



SAFE SEAS CONNECTED COASTS

2025 - 2030

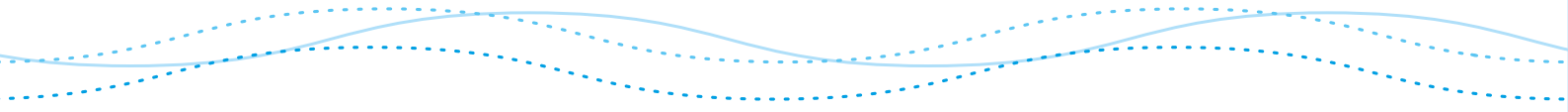


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Aids to Navigation Network around the coast of Ireland

North and South



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Lighting the way sustainably: Dublin Bay's Kish Lighthouse, first lit in 1965, is undergoing its most significant upgrade since automation. In 2024-2025, two solar arrays with 30 panels each will be installed on its balconies, powering low-energy rotating LED lights. This upgrade reduces environmental impact while preserving its crucial role in navigation. Kish is the latest of 24 lighthouses that have been solarised. Credit: unknown (sent by passing boat to Captain Dermot Gray, Master ILV Granuaile)



Chairman's Foreword

Irish Lights has a history over two centuries of delivering safe navigation around the coast of Ireland.

At any time during that journey, our Aids to Navigation (AtoN) service has offered all those who use that sea space the best possible service based on the most modern science, engineering, equipment and techniques available at that time. We are very fortunate that throughout our long history, our employees have always had the expertise as well as an openness to innovate where necessary and have been uniquely dedicated to delivering those services to the highest international standards, ensuring safe passage for all mariners. This remains the case today and the foundation of our new strategy remains focussed on best use of technology in a sustainable manner and the expertise and commitment of our employees. All of this is set against the backdrop of the critical importance of the sea to the island of Ireland's material and environmental well-being and the challenging nature from a navigational point of view of the waters around our coast.



This 2025 – 2030 strategy is being written in a period when the importance of secure international maritime supply chains is becoming better understood. Events such as the Covid-19 Pandemic, the Suez Canal closure, Brexit, and geo-political conflicts, have all highlighted the importance of safe, secure, and environmentally responsible maritime transport. AtoN, and their integration into the wider suite of maritime safety and environmental services that mariners rely on have a critical role to play in supporting our maritime economy.

This strategy builds on a solid base of achievement, progress and continuity while taking account of some new and exciting drivers of strategic change. These include the shared and changing nature of the sea space around us, changes in technology, digitisation of services, the challenges of climate change and biodiversity and the evolution of regulations and standards. The heightened focus on offshore renewable energy and its strategic potential for Ireland is a case in point.

Irish Lights is and has been for over two centuries, a trusted provider of services and expertise to ensure safe navigation at sea around the island of Ireland, north and south. Retaining, growing and developing our expert and dedicated employees and ensuring our assets and infrastructure are operating effectively and reliably is critical to maritime safety around our coast. This strategy sets out clear goals and objectives for Irish Lights over the period 2025 - 2030 and the allied activities, resources and infrastructure required to deliver this service.

At the heart of this strategy is a commitment by Irish Lights to navigational safety at sea and around our coast, the adoption of effective and sustainable technologies, the protection and enhancement of our maritime environment and the sharing of our heritage with coastal communities. This is driven by our history, sense of place, our values, and our links to our user and stakeholder community. Building on our history and enduring values, we look forward, through the implementation of this strategy, to ensuring that Irish Lights continues to make a vital contribution to the maritime sector and the wider economy over the next five years and beyond.

Mark Barr, Chairman, Irish Lights

Chief Executive's Introduction

Safe navigation is a prerequisite for maritime safety, trade, security, and the protection of the environment.

Shipping, ports, offshore energy, maritime planning, fishing, aquaculture, tourism, and environmental protection all require safe navigation. Moreover, over 90% of all goods imported and exported and almost 2 million (1,877,900) passengers are transported by sea, highlighting as the Chairman has pointed out in his foreword, the strategic importance of safe navigation.



Irish Lights is required by statute and in accordance with the provisions of the SOLAS – Safety of Life at Sea Convention – to provide and regulate marine Aids to Navigation (AtoN) to ensure safe navigation. It does this through the provision of a reliable, technologically advanced, AtoN infrastructure, the regulation, inspection and auditing of local aids to navigation, the marking of wrecks and new dangers and the provision of associated data, monitoring, information and advisory services.

This strategy builds on the success of our 2018 - 2024 strategy and reflects changes in the wider international maritime sector, significant national regulatory changes, and important feedback from our stakeholders through our ongoing consultation processes and our 2024 Stakeholder Survey.

The primary focus area for our strategy will always be Safe Navigation and this is captured in **Focus Area (1)** which reflects our core statutory safety functions and evolving industry, and maritime safety requirements linked to the strategic drivers of change analysed in Section 3.

To reflect the significance of Marine Spatial Planning (MSP) and the National Marine Planning Framework as a co-ordinating context for marine planning, development and protection, we have introduced a new **Focus Area (2)** to demonstrate the importance of Leadership, Collaboration and Alignment with related policies and organisations at national and international level.

In response to stakeholder feedback (see Section 4), we have elevated our actions on climate change and our commitment to sustainability, environment, and biodiversity, into a new strategic **Focus Area (3)**.

We maintain our commitment to the coastal communities in which we work and to safeguarding our heritage and developing the Great Lighthouses of Ireland all-island tourism initiative in **Focus Area (4)**.

Delivering Excellence and our ongoing commitment to our Values in **Focus Area (5)** reflects the importance we attach to our employees, their professionalism and expertise, and the delivery and development of our services in an agile, efficient, innovative and effective manner. We further benefit in this area from the sharing of expertise and resources with our sister organisations in Trinity House and the Northern Lighthouse Board and our shared General Lighthouse Authority (GLA) Research and Development team (GRAD).

