



Company Profile

www.jrcs.co.jp

JRCs®

Tomorrow's Technology Today!

JRCS

Founded in 1948 by my father, Mr. Takakiyo Kondo, who since retirement now holds the position of Lifetime Chairman, JRCS is recognized internationally as a leading manufacturer of high quality marine products designed to meet the classification societies' requirements for complete Engine, Electrical and Cargo Control, Monitoring and Alarm Systems, Instrumentation, and other associated equipment for a wide range of vessels.

JRCS has a proud record of sustained growth and adaptation to new technologies which are matched to meet the requirements of the marine and offshore industries.

Today, JRCS has a record of over 6,000 vessels that have been fitted with our equipment, these include Bulk Carriers, Container Ships, VLCCs, ULCCs, LPG and LNG Carriers, Cruise Ships, FPSOs, and Offshore installations. The range of vessels underlines the levels of technological excellence that we can provide to meet the specification requirements.

Whilst being one of the few manufacturers able to provide equipment packages as a "Single Source Supplier", we are proud to say that we are still "a family company" and as such we have built a reputation for providing products of the highest traditional values for which JRCS is well known and at the same time continues to match the needs of the marine and offshore industries by providing "Tomorrow's Technology Today".

Finally, I hope that you find this overview of JRCS and our Product range interesting and I would like to take this opportunity to thank all JRCS customers, Past, Present, and Future, for their continued support.

Thank you.



