



KOREAN FISHERIES MONITORING SYSTEM

# ILLEGAL FISHING



**INMARSAT GLOBAL GOVERNMENT**  
**COMMUNICATIONS MADE CERTAIN**

This case study is over 5 years old. Whilst the specific hardware mentioned may have been superseded with more advanced models, it proves the longevity and capability of Inmarsat's L-band services. With proven technology and global coverage, you can rely on our services for [#communicationsmadecertain](#)





"Inmarsat provides global coverage and enables us to track Korean distant water fishing vessels operating even in Polar Regions. Being a communication platform, it also provides a two-way digital communications and texting service. This consequently stimulated the development of an electronic reporting system, allowing the (Korean) government to analyse catch data for stock assessment. Having a Korean satellite service provider was also beneficial for us to address maintenance issues by taking immediate steps."  
Taehi Ri,  
Director of the FMC

# IUU FISHING WAS DAMAGING THE REPUBLIC OF KOREA'S INTERNATIONAL REPUTATION.

The US identified Korea as having vessels engaged in IUU fishing in the CCMLAR area in January 2013.

The EU also yellow-carded Korea on November 26 2013 for illegal activities by some Korean-flagged fishing vessels in West African waters, and the non-existence of a monitoring system.

Korea needed to take serious actions in the fight against IUU fishing so as to avoid a negative impact on fisheries exports as well as to influence the fundamentals of Korea's distant water fisheries industry.

The Ministry of Oceans and Fisheries has management responsibility for this issue. The Fisheries Monitoring Center (FMC), as an affiliated government agency, conducts MCS (Monitoring, Control, and Surveillance) activities on Korean distant water fishing vessels.

Before the monitoring center satellite solution was implemented, specific areas were monitored by a system that did not function optimally because of maintenance difficulties. This was compounded by the government

being unable to monitor or control IUU fishing vessels efficiently due to the absence of dedicated personnel to operate such a system. Korean distant water vessels were using three different satellite units, i.e. Argos, Iridium and Inmarsat C. To standardise the system the government worked with Inmarsat partner KT Sat to distribute Inmarsat's IsatData Pro (IDP) units to vessels with no on-board Vessel Monitoring System (VMS)" within a short period of time, thus facilitating the operation of the FMC.





## THE ELECTRONIC REPORTING SYSTEM

Korean distant water fishing vessels used to transmit their positions by using one of the three different satellite systems (Argos, Iridium, Inmarsat). Since the Electronic Reporting System (ERS) was implemented in September 2015, all distant water fishing vessels have been required to transmit positions as well as logbook entries through IDP, a solution that is capable of two-way satellite communication.

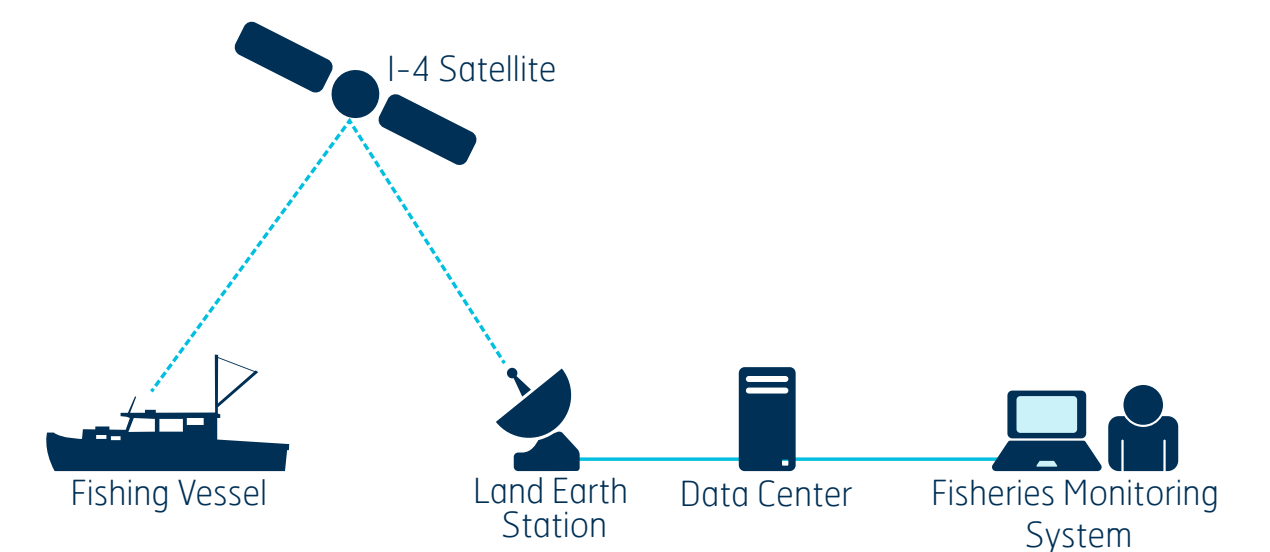
At present, 230 distant water fishing vessels and 70 offshore squid jigging vessels are fitted with the units.

