COMPASS — A New Method on Marine Fishery Security and Disaster Relief and Rescue

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China has a large number of marine fishery ships, it’s about 280 thousand.

“secure and orderly production and sustainable development of the fishery industry” is very important.
Administration of marine fishery ship is currently facing the following issues:

- How to get accurate information about the situation and distribution of fishing vessels?
Application Requirements-Fishery (3)

- How to get the positions of vessel in distress and know the type of the distress timely?
- How to organize effective search and rescue or mutual rescue among the vessels timely?
Application Requirements-Fishery (4)

- How to implement effective administration and lower costs of law enforcement
- How to release the weather forecast and sea conditions forecast to the vessels?
  (For example: the typhoon’s path etc.)
How to help the fishermen’s families know about the situations and positions of them on the sea in case of bad sea conditions? (typhoon etc.)
China is one of the most seriously natural disaster-hit countries in the world, and the characteristics are as follows:

- numerous types of natural disasters;
- high frequency, strong destructive power and serious losses.
- Just like: Earthquake, Snowstorm, Floods, etc.
How to provide disaster warning in normal state?

How to report disaster information timely when a natural disaster is encountered?

How to maintain uninterrupted data communication at disaster area, when land communication system and power grid are destroyed?
  - How to command the rescue teams timely?
  - How to monitor disaster relief processes in real-time?
  - How to optimize allocation of disaster relief resources?
  - How to coordinate multi-level command center when all kinds of rescue forces are mobilized?
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What is Compass and What is BDStar?
COMPASS Navigation Demonstration System
- set up and became operational in 2003.
- With the implementation of COMPASS system, its coverage of service will be extend globally

The system Specialty
- integrate PNT service and **Short Message** service into one system.
- suitable for the LBS applications based on Satellite
BDStar is:

- the major professional company which is engaged in satellite navigation and positioning industry in China
- one of the earliest COMPASS Service Providers and cultivate the largest COMPASS user group in fishery application.
- On 13th, August, 2007, BDStar IPO in Shenzhen Stock Exchange Market (Shares code: 002151)
The main business of BDStar:

- **Satellite navigation and positioning products**

- **Location-based information system**

- **Location-based information service**
LBS based on Compass (1)

The model can be copied
COMPASS TIANGSHU Integrated Information Service Network:

- two central nodes and a number of sub nodes
- It provides COMPASS users with:
  - Monitoring service to the compass group users
  - information interchange service –Compass and MCS
  - location-based value-added information service
    - Location based information broadcast (for example weather, security caution etc.)
    - accurate advertising
    - The Guide for The fish collection vessels and Fishing ship finding each other
    - Illegal Warning
    - Emergency Short Message for Rescue
    - etc.
COMPASS TIANJI-series Group user center equipment:
- real-time location information of mobile targets,
- Regional Management
- emergency alarm handling,
- GIS-based integrated processing,
- sharing, monitoring the status of targets and dispatching the command to targets.
- COMPASS TIANXUAN-series user terminals
  - for fishery vessels (BDG-MF-series),
  - rescue teams,
  - danger transport fleets,
  - disaster relief personnel and disaster relief aircraft
  - Connect with sensor to collect information remotely and report automatically
- to provide the services include PNT, short message communicated with cell phone system, Regional Management, command-on-the-move and disaster reporting.
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Summary

Application Promotion

LBS based on Compass

What is Compass and What is BDStar?

Fishing Vessel Security and Disaster relief Application Requirements
Marine Fishery Ship security and integrated information service system

- As a result of the efforts of BDStar over the years, COMPASS is providing security support and information service for a large number of fishing vessels in the Sea of China.
- Over the past two years, the system has saved above 300 fishermen’s lives and 20 fishing vessels.
Disaster relief and integrated information service system

- COMPASS in the fighting against Wenchuan earthquake:
  - COMPASS TIANJI group user center equipment was used to command the rescue teams.
  - Many type of COMPASS terminals were widely used by professional disaster relief teams, civil relief organization and Journalists in the Disaster Areas.
COMPASS Navigation System integrates PNT and SMS service.

It is suitable to provide LBS information service on the sea and Remote areas, where the mobile communication system is not available.

In applications, COMPASS satellites have made outstanding contributions to the fields of fishery security and disaster relief. It has attained enormous social and economic benefits as a new technical approach.

With further development of the COMPASS System, COMPASS will provide high-quality fundamental and value-added service to more and more fields of civil applications.
Thanks For your attention!

Beijing BDStar Navigation Co., Ltd