



International Committee on
Global Navigation Satellite Systems

Solution of **Internet of Ship** based on BeiDou System

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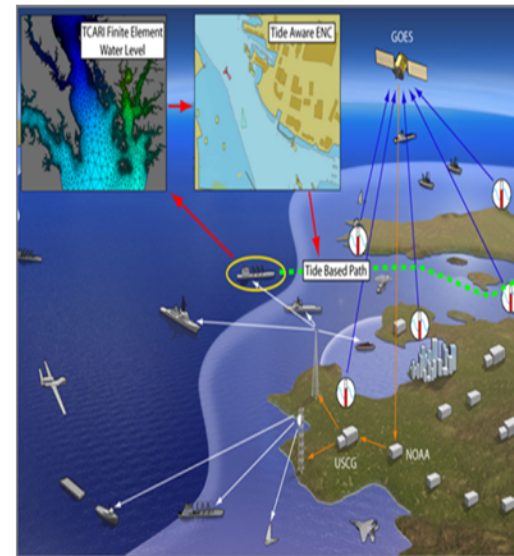
The concept of Internet of Ship

Internet of Things

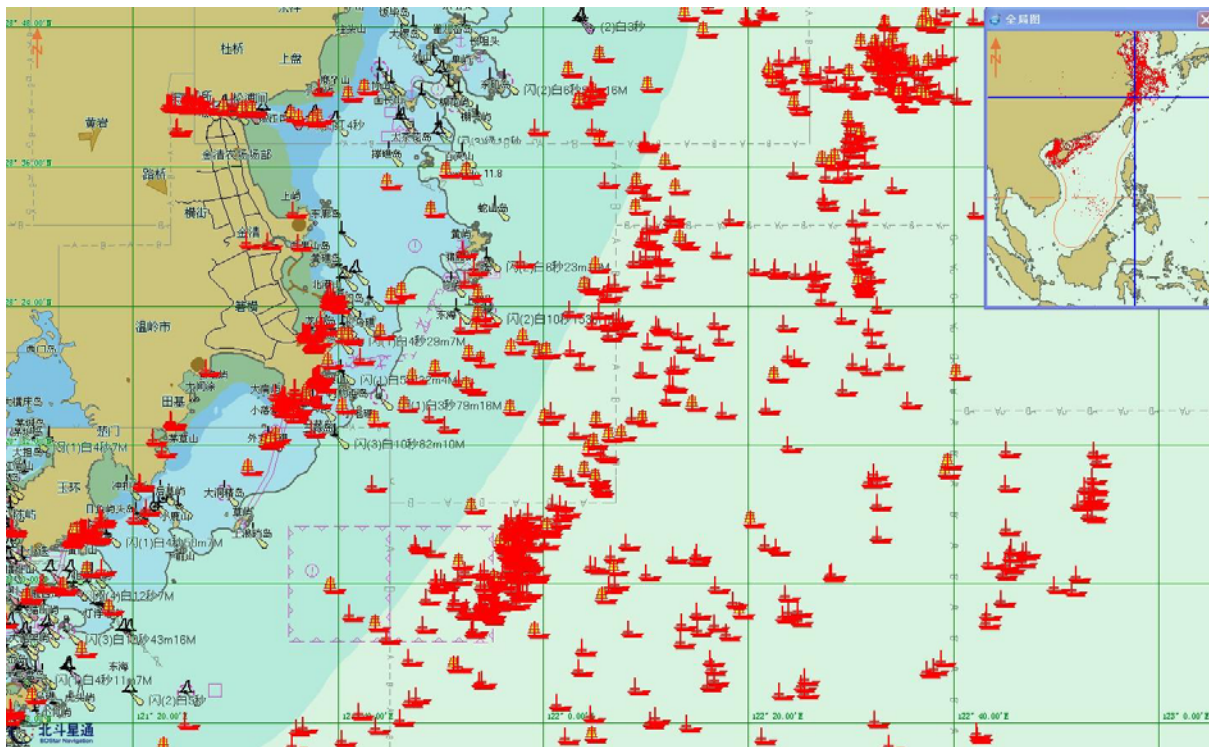
Refer to uniquely identifiable objects (things) and their virtual representations in an Internet-like structure.