I want to thank all of those who contributed to developing this strategy. Irish Lights has been delivering safety at sea services around the island of Ireland, north and south for over 200 years. We continue to build on this proud tradition and together with the Board and the entire Irish Lights team, and in close collaboration with the Department of Transport (Ireland), the Department for Transport (UK) and all our stakeholders, we look forward to delivering on this new strategy over the period 2025 – 2030.

Yvonne Shields O'Connor, CEO, Irish Lights

MISSION

Safe Navigation at Sea – To be a leading provider of reliable, efficient and cost-effective navigation and maritime services for the safety of all.

VISION

Irish Lights will be a dynamic, forward facing maritime organisation, conscious of our long history and poised to deliver future safe, smart and sustainable maritime services – **at the interface of navigation, technology, data and engineering.**

We will do this by:

Contributing to the safe development of the maritime economy and climate resilience.

Continuously upskilling our people and teams to deliver new capabilities in the maritime space.

Protecting our heritage and legacy.

1

INTRODUCTION

The Commissioners of Irish Lights



Guiding mariners for 200 years: Haulbowline Lighthouse, built in 1824 by George Halpin Sr., marks the entrance to Carlingford Lough. Standing 34m tall on a tidal rock, it now features solar power, modern LED lanterns, and AIS technology, continuing its vital role in safe navigation. In front of Haulbowline is the Hellyhunter buoy, a south cardinal mark that keeps vessels clear of the hazardous Hellyhunter Rocks that guides at the entrance to Carlingford Lough with solar, AIS and racon technology. Credit: Ann Bruen

The Commissioners of Irish Lights (Irish Lights) has responsibility under the International Convention for the Safety of Life at Sea (SOLAS) for the regulation of all marine Aids to Navigation (AtoN) around the island of Ireland and under the Merchant Shipping (Wreck and Salvage) Act for wreck response outside of harbour areas.

Irish Lights provides AtoN for general navigation and inspects and audits Local AtoN provided by Local Lighthouse Authorities (LLA) in ports, harbours and Local Authority areas, and ORE developments. The placement of AtoN, when authorised by Irish Lights does not require a Maritime Area Consent under the Marine Area Planning Act. Irish Lights is a statutory consultee under the Foreshore and Planning Acts.

Irish Lights works closely with Trinity House (England, Wales, and Channel Islands) and the Northern Lighthouse Board (Scotland and Isle of Man) to deliver AtoN services. This close cooperation is part of how Irish Lights does its business at strategic and operational level and is an essential part of this 2025 – 2030 strategy. Sharing of resources allows substantial reductions in costs and improves operational effectiveness. In addition to our core statutory services, Irish Lights uses its required reserve capacity to provide commercial and added value services to industry and serves coastal communities through initiatives such as Great Lighthouses of Ireland.



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FOR THE SAFETY OF ALL

VALUES

This strategy, and all we do, is rooted in our values of **Professionalism, Respect, Trust, Quality, Innovation and Collaboration.**

OUR ORGANISATIONAL JOURNEY SO FAR

1786 – 1800

1786 – Grattan’s Parliament. Irish Lights dates back to the establishment of The Corporation for Preserving and Improving the Port of Dublin.

1800 – 1890

1810 – Lighthouses (Ireland) Act. British Parliament enacted the Lighthouses (Ireland) Act 1810. Powers of Corporation extended to the control of lighthouses around the coast of Ireland.

1810 – 14 lighthouses were transferred and a major era of lighthouse construction and development of technology commenced.

1810 – (2nd June) 1st Entry in Lighthouse Journal.

1811 – 1st Lightship.

1812 – The first Irish Lights vessel ‘Pole Star’ comes into operation.

1865 – Gas lamps used for first time at Baily lighthouse. Large optic lenses and bell fog signals introduced.

1867 – Dublin Port Act of 1867. Separation of Port of Dublin Corporation and Commissioners of Irish Lights.

1814 – 1900 - 97 Lighthouses built around the coast of Ireland with change from candles to oil lamps as light source.

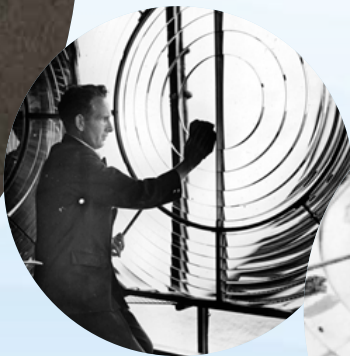
1890 – 1920

1894 – Merchant Shipping Act. General Lighthouse Authorities (GLA) established Irish Lights, Trinity House and Northern Lighthouse Board.

1898 – Roots of IALA – Conference on Maritime Works held in conjunction with the World Fair in Paris.

1904 – New Fastnet Lighthouse established (1854 Lighthouse demolished).

1914 – Initial version of International Convention for the Safety of Life at Sea (SOLAS).



1920 – 2015

1922 – Post-Partition Statutory Framework. Treaty requires maintenance of AtoN and UK approval for changes.

1928 – Radio beacons introduced.

1929 – First International Lighthouse Conference in London. Considered first 'IALA' Conference.

1935 – Irish Lights Commissioners Adaption Order. Order of the Executive Council for adaption of the 1786 Act to facilitate continued operations of Irish Lights as a General Lighthouse Authority and close working links with UK maintained.

1936 – First electric powered lighthouse at Donaghadee.

1940 – The Irish Lights vessel 'SS Isolda' was attacked and sunk 3 miles south of the Berrell's Lightship. Six of its crew were killed.

1957 – IALA formally established and Irish Lights becomes a member.

1965 – Kish Lighthouse established.

1969 – Helicopters introduced.

1980 – The provision of aids to navigation became a requirement under SOLAS Chapter V, Regulation 13, with the adoption of the 1974 SOLAS Convention in 1980. This regulation mandates that each Contracting Government provides aids to navigation as deemed practical and necessary, either individually or in cooperation with other governments, based on the volume of traffic and degree of risk.

