



# PREDICTIVE DETECTION OF AUTOMATIC IDENTIFICATION SYSTEM (AIS)

*Innovative technique using a database to improve the detection of automatic identification system (AIS) messages*

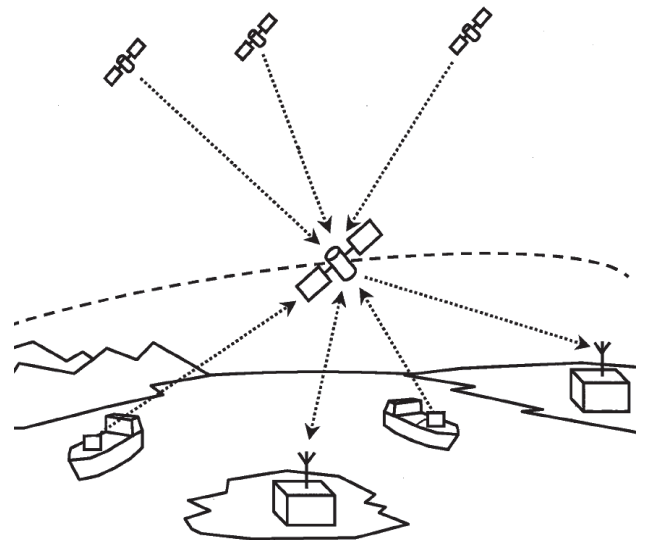
## Technological benefits

### Better detection of AIS signals

Correlation peaks more easily detected  
Smaller Doppler window and fewer collisions  
Doppler shift due to satellite motion taken into consideration

### Easier demodulation

A priori knowledge of at least 25% of the message bits



AIS signal detection device

## Invention overview

System for detecting AIS signals suitable for regional or global surveillance.

Database used to predict, identify and reconstitute signals transmitted by ships already observed.

## Potential applications

### Onboard AIS receivers

Fitted to satellites or aircraft

### Ground stations

Isolated or in networks

## Commercial benefits

### Wide coverage

Regional surveillance with just one detector  
Wide surveillance coverage for current stations

### More efficient detection

Cuts message loss  
Simpler demodulation calculations

**TRL : 3**

*Patented invention, available under license*