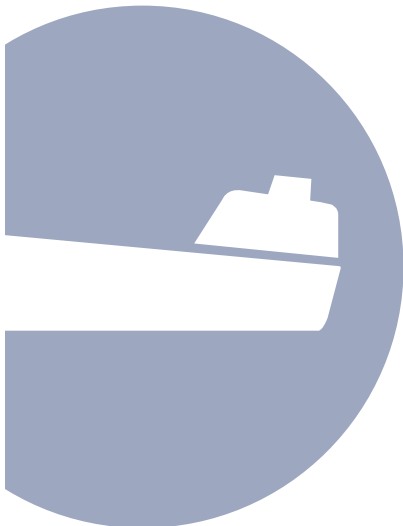




Long-Range Identification and Tracking (LRIT)



A testing time for maritime security

The deadline is approaching fast for vessels to implement the new IMO regulations being introduced at the end of 2008. Inmarsat's general manager of safety services, Brian Mullan, reviews the purpose and requirements of the LRIT, and warns against leaving compliance until the last minute.



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Ever since before September 11, 2001, when the World Trade Centre in New York was attacked by terrorists, significant attention has been focused on the likelihood of a major maritime asset being attacked.



Aftermath of the attack on the USS Cole in 2000, which claimed the lives of 17 sailors. (Photo: Rex features)

These concerns were firmly founded on the incident where the *USS Cole* was bombed on October 12, 2000.

What originally started as concerns turned quickly to fears when, almost exactly one year after the September 11 attacks on the World Trade Centre, the tanker *Limburg* was attacked in a similar fashion to the *USS Cole*, on October 6, 2002.

Sharp focus on maritime security led swiftly to The International Maritime Organisation (IMO) holding a Safety of Life at Sea (SOLAS) Conference in December 2002. From this conference came the framework that produced the IMO International Ship and Port Facility Security (ISPS) Code.

Within the ISPS Code, Regulation 6 mandated the requirements for ship's security alert systems (SSAS) which were introduced in 2004. At the same time, Regulation 10 called for the early implementation of Long-range Identification and Tracking (LRIT) of ships, as a matter of urgency.

Since that time there have been intensive discussions at many IMO meetings. The result is that LRIT-specific IMO Resolutions were passed in May 2006, giving regulatory effect to the introduction of LRIT.

Implementation date

The date for LRIT to begin was set at 31 December, 2008. Despite some calls for delay, the IMO has remained resolute in maintaining the start date for LRIT and the US has already passed a Rule Making that is based upon the agreed date.

This means that any ship, wishing to trade with the United States after 31 December, 2008, will have to meet the functional requirements of LRIT.

The purpose of LRIT is to increase maritime domain awareness and to improve maritime security. In simple terms, ships that will be subject to the requirements of LRIT will have to ensure that they comply in time.

Although the letter of the IMO regulations allow ships until the time of their first Safety Radio Survey after 31 December, 2008, to comply, the reality is likely to be that many must comply from 31 December, 2008.

At present, many people are asking: "What do we need to do, to comply?"

Inmarsat has taken part in every LRIT meeting and can provide here a brief analysis of what does need to be done – and done quickly – by the various parties that will be involved in LRIT.

Flag States

Flag States first need to decide on the Data Centre to which their ships must report. This can be a national data centre (NDC) in their own country or hosted on their behalf by one of several commercial entities able to provide this service.

If the Flag State decides that it does not want to have its own NDC, then it must nominate one of several Regional or Co-operative Data Centres (RDC/CDC) that are being established.

Once the Flag State has decided, it must advise all the ships flying its flag the Data Centre which they will be reporting to.

The next stage is for the Flag State to select an LRIT Application Service Provider (ASP) to test all the ships for LRIT compliance. Any ships whose equipment fails the compliance testing must either upgrade or replace existing, or install new equipment for LRIT.

The equipment to be used for LRIT includes Inmarsat C or Mini C and Isat M2M, although approval of the specific type of equipment for LRIT remains at the discretion of the National Administration of the Flag State. The majority of ships that have recent Inmarsat equipment are expected to be able to comply without change.

Application Service Providers

ASPs will sign agreements initially with ship owners, to enable testing for LRIT compliance to be carried out on all their ships. Tests are then carried out and any non-compliant ships are advised, so that they can be brought into compliance before the LRIT deadline.

The next stage is for ASPs to sign agreements with those Flag States for whom they will handle all LRIT reporting. Ships do not pay to transmit the LRIT data reports - these costs are covered by the users of the LRIT system. However, ship owners are responsible for any costs associated with bringing their ships into compliance.

It is expected that Flag States will either issue, or authorise ASPs to issue on their behalf, the necessary certificate of compliance with LRIT requirements. Flag States can track at any time all ships flying their flag. Flag States can track their own ships - anywhere, anytime.

Port States

Port States, to which ships have given prior notification of arrival, are entitled to track those ships en route to the ports. The US, for example, requires 96 hours prior notice of arrival.

Coastal States

Coastal States can track all ships passing within 1,000 nautical miles of their coasts, even if the ships concerned do not intend to call at any port within the Coastal States.

Current LRIT activities

The IMO will provide a Data Distribution Plan (DDP), which governs the distribution of LRIT data, in order to ensure that the data goes only to those States entitled to receive it.

The United States is hosting, on an interim and temporary basis for at least the first two years of LRIT operation, the International Data Exchange (IDE). The IDE is the hub through which LRIT data will flow between the various users of the system.

Full LRIT system testing, involving some ships, ASPs, Data Centres, the IDE and DDP, is commencing on 1 July, 2008. These tests are aimed at proving the overall system and providing confidence that everything will work as planned from the start date of 31 December, 2008.

Co-ordination of the LRIT System

The IMO appointed the International Mobile Satellite Organisation (IMSO) as the LRIT Co-ordinator. IMSO will provide initial and ongoing review and audit of the entire LRIT system, to ensure smooth operation, proper data security and fair charging between the elements of LRIT.

IMSO will be able to provide, to any Member State requesting it, advice and assistance on setting up the LRIT system. IMSO is also the body that oversees Inmarsat's provision of its public service obligations for the Global Maritime Distress and Safety System (GMDSS) and reports annually to the IMO.

There are a number of IMO Member States that have yet to declare their plans for Data Centres and indicate to what extent they expect to purchase LRIT data. This gives rise to some degree of uncertainty over the total amount of LRIT data that will be bought and therefore on the amount of cash that will flow. The role of IMSO is vital, yet how full funding will be provided for all of its LRIT activities remains unclear. It is essential that all elements of the LRIT system remain financially viable.

Next steps

The IMO has planned for a number of ad hoc meetings on LRIT within the next few months, with the express purpose of ensuring that LRIT starts smoothly and on time.

Ship owners now need to ensure that the equipment on their ships, which they intend to use to meet the regulatory requirements of LRIT, will comply.

This can be done by reaching agreement with any of the LRIT ASPs to begin testing without delay. There will undoubtedly be some equipment that does need to be changed. Given the well-publicised global shortages of installation engineers, leaving it to the last minute is definitely NOT an option.



Attacked: the French registered Limberg in 2002