1982 – Unified buoyage scheme agreed.

1993 – Irish Lights is granted powers under the Merchant Shipping (Salvage and Wreck) Act 1993 to mark or remove wrecks that pose a danger to navigation.

1995 - UK Merchant Shipping Act. 1984 Act repealed in UK. Remained in Ireland.

1996 – Last Lighthouse Keeper withdrawn.

1997 – Merchant Shipping (Commissioners of Irish Lights) Act confirms powers for electronic AtoN and commercial activity.

2000 – Newly designed and built ILV Granuaile enters into service. During the period 1812 – 2000 Irish Lights owned and operated 27 vessels.

2010 – Atkins Review and establishment of Joint Strategic Board to drive strategic co-operation between the 3 General Lighthouse Authorities for the UK and Ireland.

2015 – 2024

2015 – Irish and UK Governments agree new arrangements for Irish Lights.

Irish Lights launches Great Lighthouses of Ireland Initiative.

2018 – Irish Lights launches its new 5-year strategy Safe Seas Connected Coasts 2018-2024.

RTE launches Great Lighthouses of Ireland TV Documentary – watched by 450,000 viewers.

2021 – Maritime Area Planning Act – Provides for Irish Lights AtoN approvals process. Confirms Ireland's maritime area.

2022 – Irish Lights hosts International Conference on Navigating to 2050 safely and sustainably.

2023 – Ireland ratifies the IALA Convention.

Irish Lights publishes 1st Climate Action Plan to 2030.

Irish Lights launches new online Local Aids Navigation Portal and Training Programme.

2024 – IALA Convention enters into force. Establishment of IALA Intergovernmental Organisation (IGO).


2025 – 2030

2025 – Irish Lights launches 5 Year Strategy – Safe Seas – Connected Coasts 2025 – 2030.



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DRIVERS OF STRATEGIC CHANGE

The image shows the interior of a ship's bridge. Two women are working at a console with multiple computer monitors. The monitors display various navigation data, including maps and charts. The woman in the foreground is wearing a dark jacket with 'HH' on the back. The woman in the background is wearing a dark blazer. The background shows a view of the sea and a coastline through large windows. The overall lighting is blue, suggesting a professional and focused environment.

Shaping future mariners: Over the past five years, nearly 50 cadets have trained on ILV *Granuaile*, gaining invaluable hands-on experience in navigation, vessel operations, and safety procedures. Irish Lights assists the Maritime College of Ireland (NMCI) to support cadets through their training, ensuring the next generation of maritime professionals are equipped with the skillset to navigate safely and have long and successful careers. Credit: National Maritime College of Ireland (NMCI)

This strategy has been developed against a backdrop of change in the wider marine sector in Ireland and Northern Ireland recognising the critical importance of safe and efficient marine navigation to protect lives and promote the economy, trade, the environment and quality of life.

The strategy for the provision of Aids to Navigation is to ensure safe, efficient, and environmentally responsible navigation for all users. The 2018–2024 *Safe Seas – Connected Coasts* strategy focused heavily on driving innovation in service provision and building resilience into our AtoN systems to ensure safe navigation. These core objectives remain. The analysis in that strategy that the likely timeline for the emergence of any new IALA approved AtoN systems was 10 to 15 years has been proven correct and remains the case.

However, while there is continuity, there are also significant changes to the trends and drivers which inform this strategy. Irish Lights has identified nine key drivers of change that will influence this strategy over the period to 2030 and beyond.

Drivers of Strategic Change to 2030 and Beyond

1. A Shared and Changing Sea Space
2. Trade Patterns and Mix of Vessels
3. The Future Mariner
4. International and National Maritime Legislation, Standards and additional Compliance Requirements
5. Changes in Technology
6. Thought / Knowledge Leadership and Recognised Expertise on Navigation and Safety
7. Sustainability, Climate Change, Environment and Biodiversity
8. Maritime Safety and Security
9. Key Asset Replacement and Contract Renewals

A Shared and Changing Sea Space

Marine Spatial Planning (MSP) in Ireland is being delivered through the Marine Planning Policy Statement and the National Marine Planning Framework (NMPF). A Marine Plan for Northern Ireland is under development and takes a broadly similar approach. The Irish Lights safety of navigation service is an important enabler for MSP and responsible use of the shared marine space. The period of this strategy will see increased use of our maritime space as Offshore Renewable Energy (ORE) rollout commences, and DMAP (Designated Marine Area Plans), and MPA (Marine Protected Areas) are defined. Direct impacts will include new physical infrastructure, increases in vessel numbers and traffic density, and additional regulatory requirements. This will affect all sectors including commercial, fishing, and leisure. There will also be an increase in Local Aids to Navigation and referrals arising from consenting activities. Scrutiny of development applications submitted to An Bord Pleanála, The Maritime Area Regulatory Authority (MARA), and Local Authorities, will be a significant task as will ensuring compliance with existing and emerging environmental regulations.

This strategy has been prepared with MSP at its core and recognises that a more planned and regulated maritime environment will develop across the period of the strategy.

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The provisions of the Maritime Area Planning Act (MAP Act) and the establishment of MARA have brought significant improvements to the regulation of activity in Ireland’s maritime area out to the limits of the Exclusive Economic Zone (EEZ). The regulatory role of Irish Lights is recognised in this legislation. Irish Lights has a constant presence on the sea and in key coastal locations and collaborates with other agencies as required.



Supporting safe seas: Irish Lights provides extensive safety of navigation advice to all Offshore Renewable Energy (ORE) projects. Irish Lights will continue to support the process as projects progress through their commissioning and operational stages, via the Statutory Consent process for lighting and marking of offshore infrastructure. Credit: Irish Lights

Trade Patterns and Mix of Vessels

This strategy recognises the critical importance of ports to our island and takes into account that trading patterns in ports in Ireland have been affected by Brexit, by climate change measures, by changes to fishing practices, and by other cyclical business impacts. It is anticipated that there will be further impacts within the period of this strategy resulting from the roll out of ORE projects, and within and beyond the strategy period by direct climate change impacts such as weather events and flood risk.