K. Kondo
President and C.E.O.

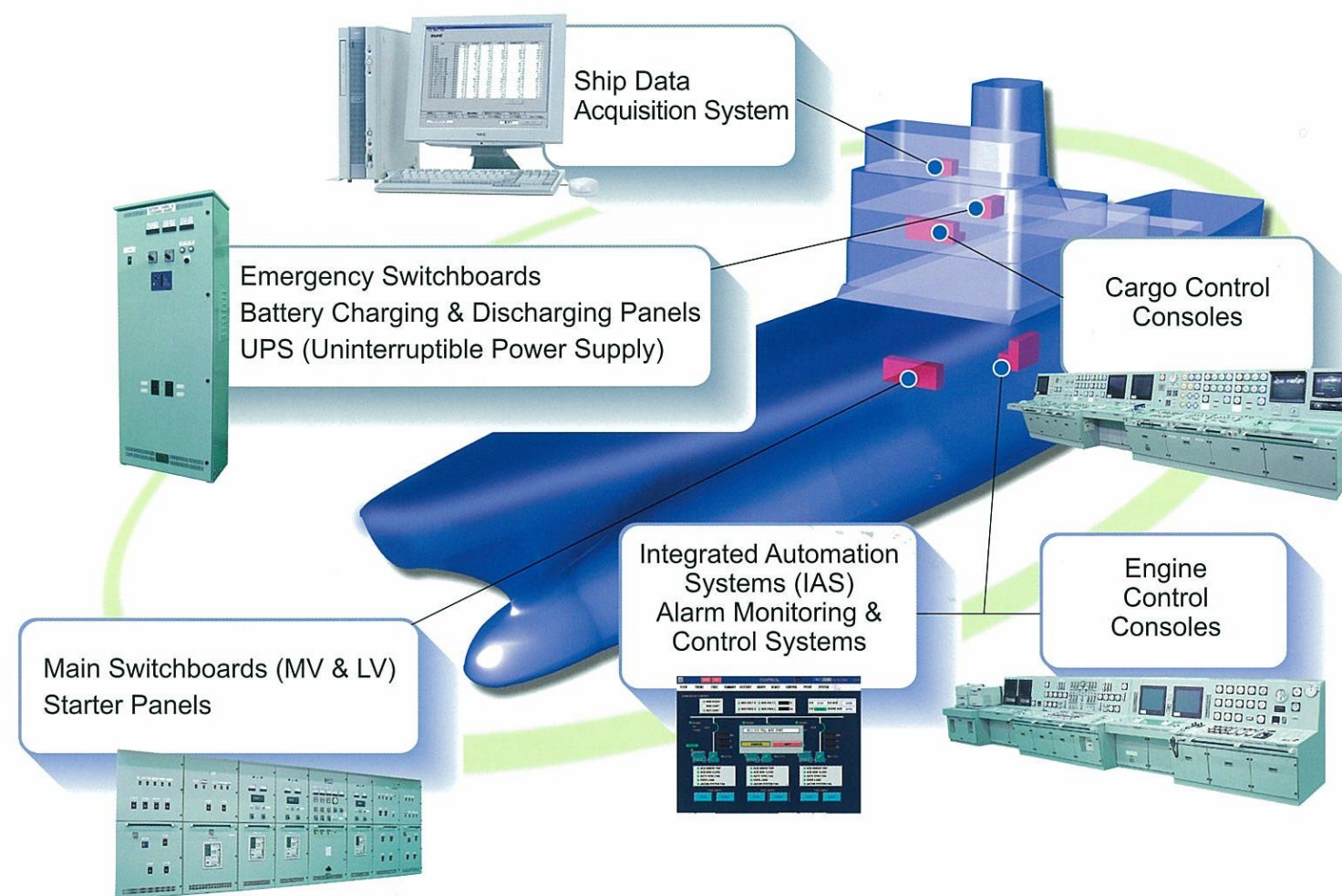
K. Kondo



Toyouura Plant

Head Office

Product Range



HISTORY

- 1948** The establishment of "Japan Radio & Electric Mfg. Co., Ltd."
The construction of the Izaki Plant
- 1957** The establishment of a Tokyo Business Office
- 1962** The construction of the Head Office in Shimonoseki
- 1977** The construction of an engineering building
- 1981** The construction of the 1st stage of the Toyoura Plant
The construction of the Tokyo Business Office building
- 1982** The construction of a Technical Centre
- 1984** The establishment of a sales company "JRCS Corporation"
- 1985** The construction of the 2nd stage of the Toyoura Plant
- 1990** The construction of the 3rd stage of the Toyoura Plant
- 1995** The establishment of an Overseas Liaison Office in the UK
- 1998** The acquisition of the International Quality Assurance Standard "ISO 9001"
- 2004** The construction of the Training Centre at the Toyoura Plant

Power Management Systems



Main Switchboard

Advanced power management providing high reliability and safety benefits

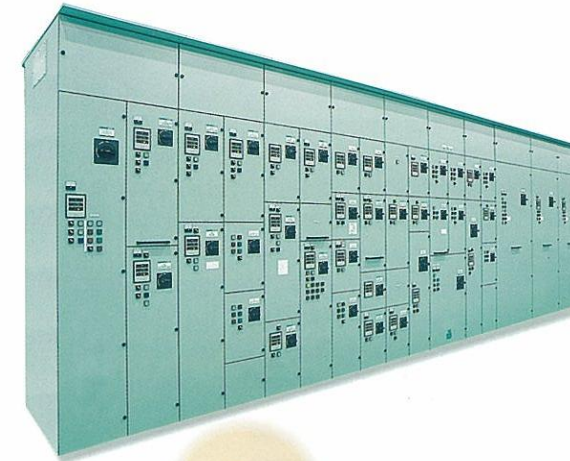


Medium Voltage Switchboard

Designed to meet the requirements of medium voltage power system

Starter Panel

Compact, high performance, multi-function Starter Control Units with powerful network and regulating functions providing high grade control systems



Group Starter Panel

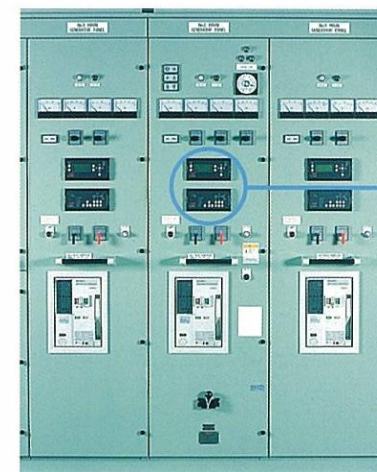


Draw-out type Starter Panel



Individual Starter Panel

Generator Plant Control & Power Management System



JACOM-22

Fully distributed "independent" Generator Plant Monitoring and Control System which eliminates the need for the Synchronizing Panel

