**Abstract:**-

In today’s world, the fishermen faced problem for the past few years is difficulty in identifying our country’s border. The border between two countries. The existing system’s developed for the maritime boundary identification can assist the fishermen and the coastal guards by means of Global positioning system (GPS), Global system of mobile communication (GSM) and also by Zigbee transmitter and receiver. This system fails to notify the message at the mid of the sea when the satellite communication is amputated. To overcome this disadvantage of missed messages here we have designed a device using embedded system by GPS device , a temperature sensor, anemometer and humidity sensors are used to know the current weather report in case of endangered situation. The GPS receiver gives the current location of the boat. The microcontroller compares the current location with the predefined values unless until the border is reached. Once, the border is reached, it makes an alarm through gps itself .Along with this ,cyclone prediction can be done using comparing the previous value of temperature and air flow. By means of this, the fishermen will get help in all aspects and the information will be known to both fishermen and the coastal guards, this leads to easy rescue.

**Keywords- GPS, Wi-Fi sensor, PIC microcontroller, LCD, Internet of Things (IOT).**

INTRODUCTION

In the system we are using the wireless technology to send the message from the boat to fishermen, the position of the boat in the sea using the GPS technology. The system is used to detect the boundary of the two country where they exists. This mainly happens when fisherman crosses border of neighbouring country as they are not aware of the limits in sea. The proposed system uses a GPS receiver which receives signals from the satellite and gives the current position of the boat. The satellite technology used is Low earth orbit, where the connectivity is done without gaps. The microcontroller compares and indicates the fisherman that he has crossed the boundary by a LCD display with a buzzer. This system provides an indication to both fisherman . A report for weather can also be obtained through temperature and humidity sensor. The objective is to determine the actual location of the boat and to know the border limit with the weather report.

EXISTING SYSTEM

At present there are few existing system, in which the complete system moves through GPS, GSM, Zigbee transmitter and receiver. In these technologies, the location can be identified but the mobile communication will be failed due to weak signal at the middle of the sea. The satellite technology used is geostationary orbit, where the single satellite covers an area. This holds good for terrestrial purpose, but at the sea surface the ice bergs will blog the satellite communication. Separate antennas were used for GPS and GSM. This is the major drawback of the already existed systems.

EXISTING SYSTEM DISADVANTAGE

* Only used to point the location of boat.
* Maybe connection failed due to bad weather.
* It cannot predict the weather.
* Used for only one purpose.

PROPOSED SYSTEM ARCHITECTURE

The procedure of this system is the GPS gives the current location of the boat to the microcontroller. The microcontroller compares the position values, display in the LCD, sends to the monitor server. This continues until the border is reached. When the border is reached it makes a buzzing alarm and display that the border is reached. And using Temprature sensor, anemometer and humidity sensor for prediction for cyclone. This helps us in all the circumstances.

PROPOSED SYSTEM ADVANTAGE

* Accurate Gobal Position System for boat.
* It can sense humidity, temperature and air flow.
* It can Predict the bad weather.
* It send alert through voice.
* It is multifunctional process system.

Figure1: Block Diagram

**Audio Playback**

**Lcd monitor**

**Anemometer**

**Gps**

**Temperature**

**sensor**

**Humidity Sensor**

**Rasberry PI**

Hardware Requirement:

* **Anemometer**
* **Humidity Sensor**
* **Temperature** **sensor**
* **Rasberry PI**
* **Gps**
* **Audio Playback**
* **Lcd monitor**

Software Requirement

* Python
* Raspbian os.