Changes in port activity and associated traffic patterns impact directly on the demand for Irish Lights services in relation to both General and Local AtoN. The Ports Capacity Study, published in June 2023, and the National Ports Policy Issues Paper provide a detailed analysis of Tier 1 and Tier 2 Ports, and ports of Regional Significance. The capacity study also took into account ports in Northern Ireland. It is important that all port developments include an analysis of safe navigation and AtoN requirements and that updated hydrographic data is provided to the UK Hydrographic Office (UKHO).

The requirements of the ORE sector will be a key driver for ports development. There are a small number of ports that have the combined water depth, landbank, and access that could support ORE construction requirements. However, there are many ports that could support the operation and maintenance requirements of ORE. It is anticipated that a cooperative approach between ports will emerge based on the demand and facilities available.

Growth in cruise traffic may require changes to AtoN provision as vessels are visiting more remote locations or when tendering to ports from anchorages.

The average age of the world fleet continues to increase, and as of early 2023, the average ship's age was 22.2 years (United Nations Conference on Trade and Development – UNCTAD). An aging fleet can bring challenges in relation to reliability, and to the introduction of new technology, as much of the fleet would not be suitable for retrofit, but still not of an age where it will be replaced. There are similar challenges in the fishing fleet. To ensure safe navigation Irish Lights must serve all mariners regardless of the size or type of vessel or the level of technology available.

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Credit: National Maritime College of Ireland (NMCI)

The Future Mariner

High standards of seafarer training are a basic requirement for safe navigation. Different international and domestic training standards and regulations apply depending on the size and type of vessel involved. However, all mariners regularly use Marine Aids to Navigation to enhance the safety and efficiency of their voyages.

The Department of Transport regulates seafarer Education and Training in Ireland. The required courses to meet international standards are delivered through the National Maritime College of Ireland (NMCI), Bord Iascaigh Mhara (BIM), the Irish Sailing Association (ISA), and approved private providers.

The skillset required for seafarers has changed significantly over the years and these changes are likely to continue or accelerate over the period of this strategy. Safe navigation and watchkeeping requires the ability to make use of traditional skills alongside an increasing array of technologies which aid safe navigation.

Irish Lights promotes and supports high standards of training throughout the maritime community and the ILV Granuaile is an important resource for providing access to sea time for NMCI students as they commence their careers at sea.

Emerging technologies such as autonomous systems and route data exchange capabilities, will exist side by side with more traditional navigation methods throughout the coming decade. This strategy recognises the need to cater for future mariners and the mix of cutting edge and traditional navigation technologies that must be accommodated into the future.

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International and National Maritime Legislation, Standards and additional Compliance Requirements

New and updated equipment standards, guidance, and regulations from the International Maritime Organisation (IMO) and International Telecommunication Union (ITU), and from standards bodies such as International Organisation for Standardisation (ISO) and Radio Technical Commission for Maritime Services (RTCM) have a direct influence on equipment carried on board vessels and how mariners engage with AtoN and other safety systems. These requirements must be aligned with the output from IALA through cooperation between the organisations involved and collaboration between the government Departments and state organisations which represent Ireland at these bodies. This ever-growing need for collaboration in our maritime space has been apparent for some time and is reflected in this strategy.

The Maritime Area Planning Act defines Ireland's Maritime Area as extending from high-water mark to the continental shelf (including the EEZ). MSP requirements are set out in the Marine Planning Policy Statement (MPPS) and the National Marine Planning Framework (NMPF). There is a clear requirement for regulation and enforcement to the limits of the maritime area. There is a requirement for Aids to Navigation regulation to extend to these limits and (subject to ratification of the relevant IMO Convention) wreck response may be similarly extended.

In addition to maritime legislation, Irish Lights is governed by a growing suite of national and public body legislation and compliance requirements. These requirements cover governance, data, environmental, health and safety, employee and employer legislation and Irish Lights is required to meet the highest standards whether through regulation or voluntary best practice. The preparation of this strategy has included an assessment of all known potential compliance requirements and the requirements to plan for the impact on Irish Lights services going forward.

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This ever-growing need for collaboration in our maritime space has been apparent for some time and is reflected in this strategy.



The North Bull Lighthouse, located at the mouth of the River Liffey near Dublin, is an active aid to navigation that helps guide shipping safely into the Liffey and the Port of Dublin. Operated and maintained by the Dublin Port Company, it is an example of a local Aid to Navigation (AtoN) inspected by Irish Lights. This lighthouse is part of a network of over 3,500 local AtoNs around Ireland's coast (north and south), ensuring safe passage for vessels, protecting maritime trade, and supporting one of the country's busiest ports. Credit: Ann Bruen

Changes in Technology

The primary equipment carried on commercial vessels is mandated through IMO Conventions. For many other vessels earlier adoption of alternative systems is possible. While this can be beneficial there are also risks in the use of unofficial systems and data, particularly in safety sensitive situations. In these circumstances it is important that organisations such as Irish Lights are engaged with providers and users to ensure appropriate use of emerging technologies.

Emergence of new technology is a key driver of this strategy and will require close contact with all vessel user classes, and with system providers, to ensure the opportunities and risks are understood and that services provided by Irish Lights are being used in the manner intended.

IALA (the International Association for Marine Aids to Navigation) continues to lead the international standardisation of Marine Aids to Navigation. The modernisation of AtoN has necessitated increasing cooperation between IALA, and other organisations involved in maritime safety and standardisation. IALA works closely with other international organisations such as the International Maritime Organisation (IMO), the International Hydrographic Organisation (IHO) and the International Telecommunications Union (ITU). It will be important to ensure collaboration and alignment of Ireland's interests at international level to deliver improved benefits in terms of safety of navigation.

There are a number of technological advances in train that will impact on ships and trade within and beyond the period of this strategy. The mandatory implementation in January 2024 of the IMO Maritime Electronic Single Window for port entry is a clear indicator that shipping is moving towards an automated data exchange environment.

The S-100 Universal Hydrographic Data Model being introduced by the International Hydrographic Organisation (IHO) will enable IALA and Irish Lights to cater for future demands for digital products and services. Potential services include AtoN, Traffic Management, Marine Protected Areas, and Maritime Safety Information. Irish Lights is involved in the definition of these data models through its work with IALA and will also work closely with the competent authorities in Ireland to support the implementation of these developments.

The IMO Global Maritime Distress and Safety System (GMDSS) review highlighted the impact modern communication systems such as Low Earth Orbit (LEO) Satellite Networks, and terrestrial technologies like VHF Data Exchange System (VDES), and Long-Term Evolution wireless communications standard (LTE), can have on maritime safety. As these future technologies are approved for use and carriage by the IMO, Irish Lights must be ready to include their use in our AtoN services.

The development of an IMO Code for Marine Autonomous Surface Ships (MASS) is well advanced. While this will initially be a voluntary code for ships other than passenger ships, a mandatory code could be in place by 2032. The work on MASS will see the emergence of improved sensor technologies which could improve safe navigation on all ships. This will parallel ongoing work on maritime digitisation related to passage planning, route exchange and Vessel Traffic Management System (VTMS). All of these developments impact on the work of Irish Lights and are included in this strategy.



It will be important to ensure collaboration and alignment of Ireland's interests at national and international level to deliver improved benefits in terms of safety of navigation.

Sustainability, Climate Change, Environment and Biodiversity

Irish Lights, since its very beginnings, has been committed to the protection of the natural environment in which it operates. The nature of our business is such that we will be one of the first affected by any change in the coastal environment or weather patterns. Irish Lights welcomes and endorses the Climate Action Plan 2024.

National and international measures to address the climate emergency will have significant impacts over the period of this strategy. Climate change will have direct impacts on our coastal network through the likely risk of increased extreme weather events and coastal flooding. These same events also impact on safe navigation for AtoN users.

Given the unique locations of our coastal infrastructure significant opportunities have arisen over the period of the last strategy to support wider national objectives for climate, environmental and biodiversity monitoring. This includes the contribution of our MetOcean network to the National Flood Forecasting Service and collaboration with the Office of Public Works (OPW), National Parks and Wildlife Service (NPWS), Environmental NGOs, and Universities / Research Groups on biodiversity and nature protection projects such as those at Skelligs and Inishtearaght.

The challenges of Climate Change have required a steady ramping up of our investment in sustainability, environmental protection and biodiversity. This is evidenced by the production in 2023 of a comprehensive Sustainability Strategy and Policy Statement and now the inclusion of our commitment to Sustainability, Climate, Environment and Biodiversity as a distinct Focus Area of this strategy.

Meeting these targets will not be without its challenges. The remote location of our coastal infrastructure requires a ship and helicopter to facilitate access. The conversion of all offshore stations to solar power and LED lights has reduced maintenance requirements but there is still a need to access these stations by sea and by air. The replacement of the ILV Granuaile by 2030, which accounts for 86% of our emissions, with a more fuel-efficient vessel is key to our carbon reduction targets.



Advancing sustainability: A major capital project at Tuskar Lighthouse, off the southeast coast of County Wexford saw the installation of three large solar arrays, primarily focused on providing power to the Aids to Navigation on the site. The project included the replacement of the racon and the installation of a new modern rotating LED Beacon. This solarisation project highlights the importance of modernising lighthouse stations for greater energy efficiency, ensuring long-term sustainability and safety at sea. Credit: Irish Lights

The Irish Lights station network makes a significant contribution to the cultural and biological diversity of our coastline. We will continue to work closely with local communities, government agencies, academic institutions, environmental organisations and other stakeholders to increase our understanding of these impacts. This will be reinforced by our climate adaptation study and 'Manage by Nature' approach. Our ongoing work will continue to preserve Irish Lights presence on the coast which has positively impacted coastal communities through the provision of our core services and by the alternative use of its coastal infrastructure for tourism and heritage activity.

The replacement of the ILV Granuaile by 2030, which accounts for 86% of our emissions, with a more fuel-efficient vessel is key to our carbon reduction targets.

Thought and Knowledge Leadership and Recognised Expertise on Navigation and Safety

The contribution of ever improving technology to safety at sea has been immense. Countless lives have been saved, property protected, and environmental catastrophes averted, due to ever improving construction material and techniques, stability tools, lifesaving equipment, and positioning and sensor equipment. The pace of change will continue to accelerate. Recent advances in Artificial Intelligence and Machine Learning are likely to be a catalyst for very significant change. These developments will be both on board vessels and ashore.

Introduction of new technology into safe navigation requires strategic leadership from organisations such as Irish Lights to ensure that both the development and introduction of such systems is well informed by user requirements. Thought leadership and knowledge leadership are essential requirements for successful delivery of this strategy. Irish Lights is staffed by professionals who are experts in their field and who continually advance that expertise through collaboration with other professionals and the research and development community. We work closely with colleagues in GRAD who provide R&D expertise and support for our developing activities. This thought leadership extends beyond AtoN provision to understanding how combinations of navigation systems and associated data and information are used by mariners and the risks associated with each use case. Irish Lights responsibilities cover all vessels, and our focus is the safety of all mariners.

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Lighting the Way Sustainably: The new low-energy LED light source at Ardnakinna Lighthouse, Bere Island, County Cork has been installed as part of an upgrade to improve efficiency and reduce environmental impact. Developed in collaboration with the General Lighthouse Authorities (GLA) Research and Development (GRAD) team, this cutting-edge technology enhances energy efficiency while ensuring a reliable aid to navigation for mariners. Credit: Irish Lights

Maritime Safety and Security

The security of our maritime domain is a matter of increasing concern in terms of protection of assets, security, and surveillance. Ireland hosts significant subsea infrastructure that is of national and regional importance. The rollout of ORE, and particularly floating ORE, will see critical energy installations at long distances from our shore.

Global Navigation Satellite System (GNSS) positioning technology can also be vulnerable. GNSS vulnerabilities can pose significant cybersecurity threats such as spoofing and jamming which can affect a significant number of on-board systems using positioning and timing inputs.

Complementary Positioning, Navigation, and Timing (CPNT) systems are required to address situations where GNSS is unavailable or degraded. This includes greater resilience within existing systems, and the use of dissimilar PNT systems, and existing AtoN and NavAid systems.

In 2023 Irish Lights hosted a joint workshop with the Marine Institute, on the topic of Navigating Safe and Secure Seas and Oceans. The feedback from this workshop informed the identification of associated research priorities in the National Marine R&D Strategy, Ocean Knowledge 2030. In this context, the recent commitment to the development of a Maritime Security Strategy in the Defence Policy Review 2024 is also welcome.

Ensuring a secure and resilient network of aids to navigation and collaborating with others as appropriate to monitor and secure our maritime domain are important and relevant considerations in this strategy.



Key Asset Replacement and Contract Renewals

The ILV Granuaile and the contract helicopter service are central to our mandate to provide a network of essential aids to navigation and to meet our wreck response obligations.

In 2023, a major project commenced to plan for the replacement of the ILV Granuaile by 2030. In 2025 the procurement of a new helicopter service for Ireland and Northern Ireland will commence. These are key projects to be delivered within the lifetime of this strategy.



— 3 —

BUILDING ON OUR PREVIOUS STRATEGY

Safe Seas – Connected Coasts (2018–2024)



The crew of ILV *Granuaile* work on a buoy to inspect the lantern and electrics.
Credit: Andrew Collins

An important aspect of any strategy is its ability to withstand unexpected external forces that could not be foreseen when it was being prepared. Our 2018–2024: Safe Seas – Connected Coasts Strategy saw more than its fair share of such events including, Brexit, the Covid-19 Pandemic, the Suez Canal closure, and the war in Ukraine.

Despite these events our strategic objectives were achieved and a strong foundation was established for this follow on, 2025 – 2030, strategy. Five Focus Areas were established under the previous strategy and the primary focus area remains for this strategy and will always be Safe Navigation. Safe, efficient, and environmentally responsible navigation is a critical enabler for Ireland’s economy. Energy and food security, tourism, maritime planning, and environmental protection, all require safe navigation. Safe navigation requires a continuing mix of physical and electronic AtoN operating to international standards.

In reviewing the previous strategy, employees commented positively on the effectiveness of the five Focus Areas in achieving a day-to-day operational touchpoint for everyone with the strategy objectives. The focus areas crossed organisational structures in a positive way, created a common language as to what needed to be done, and forced an external mindset. The Focus Areas played an important role in operational planning, allowing employees to prioritise and understand which things were being prioritised and why some things were being prioritised over others.

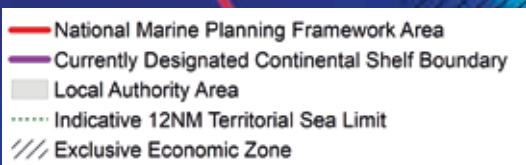
This strategy is similarly structured under five focus areas (see page 31) which have been updated to reflect the changes in the wider maritime sector at national and international level, significant regulatory changes, and important feedback from our stakeholders through our ongoing consultation processes and our 2024 Stakeholder Survey.



Waves crashing at Fastnet Rock Lighthouse off the coast of Cork. Credit: In Production TV

4

STAKEHOLDER CONSULTATION



Credits: DECC: Designated Continental Shelf (2014), Exclusive Economic Zone (2014); DHLGH: NMPF Area (2016); DFA: 12nm Territorial Sea (2004); GEBCO Group: GEBCO Grid (2020); Office for National Statistics (UK): Countries (2020); OSI, Local Authority Areas (2017); OSNI, Largescale Land Boundary (2020).

National Marine Planning Framework - Map of Ireland's maritime boundaries. Credit: Marine Institute

Effective user and stakeholder input is critical to ensuring that Irish Lights provides a satisfactory and relevant range of services. Irish Lights maintains close contact with representatives of users of its services and with other stakeholders. We also seek input from the general public on all of the services we provide.

This essential relationship with stakeholders is achieved through a variety of channels.

- We meet regularly with Government Departments and Agencies in Ireland, Northern Ireland and the UK to discuss matters of shared concern, and we work closely with local authorities, ports and shipping industry representatives through various industry groups.
- Our annual AtoN User, AtoN Provider and Joint User Group meetings in Ireland, Northern Ireland and the UK are well attended and provide a shared space for consideration of all AtoN issues.
- Our 5 yearly AtoN Review process considers AtoN requirements in Ireland and Northern Ireland and includes a peer review mechanism.
- Our employees, and particularly our coast teams and local contacts, are our key ambassadors as they go about their daily work and a critical source of feedback from the coast.
- Our online presence is used to provide information and seek input from all members of the public.

From time to time, we survey our stakeholders for additional feedback. The results of the most recent survey, completed in July 2024, are summarised in the Table on page 27.

