

SOFTWARE TYPE APPROVAL CERTIFICATE

This certificate is issued to
RAIKA OFFSHORE & COMMERICAL SERVICES
TEHRAN, Iran

for the type of product
MAINTENANCE MANAGEMENT SOFTWARE
MARINUS - Integrated Fleet Management System
Version 1.6.x to 1.9.x

Intended Use:

The software is intended for use onboard vessels to Planned Maintenance System (PMS)

Requirements:

- Asia Classification Society Rules for the Classification of Steel Ships
&
- NR 496 DT R02:
"Approval of Computerized Maintenance Management System used on board ships"
&
- IACS UR E22 E26 E27

Certificate No.: ASIA-CE-05-041

Issue Date: 1405/05/11 - 02 Aug. 2026

Expiry Date: 1407/04/27 - 17 Jul. 2028

File No.: 26/08/1/56/102/135057

Mohammad Reza Zafari
Managing Director



This certificate will be valid till the date of expiry, unless the applicant makes any changes and modifications to the approved product which have not been notified to, and agreed with ACS. The applicant is obliged to maintain the quality of the approved product in the condition agreed with ACS.

این گواهینامه تا تاریخ انقضای ذکر شده معتبر خواهد بود. مگر اینکه درخواست کننده این تأییدیه تغییراتی در محصول تأیید شده ایجاد نماید که به اطلاع رده‌بندی آسیا نرسیده و در مورد آن توافق ننموده باشد. درخواست کننده این تأییدیه موظف است که کیفیت محصول مورد تأیید را در شرایط توافق شده با رده‌بندی آسیا حفظ نماید.

PF/CT/13-02

THE SCHEDULE OF APPROVAL

1. **PRODUCT DESCRIPTION (software):**

Marinus is an integrated fleet management system designed to support the complete operational and technical management of vessels. The system is installed on a shipboard local server and client workstations, enabling local operation without dependence on continuous Internet connectivity. It communicates asynchronously with a shore-based central server to synchronize operational data between ship and shore. The Marinus system integrates five core ship management modules: Planned Maintenance System, Inventory Control, Purchasing & Orders, Daily Monitoring, and Crew Management.

Programming Language(s):

Java (Back-end), React (Front-end)

Integrated Development Environment (IDE):

IntelliJ IDEA

Compatible Operating Systems (Clients):

Microsoft Windows operating systems (desktop client application), Linux

Database Manager:

PostgreSQL

Compatible Operating Systems (Shipboard Server):

Windows 10 and above, Linux

Software Version:

1.6

Production Site: RAIKA OFFSHORE & COMMERCIAL SERVICES, 3rd Floor - No. 54, Karimian (Golestan 7) Alley, Pasdaran Ave., Tehran, IRAN

2. **DOCUMENTS AND DRAWINGS:**

- Marinus Product Description
- Marinus User Manual
- Marinus Installation Guide

3. **TEST REPORTS**

Demo version Marinus Version 1.6

4. **APPLICATION / LIMITATION**

- The approved Marinus Integrated Fleet Management System is acceptable for use onboard ACS-classed vessels surveyed under the Planned Maintenance System (PMS).

Regulatory Scope of Approval:

This certificate is valid for tested Marinus modules (Planned Maintenance System, Inventory Control, Purchasing & Orders, Daily Monitoring, and Crew Management) version 1.6 and later releases of version 1, provided that alterations of functionality remain in line with the Rules in force.

- Onboard Installation and Maintenance Requirements: The system is to be installed and used according to the manufacturer's recommendations. Access rights are to be set using the Role-Based Access Control (RBAC) mechanism in order to avoid unauthorized editing or deleting of maintenance histories. The data is to be saved at regular intervals using the automated backup function. If the shipboard server fails, restore the system by transferring the backup from the central server.

PRODUCTION SURVEY REQUIREMENTS

The maintenance management software is to be manufactured, examined, and tested by RAIKA OFFSHORE & COMMERCIAL SERVICES in accordance with the type described in this certificate.

5. **MARKING OF PRODUCT**

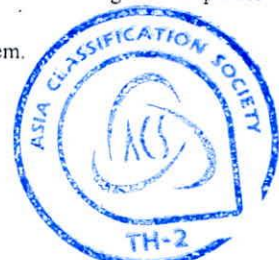
Maker's Name or Trade Mark: RAIKA OFFSHORE & COMMERCIAL SERVICES

Software Name and Version: Marinus Version 1.6

The identification is displayed in the upper left side of the local software application interface. The identification is also to be available in the software user manual.

6. **OTHERS**

- 6.1. RAIKA OFFSHORE & COMMERCIAL SERVICES shall notify Asia Classification Society of any modification to the software to maintain or renew certificate validity. Substantial PMS changes may require a new approval process.
- 6.2. The Society reserves the right to require check tests at any time. RAIKA accepts full responsibility for informing relevant parties of proper use and conditions of approval.
- 6.3. Software operates as a native local application running directly on the workstation operating system.
- 6.4. This is the first Type Approval Certificate issued for this product.



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