Inmarsat's IsatData Pro service provides global satellite network coverage and data transmission to track and monitor Korean fishing vessels across the world.

## FISHERIES MONITORING SYSTEM (FMS)

The Fisheries Monitoring System (FMS) is designed to receive VMS messages from all satellite systems on an hourly basis. When necessary, the frequency can be reduced down to one minute, enabling monitoring agents to perform more targeted monitoring.

The FMC conducts routine monitoring of vessel tracks and their movement. Upon detection of any suspicious behaviour, the FMS issues automatic alerts so that monitoring agents can give direct instructions to vessels and vessels operators.





# ISATDATA PRO

**IsatData Pro is a global satellite data service designed for two way text and data communications with your assets, anywhere, anytime.**

IsatData Pro increases business efficiency, lowers operations costs and enables compliance with government regulations. Applications include transferring electronic documents and vessel telemetry information, text-messaging remote workers and maintaining up-to-date captain's logs and many more.

The IsatData Pro service is designed for mission-critical applications. All messages are delivered within seconds, making IsatData Pro ideal for sending information to people operating in high-risk areas, reporting alarm conditions and retrieving logs from remote equipment during an emergency.

## SMART DATA TERMINALS

IsatData Pro satellite service provides a choice of field-ready terminals or embedding the modem (IDP-100) into existing systems. Within the terminal family of products, customers can choose between terminals designed for land-based (IDP-680) or maritime (IDP-690) applications.

## ISATDATA PRO HARDWARE FEATURES

- Integrated GPS for location-based services

- Environmentally-sealed enclosure for outdoor installations
- Low-power modes for battery-powered applications
- Peripheral interfaces for connecting to analog, digital and serial devices
- Serial interfaces for connectivity to RS485/J1708 and Modbus interfaces
- Programming capability and user tools for quick customization to meet business needs

## APPLICATIONS

- Send electronic documents including logistics, forms and billing signatures
- Text-message captains and remote teams
- Collect and send logs required to meet transportation and government regulations
- Collect and transmit telemetry information from vehicles and heavy equipment
- Download report logs from environmental data logging equipment
- Send pressure, volume and other sensor information

- from remote well sites
- Aggregate, monitor and communicate information from smart grid sensors in near real-time

## KEY BENEFITS

- High messaging capability
- Send and receive more data to allow better visibility of business operations and risk management
- Communicate information to remote workers and assets where previously not affordable or available

## BEST VALUE

- > Equip fleets and asset groups of all sizes with competitive hardware and airtime pricing
- > Accurately budget communication costs without roaming charges

## ROBUST AND RELIABLE SERVICE

- > Receive notification of events within seconds
- > Install customisable, environmentally-sealed terminals anywhere, even in harsh environments

IDP 680



IDP 690



IDP 800







**\$6 BILLION**  
ESTIMATED GLOBAL COST  
OF ILLEGAL FISHING

FISH STOCKS HAVE SEEN A  
**90%**  
DECREASE IN THE PAST  
**60 YEARS**

**27 MILLION**  
**TONNES**  
OF UNWANTED MARINE LIFE  
ARE DUMPED ANNUALLY

**"We are glad that we could play a role in establishing the Korean Fisheries Monitoring System. We also are very happy to deliver our valued maritime satellite solution to our Government. The Korean Government was pleased with the service as it increased safety levels of domestic vessels and their crew, and also eliminated many international disputes by complying with the IUU guidelines."**

**Chris Kim**  
Business Manager - Maritime Service Team  
Satellite Service Division  
KT Sat





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