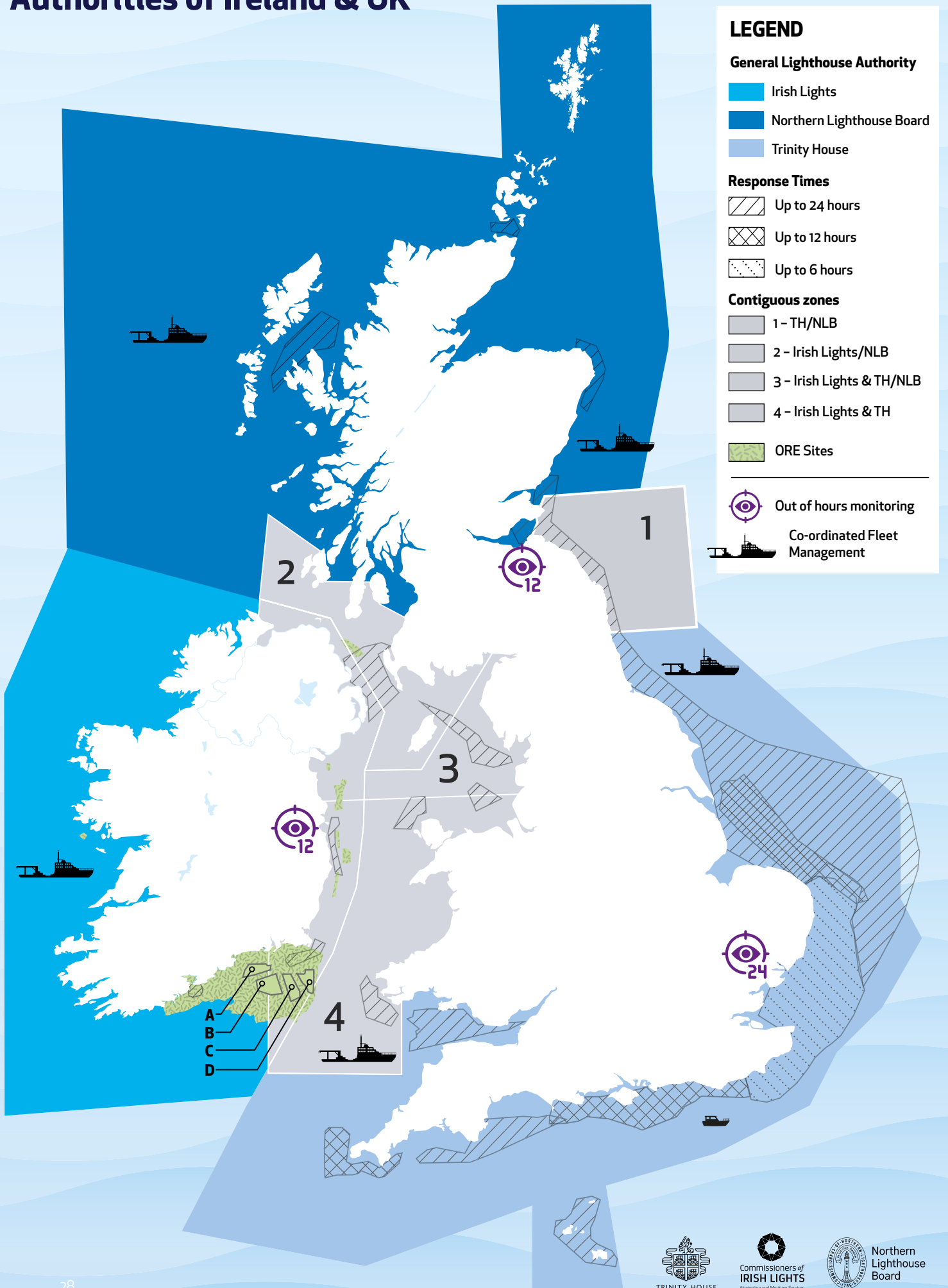


Stakeholder engagement is central to Irish Lights' vision to promote collaboration and provide effective services. Irish Lights demonstrates this commitment through comprehensive consultation with stakeholders, ensuring their needs and insights shape the future. Regular forums, working groups, and meetings with aids to navigation providers and users are vital platforms for open dialogue. These engagements support continuous improvement, align with maritime safety priorities, and reinforce our shared commitment to safe and efficient navigation.

Stakeholder Survey Feedback 2024

Topic	Key Survey Findings
AtoN Requirements:	The survey confirmed the strong support from users of Irish Lights services for the continued provision of physical AtoN to support safe navigation. This opinion was reinforced by user feedback received during five regional AtoN workshops held in Dunmore East, Castletownbere, Galway, Killybegs, Bangor (Co Down) and Howth.
Stakeholder Satisfaction:	The average satisfaction score was 4.4 out of 5 with higher scores from Ports, Shipping, and Government Departments. User concerns which decreased this score were primarily related to the inability of Irish Lights to fund additional AtoN services at local level, and heritage related issues.
Safe Navigation:	The average score for alignment with the safety of navigation priorities of those surveyed mirrored the overall score of 4.4 out of 5. Where respondents were least satisfied, they expressed a view that more funding was required for additional services and that access to safety of navigation information should be improved.
Climate Change:	Almost all respondents expressed safety concerns in relation to adverse impacts from Climate Change. These include an increasing frequency and severity of Extreme Weather Events, sea level rise, coastal erosion, sea temperature changes, and flooding. Respondents anticipate that these effects will impact on safety at sea, coastal infrastructure, and marine ecosystems.
Level of Service Provided by Irish Lights:	Almost all respondents recognised and supported the Aids to Navigation and the associated regulatory regime for Local Aids to Navigation. The importance of this service to safe operations was highlighted in the responses. A significant number of respondents noted the importance of the weather data provided from Irish Lights stations, and the provision of advice and support by Irish Lights to AtoN users and providers was highlighted as an important aspect of the service.
Local Lighthouse Authority Regulation:	The new online Portal for Local AtoN, launched by Irish Lights in 2023 was positively noted by respondents. There were a number of concerns expressed regarding the level of funding needed for Local AtoN which are funded by Local Lighthouse Authorities.
Vessel and Equipment Services:	Respondents who had experience of using Irish Lights ship and equipment services provided positive feedback and highlighted the importance of having such services available in Irish waters.
Tourism and Heritage:	A significant number of respondents encouraged the further expansion of Irish Lights tourism and heritage projects.

