

## LRIT FACTS FOR SHIPOWNERS

The SOLAS V/19-1 Long Range Identification and Tracking (LRIT) regulation is now in force and has a compliance date of 31 December 2008.

The regulation applies to ships engaged on international voyages, including all passenger ships, cargo ships of 300 gross tonnes and above and Mobile Offshore Drilling Units.

Compliance to LRIT is important. Some Governments have indicated that they may not grant entry to their territorial waters, or to their ports, for vessels that do not comply with LRIT.

For full details see [www.lrit.com](http://www.lrit.com)

### **Who is responsible for what**

It is the responsibility of the Maritime Administrations/Flags to implement LRIT.

All Flags are in the process of setting up their LRIT Data Centres, appointing their LRIT Data Centre Administrator and LRIT Application Service Providers (ASPs).

Different Flags may adopt slightly different LRIT implementation strategies and so each Flag will tell the owner of vessels under their flag what they must do to comply with LRIT.

### **What ship operators (owners and managers) must do**

All the ship operator has to do is provide shipborne equipment which complies with the LRIT regulation, have it conformance tested and obtain a test certificate.

To ensure that all ships' LRIT terminals actually work in January 2009, every terminal allocated for LRIT must undergo a LRIT Conformance Testing (LRIT-CT) during the next six months. The testing programme will give ship operators time to replace or upgrade any equipment that fails the test.

All shipborne LRIT equipment must be tested and certified by a Recognised Testing ASP or an Authorised Testing ASP appointed by your Flag.

Authorised Testing ASPs will also, on behalf of the Flag, be able to issue Conformance Test Reports (Test Certificates) for terminals that pass the test. Test Certificates for LRIT terminals will be required for radio surveys and inspection from 31 December 2008.

You should arrange to test your equipment as soon as possible.

### **What systems and equipment will be used for LRIT**

Inmarsat C, which includes mini-C, will be the primary system used for LRIT as it is a reliable, proven system and the majority of ships required to comply with the regulation are already fitted with LRIT compatible Inmarsat C GMDSS or mini-C equipment. Therefore, most owners will not have to invest in new equipment – which was one of the IMO's goals when designing the LRIT regulation.

Currently the only system and equipment type which satisfies all the conformance requirements of the LRIT regulation is Inmarsat C/mini-C.

Ship operators should not fit any type of equipment for LRIT compliance other than Inmarsat C/mini-C, and should be guided only by their Flag and by their Flag's Authorised Testing ASP's on suitable equipment.

Other systems will be developed for LRIT reporting in the future, e.g. a system using low earth orbit satellites will be required for Sea Area A4 coverage.

### **How Pole Star can help you**

We understand the LRIT system and what is required. We attend and contribute to the relevant IMO COMSAR, NAV, MSC, Engineering and Working Group meetings. Pole Star is an LRIT Data Centre Administrator and an LRIT ASP to a number of Flag Administrations already. We work with all the major satellite equipment manufacturers, communications service providers, land earth station operators, Inmarsat and other satellite communication network providers to ensure that the LRIT system works end-to-end.

We have provided detailed information for shipowners, operators, Flag Administrations and other interested parties on [www.lrit.com](http://www.lrit.com).

We are an Authorised Testing ASP appointed by Flags to perform LRIT Conformance Testing on their behalf. The testing service will be available from Pole Star from July 2008. Testing services can be booked directly with Pole Star or via our extensive network of distributors: see [www.lrit.com](http://www.lrit.com).

Pole Star is authorised to issue the Conformance Test Reports (Test Certificates) required for radio surveys.

We are able to supply LRIT compliant, pre-configured, 'plug-and-play', mini-C equipment if you have an urgent need for a LRIT-compliant-terminal.

### **Technical information for Superintendents, CSOs, DPAs, IT Managers and Ship Managers**

#### **The regulation in detail**

For full details see [www.lrit.com](http://www.lrit.com). You can download the complete IMO LRIT document library including the Regulation, Performance Standards and associated MSC Resolutions and Circulars, our Marine Notices and other detailed technical information.

