



**PANAMA MARITIME AUTHORITY
General Directorate of Merchant Marine**

Merchant Marine Circular No. 193

To: Owners/Operators, Legal Representatives of Panamanian Flagged Vessels, Consuls and Recognized Organizations.

Subject: Optional and Voluntary System for Electronic Books on board of Panamanian Flagged Vessels.

**References: Resolution N°. J.D. 106-01-17 DGMM of August 17, 2007.
Resolution J.D. N°. 026-2007 of November 8, 2007**

The purpose of this Merchant Marine Circular is to inform users that this Administration has established through Res. No.106-01-17DGMM of August 17, 2007, the regulatory scheme for the approval of the authorizations for the voluntary use of electronic books on board of Panamanian vessels, assuring the international standards of maritime safety and pollution prevention contained within the International Conventions ratified by the Republic of Panama.

For that effect, the Panama Maritime Authority has authorized a number of manufacturer companies of electronic books in order to provide this service on board of Panamanian vessels.

The required services within the optional and voluntary system for Electronic Books are limited to supply any Panamanian vessel, the electronic means for the reception, record and control of the information pertaining to:

- Oil Record Book
- Crew Roll Book
- Bridge Log Book

The electronic books will be supplied at the request of any shipowner or operator, by any manufacturer company approved by the Administration.

Technical Specifications:

The General Directorate of Merchant will indicate any additional technical specification that will be necessary for the recognition and authorization of any manufacturing company that meet the requirements established by this General Directorate to provide the service of electronic books on board of the Panamanian Vessels.

In order to authorize a company to provide this service, it is required that all applicants demonstrate the efficiency of the electronic system and compliance with the

minimum requirements established by the International Conventions, the rules issued by this Administration and the present circular.

The minimum requirements necessary to provide the electronic book service within the Panamanian Merchant Marine will be the following:

Bridge Workstation Log Book

- The workstation where the Bridge Log Book will be available shall be designed in accordance with the principles given in ISO 8468 and IMO regulation MSC/Circ. 982.
- The presentation of the log book shall follow the regulations established in Resolution MSC.86 (70) and MSC/Circ 982 (5.3.4.) regarding the IMO Guidelines on Ergonomic Criteria for Bridge Equipment and Layout.
- Lightning of display and keyboard shall follow the regulations in ISO 8468 7.6.3.4 and IMO Regulations MSC/Circ. 982/5.3.6.

Software updating

New software versions will be developed, edited and issued in accordance with development routines according to ISO 9002 for the work process. All changes to software will be documented and tested prior to release so that traceability is maintained within software releases.

Client/Server Installation

The electronic log book system must be capable of supporting a client/server installation, with the possibility of recording data within the same server using several clients in multiple workstations.

Minimum Data report and export requirements

- The electronic book system must be capable to support the automatic reproduction between the vessel and the operator's office, using the communication equipment at the vessel.
- The electronic book system must produce PDF format reports.
- The electronic book system shall allow the data export to another system in XML format.
- The electronic book system shall allow access by the General Directorate of Merchant Marine at any times. Moreover, if the fabricant uses a different format than the specified above, it shall provide to this Administration, the ways to access the information within the system.

Back Up and recovery of information:

The electronic book system shall have the possibility to make a security copy or back up of the data, assuring that the information will not be lost if the hard disc of the electronic book

server is corrupted. Moreover, the system must be able to recover the information of the security copy.

The electronic system shall be able to secure a rapid copy of the entire electronic book with the use of a removable memory device, (i.e. USB memory stick).

Bridge Log Book:

The Electronic Bridge Log Book must have the characteristic to record relevant events regarding the operation of the ship, along with the necessary details for the recreation of the voyage. The data shall be recorded in accordance with IMO regulations.

All recorded events shall have a stamp with time and date, the local time on board y and official UTC time.

All annotations of events within the bridge log book shall be maintained for a five (5) year period and must be available for this Administration in PDF format.

The Electronic Log Book shall have an option to include the electronic signature of the Master of the vessel.

Oil Record Book:

Should have the characteristics needed in order to record the relevant events to comply with OMI requirements.

All the events will have a stamp with time and date, the local time on board as well as the official UTC time.

All of the events within the Oil Record Book – Part I will be stored for a five (5) years period and should be available to the administration in PDF format.