Internet of Ship

Through network or Internet, a management, control and operation integrated system, is used for ship position monitoring, dispatching, safety service, E-commerce and information service.



Requirements for ship supervision

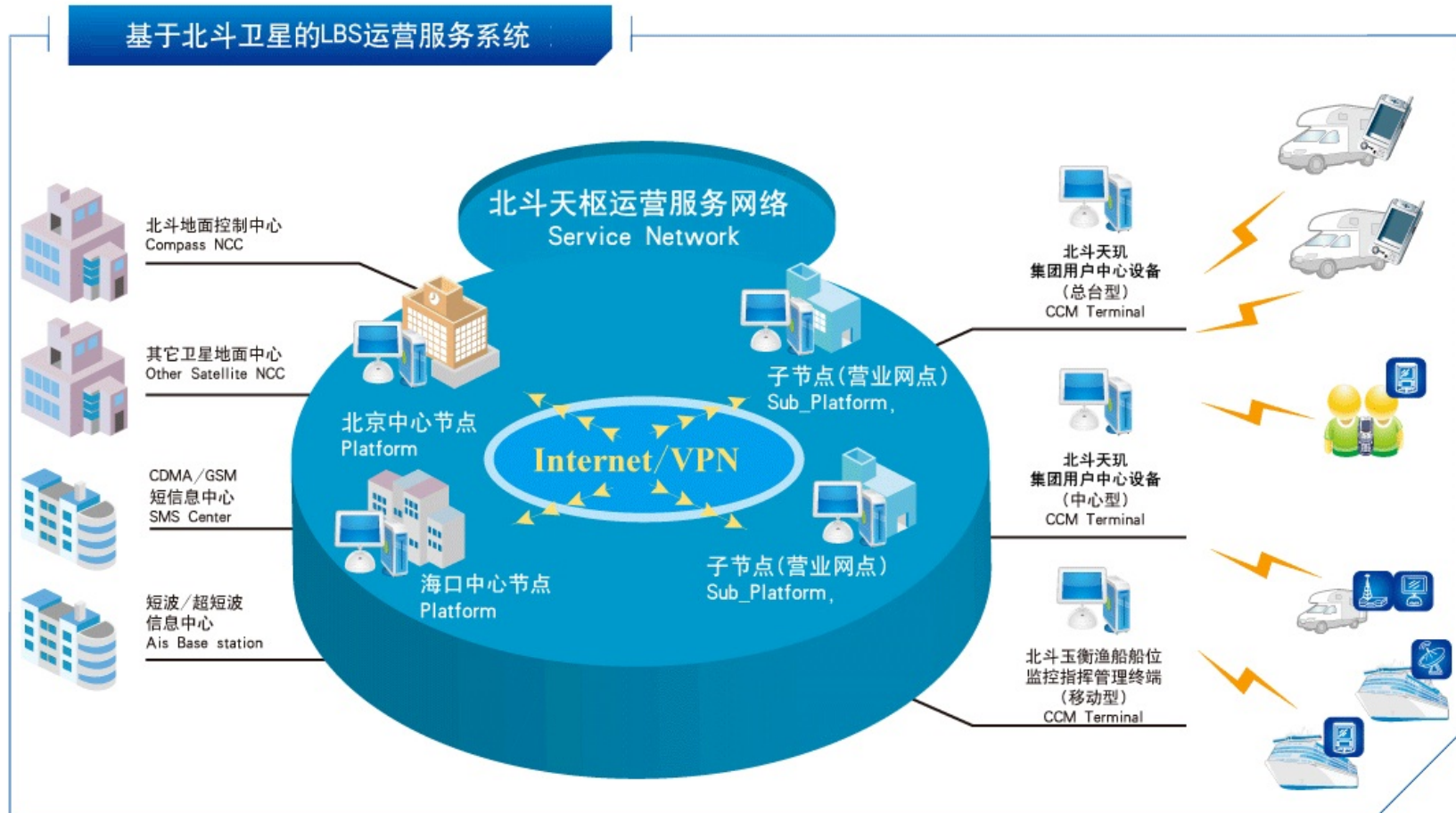


Ocean fishery is a high-risk industry and offshore fishing especially.

The traditional communication means cannot satisfy the requirements.