Main Unit

Operation Panel

Display Panel



UPS

Continuous uninterruptible battery power supply in case of AC input failure

Battery Charging & Discharging Panel

Stable supply of DC back-up power in case of emergency situations



Automation Systems

Alarm Monitoring & Control System

SMS-22-K

- Excellent cost performance
- Major reduction of installation space
- Exceptional user-friendly "Touch Screen" operation
- Highly suitable for both New Construction and Retrofit projects



System Status



Meter



Channel Call



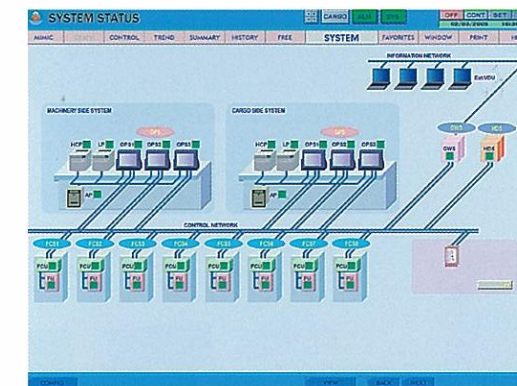
Trend Graph



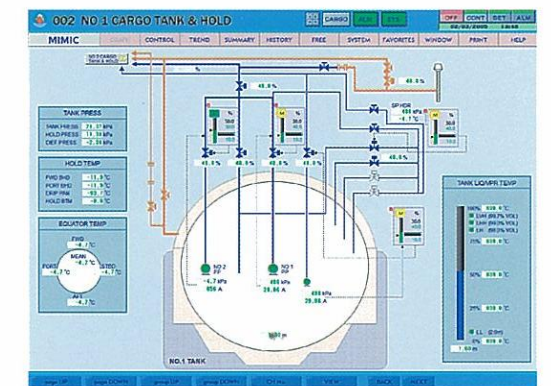
Integrated Automation System

OASIS (Operationally Advanced Super Integrated System)

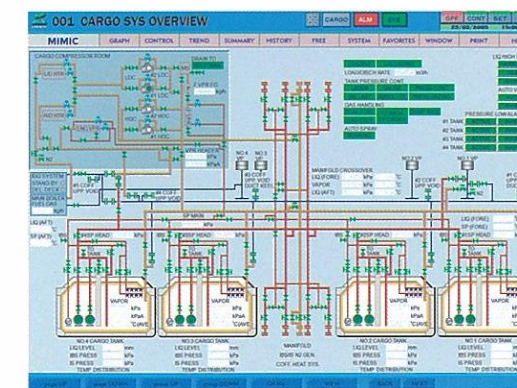
- Designed to comply with high grade specifications for LNG Carriers, Cruise Ships, FPSOs etc.
- Full monitoring and control functions using high definition graphic display screens
- Large LCD colour "Touch Screen" displays plus touch pad and trackball options
- Wide-ranging functions including Process Control, Motor Control, Valve Control, Generator Control plus many more...
- Multiple data communication networks providing reliability and redundancy
- Long term history of key data with integrated "Memo" function
- Four segment "Active" display screens
- On-board training function option
- Flash memory used for writing of operating system program instead of hard drive
- Multiple interface capabilities



