

GENERAL SPECIFICATION

LOGISTICS AND OPERATIONAL SUPPORT

GS EP LSO 206

Electronic Surveillance Aids

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1. Scope

The main purpose of Electronic Surveillance Aids is to protect offshore installations against collision, to increase safety of navigation according to [IMO COLREG](#) and [IMO ISPS code](#) around offshore installations by monitoring, controlling and assisting in traffic regulation.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the effective date of this document.

Reference	Title
IEC 60092	Electrical Installations on Ships
IEC 60533	Electrical and Electronic Installations in Ships – Electromagnetic Compatibility
ITU RR	International Telecommunication Union Radio Regulations
IMO COLREG	Convention on the International Regulations for Preventing Collisions at Sea (COLREGs)
IMO SOLAS	International Convention for the Safety of Life at Sea (SOLAS)
IMO ISPS Code	International Ship and Port Facility Security Code
IMO Resolution MSC.74(69)	Recommendation on Performance Standards for an Universal Shipborne Automatic Identification System (AIS)
IMO Resolution A.422(XI)	Performance standards for Automatic Radar Plotting Aids (ARPAs)
IMO Resolution A.477 (XII)	Performance Standards for Radar Equipment
IMO Resolution A.857(20)	Guidelines for Vessel Traffic Services
IMO Resolution A.817(19)	Performance Standards for Electronic Chart Display and Information Systems (ECDIS)
IMO Resolution A.917(22)	Guidelines for the onboard operational use of Shipborne Universal Automatic Identification Systems (AIS)
IMO Resolution A.918(22)	IMO Standard Marine Communications Phrases
ISO 9001	Quality Management Systems – requirements
IMO STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended (STCW)

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published in the applicable yearly collection.

Reference	Title
GS EP LSO 204	Marine berthing and navigation aids for coastal and offshore terminals
GS EP TEL 410	Installation rules

3. Definitions and acronyms

For the purpose of this document only, the following definitions apply.

Item	Definition
AC	Alternating Current
DC	Direct Current
AIS	Automatic Identification System
ARPA	Automatic Radar Plotting Aids. Is the equipment by means of an in-built computer system operating in conjunction with radar
Call sign	up to seven characters, assigned to the watercraft by its country of registration
COG	Course Over Ground
COLREG	Convention on the International Regulations for Preventing Collisions at Sea, 1972
CPA	Closest Point of Approach
DSC	Digital Selective Call. A standard for sending pre-defined digital messages via the maritime radio system
ECDIS	Electronic Chart Display and Information System
ECS	Electronic Chart System
ENC	Electronic Navigational Charts
GLOSSNAS	Global Navigation Satellite System. Russian system equivalent to GPS
GPS	Global Positioning System. A space-based satellite navigation system that provides location and time information (US system)
DGPS	Differential GPS
IEC	International Electrotechnical Commission

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IMO	International Maritime Organization
IMO Number	A seven digit number assigned to a watercraft that remains unchanged upon transfer of the watercraft's registration to another
LORAN	Long Range Navigation. Another type of positioning system
MMSI	Maritime Mobile Service Identity. A unique, nine digit identification number assigned to each watercraft registered under IMO
Radar	RADio Direction And Ranging. It is an equipment determining distance to an object (called target) by measuring the time required for a radio signal to travel from a transmitter to the object and return
SOG	Speed Over Ground
STCW	Convention on Standards of Training, Certification and Watchkeeping for Seafarers
TCPA	time to closest point of approach
Tracking	is the process of observing the sequential changes in the position of a target, to establish its motion
UPS	Uninterruptible Power Supply
UTC	Universal Time Co-ordinate. Formerly known / used as GMT (Greenwich Mean Time)
VHF	Very High Frequency. Radio frequency allocated to marine use and ranges from 156.0 MHz to 162.025 MHz
VTS	Vessel Traffic Services : any service implemented by a competent authority, designed to improve safety and efficiency of traffic and the protection of the environment by providing information service, navigational assistance and traffic organizational service
X-Band	9 GHz Band of radio frequency

4. Introduction

Offshore oilfields and marine terminals either directly managed by an Affiliate or a Contractor shall be equipped with an Electronic Surveillance Aids system as stipulated in **GS EP LSO 204**.

Such Marine Surveillance Aids shall be under responsibility of the Marine Operations Manager, the Marine Operations Supervisor or the person in charge of the marine operations according to the local organizational structure.

It is recommended to install repeaters in Emergency Crisis Rooms either onshore or offshore with very limited functions, only for monitoring purpose.

Monitoring, reporting and assistance duties shall be appointed to one radio operator or traffic controller complying with the following requirements: