



When safety matters most you can trust in Orga.

For over 45 years, Orga is delivering high quality and reliable Aids to Navigation solutions for marking offshore platforms making them more visible for passing marine traffic. Our offshore specialists together with our in-house research and development department ensure that we remain at the forefront of emerging technologies. This results in innovative, reliable and cost-effective solutions.

Orga's Aids to Navigation solutions are suitable for all kinds of projects.. Whether it is a new-build project, a decommissioned or abandoned platform or if you are upgrading an existing structure.

To contribute to the safety of the people, assets and the environment we understand it is necessary to take international and national requirements into account. Therefore all our Aids to Navigation products meet the latest IALA (International Association of Lighthouse Authorities) requirements and are compliant with regional regulatory requirements.

At Orga we don't just help you meet these challenges, we help you to stay ahead of them.



Innovative, reliable & cos effective Aids to Navigations



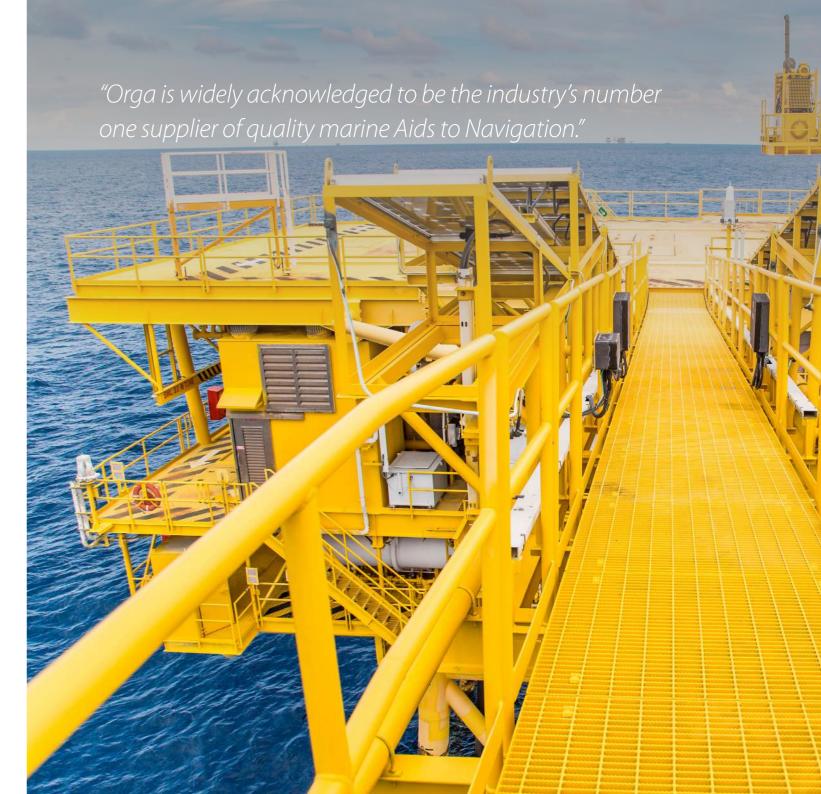
Over 45 years of experience in Aids to Navigation



Full compliance with regulations (IALA, USCG, etc)



High quality products.
Easy to install, maintain and repair.



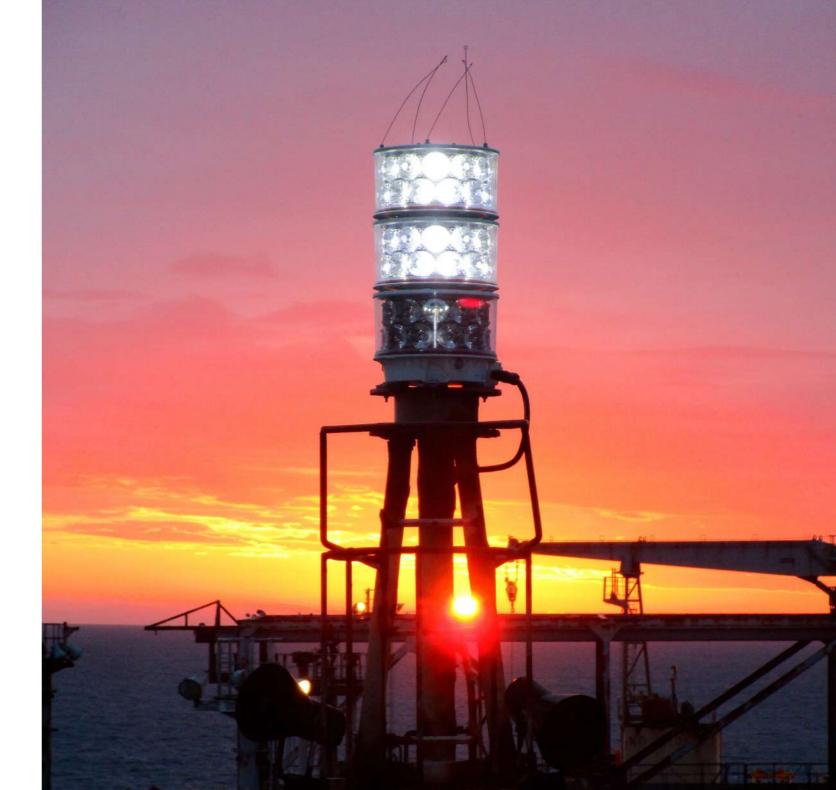
Your structure marked in line with international or local requirements.

The offshore industry is obliged to comply with a large number of safety standards. The recommendation for marking offshore structures is the IALA O-139 standard (International Association of Lighthouse Authorities). Our offshore specialists and in-house research and development department make sure our Aids to Navigations solutions are in compliance with the latest IALA standards.

Next to the IALA recommendations, each country can develop their own national regulation. This can differ in colours, numbers and light characteristics. Due to the overall design of our products, our system is able to quickly adapt to different regulations such as USCG (USA), NORMAM 17 (Brazil), OPRED (United Kingdom), Mijnbouwregeling (The Netherlands), Kystverket (Norway), etc.

Do you have specific requirements? No problem, at Orga we work closely with our customers worldwide to make sure your Aids to Navigation is fitted to your needs.







A centralised system that provides full control and digital communication.

Our Aids to Navigation products can be controlled and monitored completely by our state-of-the-art Digital Navaids Central Control Panel (D-NCCP). The control panel is available in both, non-certified and gas hazardous area certified. It is based on a modular design in combination with a touch-screen display. The display on front of the panel is showing the status of all connected Aids to Navigation equipment.

Due to the I/O module inside, the control panel can easily communicate with the platform control system (SCADA/DCS). It is able to provide hard wired contacts, RS485 Modbus, Ethernet TCP/IP Modbus or Ethernet TCP/IP http webserver transmission. It transfers health status and alarm signals to a (remote-) location, through the SCADA/DCS system. For unmanned platforms, this will save you on transportation and maintenance costs.

The innovative design and configuration together with the touchscreen makes the system user-friendly and intuitive for all users. Due to the modularity of the system, it can also be combined with the controls for helideck lighting and/or obstruction lighting.



Touch screen interface (to allow full system interaction)



Easy to maintain and



Full compliance wit regulations (IALA, USCG, etc)



Explosion proof Digital Navaids Central Control Panel



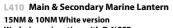
Other Orga solution: can be connected

"Effective, reliable Aids to Navigation systems are essential for safety and ensuring that offshore structures are visible to all vessels in all weather conditions:

Remote Control and Indicator Panel
Suitable for Central and Decentral concept
Same touchscreen functions as NCCP (when used)
Provides detailed information of the system connected

.

VDX05 Visibility Meter Automatic ON/OFF control in low visibility of the foghorn or lanterns Works in conjunction with D-NCCP Explosion proof ITRO4 Racon
Automatic vessel identification
X and S bands with side lobe suppression
Explosion proof



15NM & 10NM White version
Works in conjunction with D-NCCP
For operating in UK sector

L410 Main Marine Lantern 10NM White version

LED marine lantern
Works in conjunction with D-NCCP

GPS Synchronisation Unit

Wireless synchronisation
Synchronise on other bridge-linked or remote platforms
Synchronise Orga navaids and competitor navaids system,
when operated in a compatible GPS mode.

L410 Subsidiary Marine Lantern

3NM Red version Works in conjunction with D-NCCP For operating in UK sector FH800(3) Omni-directional Foghorn 2NM Omni-directional foghorn For central and decentral concept Available in main/secondary concept

A decentralised system that complies to your specifications.

In addition to the well-known Orga Digital Navaids Central Control Panel (D-NCCP) system, Orga is able to design and supply a decentral system. With this system each marine lantern will have its own local control panel/power supply system and battery pack, for power regulation, flash character and photocell control. To make the system complete, a decentral foghorn solution can be added, with its own local control panel/power supply system and battery pack, for power regulation, blast character and optional visibility meter control. This saves a lot of space in the control room since all equipment is installed outdoors on the extremities of the platform to comply with the IALA O-139 recommendation. Depending on location or client specifications the decentral system can be powered by a solar panel system or a AC powered battery charger system.

Orga's decentralised systems can be installed easily and quickly with help of GPS synchronisation. With this quick, cable free solution, all marine lanterns are wireless synchronised and will flash in synchronism, even on adjacent platforms if applicable.

If you prefer the possibility of a detailed remote monitoring facility, the decentralised system has to be provided with a conventional synchronisation and control (OrTalk) cable.



Single lift design for easy installation



Available in solar or mains



GPS synchronisation saving on cable costs



Low maintenance delivers operational savings

Decentral Foghorn Skid Foghorn Visibility Meter Battery enclosure GPS synchronisation unit



L410

Marine Lantern

The Orga marine lanterns fully comply with the requirements of the International IALA O-139 recommendation (International Association of Lighthouse Authorities). These marine lanterns mark the offshore structure at night and during low visibility by ensuring that at least one light is visible upon approaching the structure from any direction. The lanterns are activated at sunset until sunrise and at all times when the meteorological visibility in any direction is 2NM or less.

The L410-W-10 marine lantern is designed to provide 10NM white omni-directional visual coverage. The L410-W-10 has a minimum effective intensity of 1,400Cd. It is a white light, flashing in Morse code 'U' every 15 secs controlled by the Digital Navaids Central Control Panel (D-NCCP). The L410-R-03 marine lantern is designed to provide 3NM red omni-directional visual coverage. The L410-R-03 has a minimum effective intensity of 15Cd. It is a red light, flashing in Morse code 'U' every 15 secs controlled by the D-NCCP.



- For central concept
- 10NM White or 3NM Red version
- LED marine lantern
- Works in conjunction with D-NCCP



- For central concept
- 15NM & 10NM White version
- Works in conjunction with D-NCCP
- For operating in UK sector

L410

Main & Secondary Marine Lantern

Orga's L410-W-15F is an explosion proof combined main & secondary marine lantern providing 15 and 10NM white omni-directional visual coverage. Any offshore structure that is operating in the UK sector should be marked with these lanterns, in combination with L410-R-03, to ensure that at least one is visible upon approaching the structure from any direction.

It is designed to provide 15NM white omni-directional visual coverage during normal mains supply operation and during failure of this lantern, the 10NM light takes over. During a mains failure the 10NM light becomes active with power of the battery pack.

Flashing white light in Morse code 'U' every 15 secs, the main lantern has a minimum average intensity of 12,000Cd. The secondary lantern has a minimum average intensity of 1,400Cd.

L420Marine Lantern

Orga's L420 is based on a decentralised concept, which means that the electronics needed for power supply, code generation, photocell activation etc is arranged locally at the marine light. These lanterns mark offshore structures during night and low visibility by ensuring that at least one light is visible upon approaching the structure from any direction. They are activated at sunset until sunrise by means of a photocell.

The L420-W-05 is designed to provide 5NM and L420-W-10 is designed to provide 10NM white visual coverage and has a minimum effective intensity of respectively 75Cd or 1400Cd. The L420-R-03 is designed to provide 3NM red visual coverage and has a minimum effective intensity of 15Cd. The marine lanterns can be supplied with wired synchronisation and communication connection or with a cable saving GPS code synchronisation unit. They are mains or solar powered, depending on project requirements.



- Decentral concept
- Available in 5NM, 10NM White and 3NM Red
- Omni-directional visual coverage
- Wireless synchronisation through GPS



- For Central and decentral concept
- Automatic ON/OFF control of lanterns
- Works in conjunction with D-NCCP
- Reliable and corrosion free design

SS24External Photocell

Orga's explosion proof photocell provides automatic control of the marine lanterns at dusk and dawn, when used in conjunction with Orga's Digital Navaids Central Control Panel (D-NCCP) and the decentral concept. It measures the outdoor light level and relays this information to the control panel, which automatically controls the activation and deactivation of the marine lanterns and when applicable, also Orga's obstruction and/or helideck lighting. The compact design and non-metallic body of the photocell houses a cable connection compartment and is suitable for use in Zone 1 and Zone 2 gas explosion hazard areas.

Omni-directional Foghorn

The Orga foghorn FH800(3) fully complies with the requirements of the IALA O-139 recommendation.