System Status



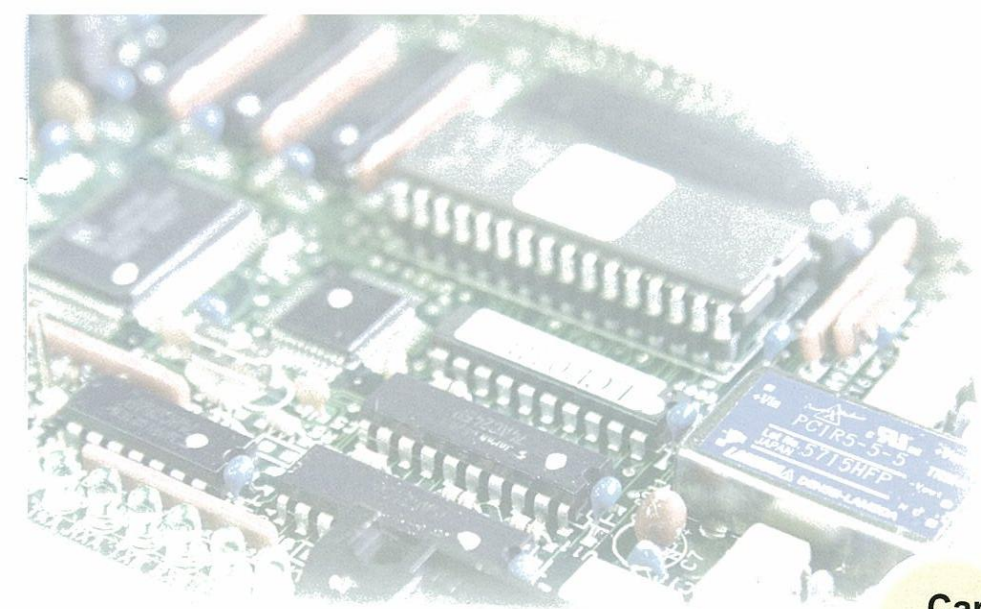
Cargo Tank & Hold



Cargo System Overview

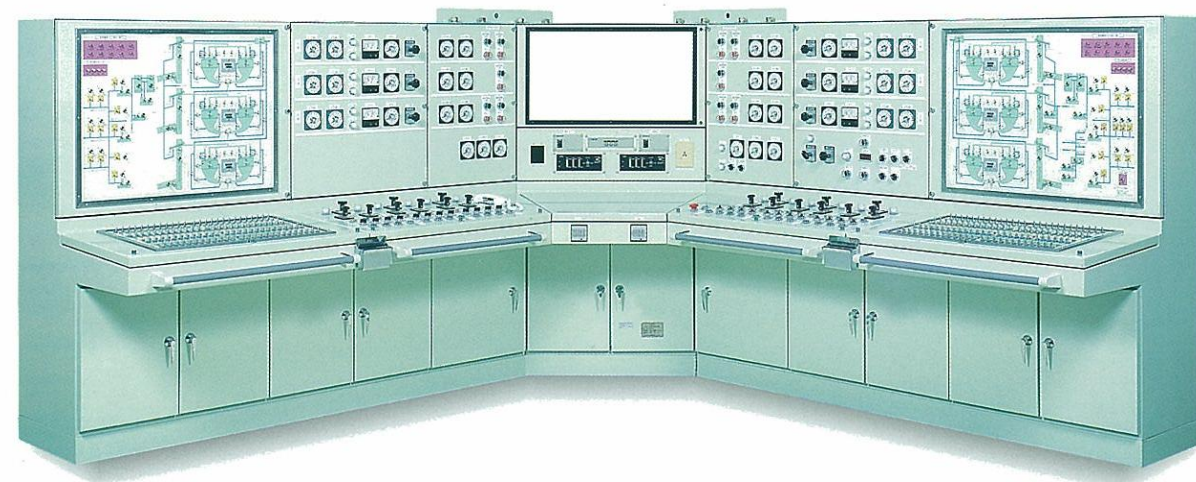


Four Segment Active Display



Cargo Control Console

Highly efficient Cargo Control System resulting from JRCS's many years of experience in LPG, LNG and VLCC vessels



Management Support Systems

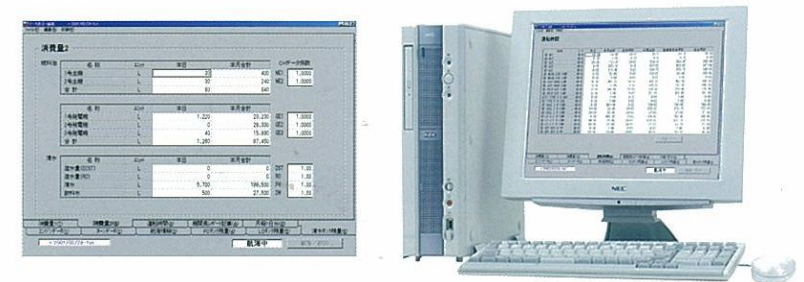


Shore-Vessel Communication System

- Real time acquisition of on-board data made available in the shore-based office
- Data analysis and problem diagnosis supported by shore-based technical staff to provide improved ship management efficiency
- Live visual display of engine room space complete with audio

Ship Data Acquisition System

PC based engine data collection and processing system using monitoring system's output signals



Machinery Training System

JRCS has a long history of providing purpose designed and built training plant for both shore-based establishments and training vessels enabling both students and ship's staff to learn how to operate plant and machinery as well as experience real time emergency situations and corrective actions.