GPS can be used for navigation, BeiDou provides a brand-new manner with amazing development prospect.

Framework of BeiDou IOS



Entire Industry Chain for BeiDou IOS – Chip & Modules



Nebulas
Multi-system multi-frequency
high performance SoC chip



Entire Industry Chain for BeiDou IOS – Terminals



handheld monitor terminals



Inland-river in-ship terminal



CDMA BeiDou/GNSS ship-borne terminal



BeiDou/GNSS dumb terminal



BeiDou/GNSS in-ship terminal



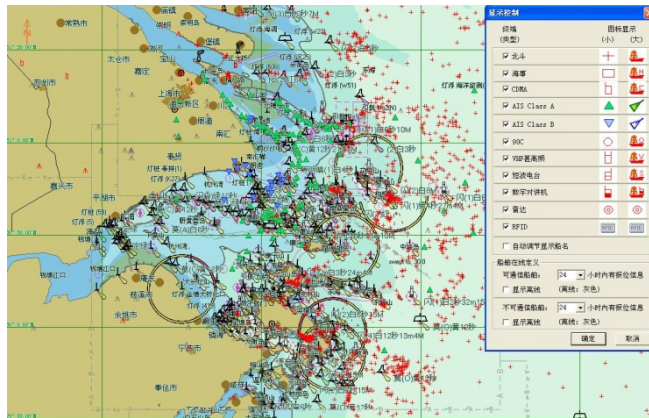
BeiDou/GNSS mobile ship-borne director

Land & Inland river

Offshore

Offshore and far-sea

Entire Industry Chain for BeiDou IOS – Services



- ❑ Information management
- ❑ Ship movement information inquiry
- ❑ Emergency command and management
- ❑ Auxiliary policy information management
- ❑ Fishery trade information system (future expansion)