Due to smart technology we can operate this foghorn with a low power consumption. The sound character of the foghorn is Morse code 'U' every 30 secs and is controlled from Orga's Digital Navaids Central Control Panel (D-NCCP) or from a local control panel. The foghorn signal can be activated whenever the meteorological visibility is 2NM or less by means of a visibility meter, and can be powered from a solar system or other type of UPS system. For specific regions in the world, the foghorn can also provide other characteristics.



- For central and decentral concept
- · 2NM Omni-directional foghorn
- Available in main/secondary concept



• For Central and decentral concept

- Automatic ON/OFF control in low visibility of the foghorn or lanterns
- Works in conjunction with D-NCCP
- Explosion proof

VDX05

Visibility Meter

Orga's visibility meter/fog detector is based on the back scatter operating principle with a long life laser LED. It provides a continuous visibility indication needed to control the foghorns and lanterns on the offshore location. The unit is provided with output signal for automatic control of the marine lanterns and foghorns, because of changing weather circumstances. The unit is made of stainless steel which makes it extremely suitable for offshore environments. It is provided with self-monitoring functions to ensure long term operation.

GPS

GPS Synchronisation Unit

Orga can connect a GPS synchroniser unit to each lantern or foghorn to make sure the complete decentral system is synchronised according to IALA O-139 recommendation. The GPS is a cable free solution which means that the synchronisation between lanterns, foghorn and complete systems is completely wireless. It can synchronise lanterns and foghorns on a platform complex, but also between Orga systems on other bridge-linked or remote installed assets. When a competitor GPS synchronised system is operated in a compatible mode with the Orga system, both systems can perfectly function in synchronism.

The GPS unit can also be used in the centralised solution to synchronise navaids systems on adjacent platforms.



- For Central and decentral concept
- Wireless synchronisation for marine lantern and foghorn systems
- Synchronise Orga navaids systems, also on other bridge-linked or remote platforms
- Synchronise Orga navaids and competitor navaids system, when operated in a compatible GPS mode.



For Central and decentral concept

- Automatic vessel identification
- X and S bands with side lobe suppression
- · Explosion proof

ITR04 Racon

The Explosion proof radar beacon (racon) has been designed in accordance with IALA specifications and transmits a Morse code character that is activated by structures or passing vessels. They respond to radar pulses transmitted by every vessel that is in your structures surroundings. It is fabricated from a stainless steel housing, fitted with an impact resistant synthetic antenna dome with an anti-bird spike. For maximum compatibility and flexibility, our racons are designed to work in conjunction with Orga's with Orga's centralised and decentralised concept.

Remote Control and Indicator PanelExplosion proof Remote Control Panel

The remote control and indicator panel is provided with a touchscreen that shows the status and provides controls of all connected navaids equipment. This panel can be used in addition to the Navaids Central Control Panel or in case of a decentral system with each individual lantern or foghorn skid installed on the platform. An advantage of this remote control panel is that it can be placed outside the switch room on a location with easy access. It does not take much place due to its small design, because the control devices are incorporated in the navaids central control panel or are already integrated in the decentral skids. In addition to this, the remote control and indicator panel can also be used to control and monitor the Orga helideck or aeronautical light equipment installed on the platform.



- Suitable for Central and Decentral concept
- Same touchscreen functions as NCCP (when used)
- Provides detailed information of the system connected



Why make business complicated when the solution is just one call away?

With over 45 years of experience, Orga provides the right advice and guidance during the complete project process. With our expertise we can find a reliable and cost-effective solution for your certain project.

Since Orga started as a service company, we still have a dedicated team of certified service engineers. For example, to carry out a site survey to inspect your installed system on your assets, resulting in a full inspection report.

The main goal of our services is to provide safety and compliance with regulatory requirements. We trust that with our expertise, we can provide you with confidence and peace of mind.

Over 45 years of experience in safety marking.

Since 1973, Orga has been delivering high quality and efficient marking solutions for offshore platforms, to contribute to the safety of people, assets and the environment.

For optimum marking of your platform, call us: +31 (0)10 208 5555



Design, production, quality



100% regulatory compliance guaranteed worldwide.



Locally based support teams & international partners.



The right solutions & services around the world.



Orga bv Strickledeweg 13 3125 AT Schiedam The Netherlands ****+31 (0)10 208 5555 **=** +31 (0)10 437 8445 ™info@orga.nl ⊕ www.orga.nl