The data on the vessel's position should coincide with the information on the position on the Bridge Log Book.

The Oil Record Book should have characteristics for the electronic signature of the Vessel's Master.

Crew Roll Book:

Should have the characteristics to list the crew onboard the vessel and a function to be able to list and control the users with a user name and a password. The crew role system should also have the reports described bellow:

- Onboard Crew List: will have the following information: Full name, position onboard, Certificate of Competency, place of birth, age, passport number,

- Crew details report: including: Full Name, position onboard, Certificate of Competency, Place of Birth, Age, Nationality, Passport Number, Name and address of the closest relative, port of embarkation, place and date of embarkation, embarkation duration.
- Historic crews report: including the following information: Full name, onboard position, Certificate of Competency, Place of Birth, Age, Nationality, Passport Number, Port and date of embarkation, Place and Date of landing. The crew's historic details should be stored for a five (5) years period and will be available in PDF format.

Both, the manufacturer and the vessels that use the Electronic Book Systems, should provide the general or special information recorded on the Electronic Books, required by the General Directorate of Merchant Marine to verify the compliance of the international regulations or for investigations, or navigation incidents, inspections or any other control process that the maritime administrations may be carrying out. This requirement will be mandatory and non compliance could lead to the authorization withdrawal.

In order for the vessels in the national merchant marine to use any format of the Electronic Book System on board, it is necessary for it to obtain the required license, which is not transferable and which is issued for a one year period. The request could be made by the ship owner, the master, or the Legal Representative at the General Directorate of Merchant Marine or at any Merchant Marine Consulate.

For the Panamanian merchant marine vessels to obtain the Appropriate License that will allow them to use the Electronic Book system they should be duty paid with the National Treasury.

For the issuance of the Electronic Book License, it is necessary that, once the electronic book format is installed onboard the Merchant Marine vessel, the authorized manufacturing company shall issue a document called Manufacturer's declaration which should specify that:

1. the system is installed according to the approved existing requirements
2. the installed system complies with the specific requirements
3. the installed system has been tested and it is in a proper and perfect working and functioning condition.

It is also necessary that the owner/operator, master, and crew of the vessel which has the electronic book system installed, issue and keep on board a "Statement of the owner or agent responsible for the operation of the ship that specifies the following:

1. the crew has been trained in an appropriate and concise way on the management, utilization and operation of the Electronic Books according to STCW-95 regulation I/14.1.4.
2. the routines and processes for the conservation, and maintenance of the Electronic Book records comply with the Panama Maritime Authority and IMO's regulations and are

perfectly documented and specified in the vessel's IGS Code (International Safety Management Code).

For the issuance of the electronic book licenses by the corresponding authorities, the following documents must be presented at the General Directorate of Merchant Marine:

- Manufacturer Statement
- Shipowner/operator or master statement
- The vessel must be duty paid
- And the payment rights applicable to the issuance of the license.

The license cost for the usage of the Electronic Book, as established by Resolution J.D. No. 026-2007 is as follows:

- License for the use of the Electronic Crew Roll, \$200.00 annually.
- License for the use of the Electronic Bridge Log Book, \$500.00 annually.
- License for the use of the Electronic Oil Record Book, Part I, \$500.00.

The rights to be paid for the issuance of these licenses in electronic format issued by the General Directorate of Merchant Marine, shall be paid to this directorate or any Merchant Marine Consulate annually by every vessel subscribed in the Panamanian merchant marine. In the same way, the Consulates that provide services for the Merchant Marine Directorate may charge the fee established in this circular which will be subject to the consular fees established in article 1°, paragraph 13 from Decree 75 of July 11, 1990.

The Electronic Book system does not exclude the issuance, sale and use of the books, manuals or documents in print.

The companies recognized as manufacturer to provide the production, marketing, sale, maintenance, actualization and utilization services of the Electronic Books Formats of Bridge Log Book, Oil Record Book, and Crew Roll Book on board of the National Merchant Marine vessels that require its services are:

- KONGSBERG MARITIME AS.
- ON BOARD NAPA LTD.

**Inquiries concerning the subject of this Circular or any request should be directed to: Directorate General of Merchant Marine
Panama Maritime Authority
Phone: (507) 501-5010
Fax: (507) 501-5011**