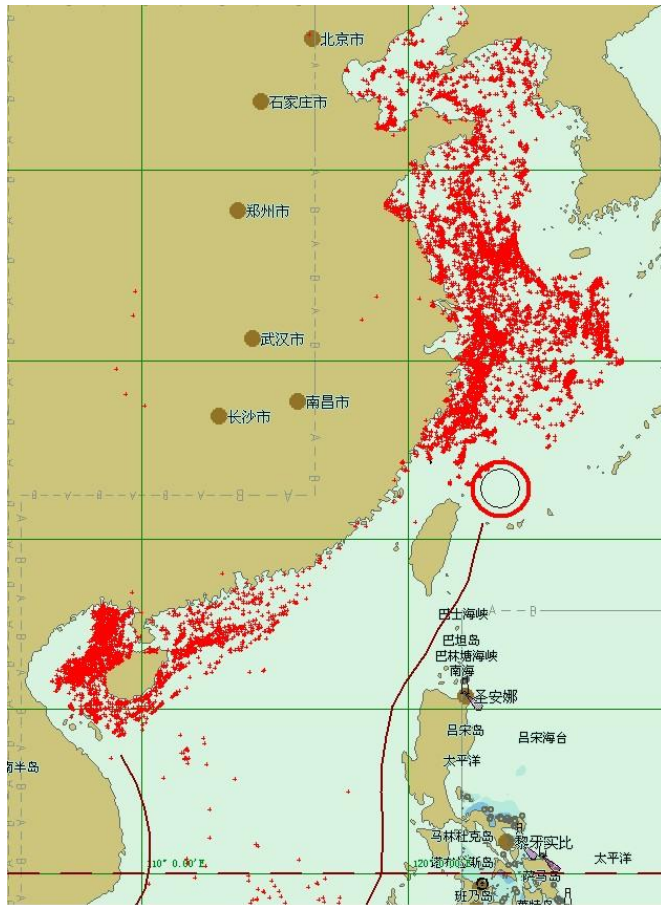


Beijing



Haikou

Applications of BeiDou IOS



More than **40,000** customers

Over 100 operation service branches

Provide BeiDou information service for the local ships

Applications of BeiDou IOS

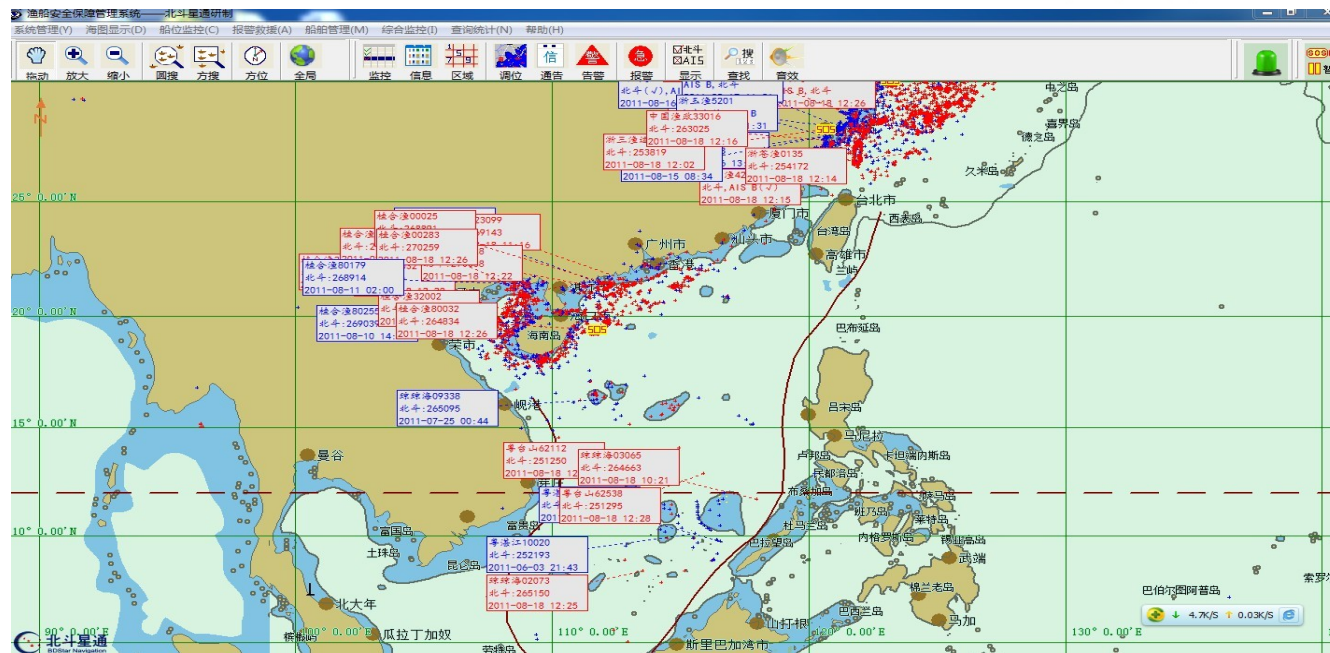


BeiDou IOS has a profound and far reaching significance for fishery safety production and international management, by the fishery department's and fisherman's praise.

Key Roles of BeiDou IOS

- ❑ **Improve scientificity and validity for fishery boats' management, by monitoring fishery boats at any time, and issuing meteorological information and navigation orders to boats directly.**
- ❑ **Strengthen emergency communication abilities by satellite communication function provided by BeiDou system, while the traditional means of communication cannot satisfy the requirements.**
- ❑ **Solve the difficult problem of remote communication for fisherman and their families through BeiDou operation center by realizing interoperability between BeiDou system and mobile phone.**
- ❑ **Explore fishery trade service in the future to maximize the benefits of BeiDou IOS**

Applications of BeiDou IOS



The operation center received more than 200 emergency alarms per year after BeiDou IOS was setup. The fisher losses are extremely reduced by rescue in time.

In 2007, Boat Taisha-2588 got stranded in Dongsha Islands and issued an urgent alarm signal. Through BeiDou IOS, the fishery department dispatches nearest Boat Taisha-2854 to rescue. Finally, the five crew members on board were all saved.

Applications of BeiDou IOS

- **Fishery application of BeiDou IOS improves the remote communication and fishery emergency response capabilities, provides a good groundwork for the exploration of new fishing boats management model.**
- **BeiDou IOS has been comprehensively implemented in the field of ocean fishery, and will be expanded to the inland field of river and lake fishery.**



Vision of international applications



BeiDou IOS is one typical representative of multi-system integration application.

Based on successful & mature applications in China, BeiDou IOS will be widely applied in the world.



Thank you!

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