#### **Equipment testing & certification**

The Flags are in the process of setting up their LRIT Data Centres, appointing LRIT Data Centre Administrators and LRIT Application Service Providers (ASPs). However, you do not have to wait until your Flag's Data Centre is in place to start your LRIT Conformance Testing. The testing can start from July 2008.

Most owners and operators want to use one company to test their whole fleet and not have to use a different Testing ASP for their vessels which are flying different Flags. Pole Star has Authorised Testing ASP status from most major Flags and therefore we can test multi-flagged fleets as one process.

Pole Star has requested Authorised Testing ASP status from all Flag Administrations. For a full current list of Flags that have already appointed Pole Star as an

Authorised Testing ASP please refer to [www.lrit.com](http://www.lrit.com). If you have a vessel in your fleet that is flagged to an administration that has not yet granted Authorised Testing ASP status to Pole Star you may want to ask that Flag Administration to speed up their authorisation process.

Testing services can be booked on-line directly with Pole Star or via our network of distributors.

Pole Star itself is the body that must issue the LRIT Conformance Test Reports (Test Certificates) on behalf of the Flag. An on-line process for requesting Test Certificates from Pole Star will be available in July.

We expect all the conformance testing systems to be at full capacity later in the year. We advise that you should arrange to test your equipment as soon as possible from July.

### **LRIT systems, communication networks and equipment**

Currently the only system and equipment which satisfies all the conformance requirements of the LRIT regulation is Inmarsat C.

Ship operators should not fit any type of equipment other than Inmarsat C for LRIT purposes, and should be guided only by their Flag and their Flag's Authorised Testing ASPs on suitable equipment. We note that some owners, relying only on assurances from hardware suppliers, have purchased non-Inmarsat C equipment for LRIT purposes, only to discover that the equipment is not compliant.

Inmarsat C GMDSS and mini-C stand-alone units are the most suitable shipboard equipment to use for LRIT. However, actual performance and LRIT conformance depends on the model and software version that the unit is running and other factors. See [www.lrit.com](http://www.lrit.com) for an up to date LRIT hardware compatibility list.

Many SSAS units based on mini-C transceivers may be technically compatible for LRIT. However, not all SSAS installations do conform to the test requirements. mini-C based SSAS units should be tested early to establish their LRIT conformance capability. Pole Star has discovered a number of mini-C based SSAS transceivers that do not comply because of the

installation method, interfaces and programming required for their SSAS functionality.

SSAS units based on D+ technology are not suitable for LRIT as they can not be remotely controlled and programmed by an LRIT ASP

Pole Star's general advice to owners is that SSAS equipment, with its prime purpose being that of security, should not be used for other purposes. Multi-use transceivers are intrinsically not as reliable as stand-alone units and the purpose specific GMDSS equipment.

### **Future developments**

Other hardware and communication systems will be developed for LRIT reporting in the future. Pole Star is investigating low earth orbit satellite systems (an LRIT solution for Sea Area A4); VHF; AIS; MF, HF, utilizing Fleet Broadband, Isat M2M and D+ technology, amongst others.

However, because LRIT equipment must be able to be remotely controlled and programmed by the Flag's LRIT ASP the system used must be an 'open system', and there must be no 3rd party controlling the LRIT programming of the shipboard equipment other than the LRIT ASP. None of these alternative technologies and networks currently meet the requirements.

#### **Europe, Middle East, Africa, USA**

Tel +44 (0)20 7313 7402

Fax +44 (0)20 7313 7401

Email [lrit@polestarglobal.com](mailto:lrit@polestarglobal.com)

#### **Asia Pacific**

Tel +852 2520 0951

Fax +852 2520 0952

Email [lrit@polestarglobal.com](mailto:lrit@polestarglobal.com)