit Conditions

## Coordinator receives message

The coordinator has received the message packet and proceeds to send it to the appropriate end devices.

# Quality requirements

## <Quality requirement one>