

Operation and Maintenance of the IDE

Service operation and maintenance, and other related activities

Submitted by EMSA

<i>Summary</i>	This paper reports the service status of the International LRIT Data Exchange hosted by EMSA.
<i>Action to be taken</i>	As per paragraph 3.
<i>Related documents</i>	Resolution MSC.297(87)

1. BACKGROUND INFORMATION

Resolution MSC.297(87) tasked EMSA with the set-up, operation, and maintenance of the International LRIT Data Exchange (LRIT IDE) within the LRIT system.

This document contains information on the performance and maintenance activities relating to the LRIT IDE in the PRODUCTION environment during 2014.

2. PERFORMANCE AND MAINTENANCE ACTIVITIES

2.1. Availability

The LRIT IDE PROD reached an availability of 99.90%. Figure 1 presents the number of LRIT positions reports per each month of 2014:

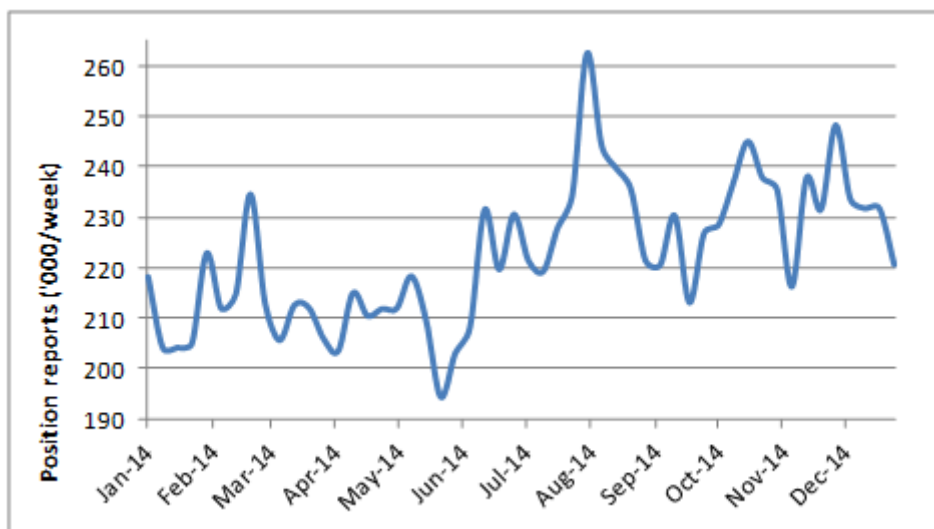


Figure 1 – LRIT Position Reports processed in a monthly basis

During 2014, the LRIT IDE PRODUCTION environment experienced a major incident, caused by the DNS service. This had a major impact on performance, but despite that, the availability remained in line with the IMO requirements.

The total number of LRIT messages processed by the LRIT IDE PROD was **15,042,825**. Out of this amount **11,867,716 messages** (nearly 80%) correspond to **position report messages** of all types (periodic position, polled position, and SAR position reports).

The processing time performance was **99.93%** (which represents the percentage of messages processed in less than 30 second which is the threshold defined by IMO).

In total, **57** Data Centres are connected to the LRIT IDE PROD, serving **119** Contracting Governments and Territories. The Nigerian National LRIT Data Centre (LRIT ID 3104) was permanently off-line or with permanent connectivity issues over the entire period.

2.2 Incidents

Table 1 presents the communication issues, the components affected and the downtime period:

Date & Time	Component	Description
20-05-14 01:00 UTC	DNS	The LRIT IDE system experienced communication issues that severely impaired the connections of the system to and from other LRIT components. The downtime was 420 minutes .
31-05-14 04:45 UTC	DNS	The LRIT IDE system experienced communication issues while operating at the Business Continuity Facility (BCF). No errors were logged related to the application or to the infrastructure. Other potential additional causes to be considered are the changes and tests on the EMSA DNS side performed by EMSA ICT for the EU LRIT CDC virtualisation. The downtime was 111 minutes .

Table 1 – Communication issues

2.3 Audit

The audit of the LRIT IDE took place from 15 October 2013 to 14 October 2014. The Audit Questionnaire was submitted to IMSO in due time and the Audit Report is currently in process.

2.4 Maintenance

The LRIT IDE software Version 2.2.1 refined current utilities, implemented new features in the Administrative Interface and underwent an extensive test campaign.

2.5 Security

A source code analysis was carried out by an external Contractor to improve the quality of the software in the next release (foreseen in 2015).

2.6 Disaster recovery (dr) site exercise

As set out in MSC.1/Circ.1376/Rev.1, 28 May 2012, a DR site exercise was successfully completed (between May 31st and June 5th) failing over the LRIT IDE PRODUCTION environment to the USCG facilities.

3. ACTION REQUIRED

The members of the group are invited to take note of the information provided.