Generator Control





Based on over 20 years experience of providing Power Distribution and Control equipment for offshore applications, JRCS systems are designed to meet the highest requirement for performance, reliability and safety.



Medium Voltage Switchboard

- Full metal cubicle construction compliant to regulation standards
- Design flexibility to match customers' requirements



Generator Control Panel

New control panels for additional generators built and installed in the limited space available

System Retrofitting

JRCS can provide shipowners and offshore operators with design services and products for the replacement of equipment in life-extension and system upgrade programmes. Taking into consideration time limitations and operational priorities, pre-installation surveys and design proposals and approvals offset on-site problems and delays so that the new equipment is installed and commissioned on time.

Power Management System Retrofitting

Due to the increased load requirements on a FPSO, JRCS manufactured and installed two generator control panels and a synchronizing panel to supplement two existing panels thus enabling four generators to be operated.



Automation System Retrofitting

Upgrade of LNG Automation System: JRCS replaced the existing 24 year old automation system by installing the SMS-22 Touch Screen Alarm & Monitoring System. Configured to meet the owners' new operational requirements, new sensors were also added whilst existing sensors and ship's wiring were checked and utilized. The same work has also been carried out on the sister LNG carrier.



Manufacturing Process

All systems are designed to match the customers' specification. All stages of the manufacturing process are strictly monitored.

1 Design

2 Fabrication

3 Painting

4 Wiring

5 Inspection & Testing

6 Packing & Shipment

Quality Assurance

ISO 9001

The Company's Quality Assurance System is fully compliant with ISO 9001 thus ensuring that all products and services are provided to the consistently high standards required.



Inspection

In addition to the Q.A. requirements, all products are inspected to ensure that they fully comply with classification requirements, IEC Rules, and other regulatory requirements related to safety, reliability, and environmental standards etc.



Recognizing the responsibility to provide the ship operator with effective service support, JRCS has an international network of authorized service agents who are appointed on the basis of their knowledge and experiences of the marine industry and the shipping environment. The JRCS Service Department is always available to handle your service requests and liaise with our service agents to ensure that arrangements are co-ordinated effectively.

Australia	Novamarine Instruments Pty Ltd	Norway	A/S Norske Telekom
Belgium	Radio Holland Belgium N.V.	Poland	Project Service Enterprise Epa Ltd
Brazil	Metalock Do Brasil Ltda	Singapore	Cyclelect Electrical Engineering Pte Ltd E-Trust Automation Pte Ltd
Chile	Sociedad Uwe Hebel Electric Ltda	South Africa	Globe Engineering Works (Pty) Ltd L. H. Marthinusen Engineering Services
China	Shanghai Fanzhou Marine Electric Technology Co. Ltd	Spain	Aage Hempel
France	Navelec	Turkey	STT Deniz Ticaret Ve Servis Ltd
Germany	Simar - Marseilles	U.A.E.	Maritronics
Greece	Radio Holland Germany GmbH	U.K.	Dowding & Mills Engineering Services
	Space Electronics Ltd	Uruguay	R.I.N. S.A. - Marine Engineering
	Nova Electronics S.A.	U.S.A.	Seaboard Controls, Inc
Hong Kong	Hostmost Engineering Ltd		
India	Penta Electromec Pvt Ltd		
Italy	Piaggio & Figli Srl		



Training of service engineers



Toyoura Plant Training Centre

Clients

JRCS regularly participates at key international marine exhibitions where shipowners and shipbuilders have the opportunity to see and discuss the latest products JRCS introduces to the market. In addition JRCS representatives frequently visit customers around the world to ensure that the company ethos of "Customer Satisfaction" is maintained.

Japan

Fukuoka Shipbuilding Co., Ltd.	MODEC, Inc.
IHI Marine United Inc.	Naikai Zosen Corporation
Iino Kaiun Kaisha, Ltd.	Nippon Yusen Kabushiki Kaisha
Itochu Corporation	Onomichi Dockyard Co., Ltd.
Kanda Shipbuilding Co., Ltd.	Saiki Heavy Industries Co., Ltd.
Kawasaki Heavy Industries, Ltd.	Sasebo Heavy Industries Co., Ltd.
Kawasaki Kisen Kaisha, Ltd.	Shitanoe Shipbuilding Co., Ltd.
Kawasaki Shipbuilding Corporation	Sojitz Marine & Engineering Corporation
Marubeni Corporation	Sumitomo Corporation
Minaminippon Shipbuilding Co., Ltd.	Tsuneishi Holdings Corporation
Mitsubishi Corporation	Universal Shipbuilding Corporation
Mitsubishi Heavy Industries, Ltd.	Usuki Shipyard Co., Ltd.
Mitsui & Co., Ltd.	
Mitsui Engineering & Shipbuilding Co., Ltd.	
Mitsui O.S.K. Lines, Ltd.	

Overseas

Alpha Tankers and Freighters International Ltd.
Andriaki Shipping Co., Ltd.
Anangel Maritime Services Inc.
Associated Maritime Company Ltd.
Bergesen Worldwide Gas ASA
Bocimar
BP Marine
British Gas
Cardiff Marine Inc.
Carnival Corporation & PLC
Ceres Hellenic Shipping Enterprises Ltd.
China Shipping Development Co., Ltd. Tanker Company
China Shipping (Group) Company
Chinese Maritime Transport Ltd.
Clipper Group
C.M. Lemos & Co., Ltd.
COSCO Group
Daewoo Shipbuilding & Marine Engineering Co., Ltd.
Diamantis Lemos Ltd.
Egon Oldendorff
Exmar
Formosa Plastics Marine Corporation
Geden Line
Gleamray Marine Inc.
Golar LNG Limited
Guangzhou Longxue Shipbuilding Co., Ltd.
Guangzhou Shipyard International Company Limited
The Hellenic Group
Hudong-Zhonghua Shipbuilding (Group) Co., Ltd.
Hyproc Shipping Company
Hyundai Heavy Industries Co., Ltd.
Inchoen National Maritime High School
International Maritime Carriers Ltd.
Iolcos Hellenic Maritime Enterprises Co., Ltd.
Kristen Navigation Inc.
Kuwait Oil Tanker Co., S.A.K.
Lykiardopulo & Co., Ltd.
Maran Gas Maritime Inc.
Nantong COSCO KHI Ship Engineering Co., Ltd.
Nereus Shipping S.A.
Orient Overseas Container Line Ltd.
P&O Cruises
Samsung Heavy Industries Co., Ltd.
Seaspan Ship Management Ltd.
Shanghai Waigaoqiao Shipbuilding Co., Ltd.
Shell International Marine Ltd.
Sinotrans
Sonatrach
Tai Chong Cheang Steamship Co., Ltd.
U-Ming Marine Transport Corp.
United Arab Shipping Co.
Valles Group
Wah Kwong Shipping Agency Co., Ltd.
Wan Hai Lines Ltd.
Yang Ming Marine Transport Corp.
Yasa Shipping Industry and Trading S.A. (alphabetical order)

Government and other public offices

The Ministry of Agriculture, Forestry and Fisheries of Japan
 Fisheries Agency
 Fisheries Coordination Office
 Fisheries Research Agency
 Fisheries Research Institute
 National Fisheries University

Ministry of Education, Culture, Sports, Science and Technology
 Hiroshima University
 Kagoshima University
 Mie University
 National College of Maritime Technology
 Tokyo University of Marine Science and Technology
 The University of Tokyo

Ministry of Internal Affairs and Communications

Ministry of Land Infrastructure and Transport
 City and Regional Development Bureau
 Japan Coast Guard
 Japan Meteorological Agency



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JRCS JRCS Euro Marine Service B.V.

Euro Marine Service B.V.

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