Collaboration across the General Lighthouse Authorities of Ireland & UK



— 5 —

LOOKING FORWARD IRISH LIGHTS STRATEGY 2025-2030



This 2025–2030 strategy is strongly focussed on safe navigation through the provision and regulation of Aids to Navigation to the international standards set by IALA. The strategy recognises the importance of this infrastructure to safe, efficient, and environmentally responsible trade encompassing over 90% of goods brought to/from the island of Ireland.

The strategy:

- Recognises the immense contribution of our employees, past and present, to the success of Irish Lights, our achievements to date, and our ambitions for the future.
- Recognises the central importance of addressing the drivers of strategic change set out in section 2 and including climate action measures at the forefront of our work programmes including measures to deliver our Climate Action Roadmap.
- Recognises the increasing demands on our sea space and the need for collaboration to deliver the best Marine Spatial Planning outcomes for all users. Existing shipping, fishing and leisure activities will be required to share our sea space and coexist with ORE developments, MPAs and DMAPs.
- Recognises the need for key asset replacement and contract renewal including the replacement of the Granuaile by 2030 and the placement of a new helicopter contract by 2027.

The added value that Irish Lights delivers beyond its core statutory role is also embedded in our strategy. This includes commercial income from use of reserve capacity, support for related national and international activity in the maritime domain, and the opening of our heritage assets to the public to promote understanding of maritime life and support to our coastal communities.

Regulation of Aids to Navigation and their role in the delivery of safe navigation cannot be achieved in isolation. The strategy requires coordination with other regulatory bodies and active influence and participation in relevant national and international structures and organisations.

The key drivers of strategic change in Chapter 3 have resulted in the establishment of the following **Goals and Key Focus Areas for 2025–2030**

Strategic Goals and Focus Areas 2025–2030	Corresponding Rationale for adopting these 5 Focus Areas
 <p>1. Ensure Safe Navigation for All Provide and regulate to international standards a network of marine aids to navigation around the island of Ireland, which is secure, resilient, and technically advanced and which protects lives, the economy, trade and the environment.</p>	<p>Reflecting our core statutory function under the SOLAS Safety of Life at Sea Convention and the Merchant Shipping Acts and our commitment to all who use our marine space.</p>
 <p>2. Demonstrate Leadership, Collaboration and Alignment at National and International Level Act as trusted experts working in co-operation with our national, GLA, and international partners, to align the development of safe navigation services to evolving policy, regulatory and industry needs, using innovative technology and promoting the shared and safe use of the maritime domain.</p>	<p>Recognising the increasing imperative for cooperation and alignment at national and international level.</p>
 <p>3. Commit to Sustainable Operations, Climate Action, Protection of the Environment and Biodiversity Make a difference by managing climate risks, reducing our impact on the environment, promoting biodiversity and capturing the opportunities that sustainability can bring.</p>	<p>Putting to the fore our belief that every individual and organisation can make a difference and committing ourselves to continued progress on our Sustainability Strategy and Action Plan.</p>
 <p>4. Serve Coastal Communities, Safeguarding and Sharing Our Maritime Heritage Build relationships at a local level, by promoting the use of maritime heritage assets and by growing and harnessing our all-island Great Lighthouses of Ireland tourism partnership to maximise local benefits.</p>	<p>Recognising where we come from, and where we work, and committing ourselves to promoting our heritage and continuing to serve the interests of coastal communities.</p>
 <p>5. Deliver Excellence and Stay True to Our Values Combine the skills and expertise of our employees with new technologies to drive quality, reliability and continuous improvement, maintaining excellence and staying true to our values of Professionalism, Quality, Respect, Innovation, Trust and Collaboration</p>	<p>Setting out our commitment to our organisational values and our belief that these support us to deliver excellence and value to our stakeholders and the efficient and optimal use of resources.</p>



FOCUS AREA 1:

Ensure Safe Navigation for All – Provide and regulate to international standards a network of marine aids to navigation around the island of Ireland, which is secure, resilient, and technically advanced and which protects lives, the economy, trade and the environment.

Focus Area 1 of our strategy encompasses the statutory role of Irish Lights in the provision and regulation of Aids to Navigation (AtoN), and in responding to dangerous wreck outside of harbour areas. AtoN are an essential National and International Infrastructure for the maritime sector.

Safe navigation is a prerequisite for maritime safety, trade, security and the protection of the environment. Irish Lights is required to provide and regulate marine Aids to Navigation (AtoN) for all marine users. A modern AtoN infrastructure that serves the smallest leisure craft and the largest commercial cargo or passenger vessel, requires a responsive mix of physical and electronic AtoN.

Safety of navigation considerations are also important for Maritime Spatial Planning (MSP), and key emerging maritime uses such as the planned rollout of Offshore Renewable Energy (ORE) infrastructure, Marine Protected Areas (MPA), and Designated Maritime Area Plans (DMAP).

Ongoing investments in the AtoN network will reflect the need for achieving measurable decreases in outages and the maintenance of key assets.



Focus Area 1: Key Components – Ensure Safe Navigation for All

Provision of General Aids to Navigation	Regulation of Local Aids to Navigation	Provision and Maintenance of Coastal Network Infrastructure
Visual AtoN <ul style="list-style-type: none"> - Lighthouses - Buoys - Beacons 	Provide Statutory Consents / Permissions for Local AtoN Audit Local Lighthouse Authorities	Provide and maintain technology and communication infrastructure to enable 24/7/365 Monitoring of AtoN <ul style="list-style-type: none"> • AIS Base Stations • Monitoring Network
Electronic AtoN <ul style="list-style-type: none"> - Automatic Identification System (AIS) - Racon 	Inspect Local Aids Undertake Navigation Risk Assessments	Collection and broadcasting of AtoN and safety related information.
Continuously assess user needs	Provide Advice and Information on Safe Navigation	Developing enhanced data services through increased digitisation and data harmonisation <ul style="list-style-type: none"> • S100 / S200 data standards • Open Data Portal
Respond to Wrecks and Mark New Dangers to Navigation		

ASSURANCE

Meet International IALA Availability Standards

Category 1 (Vital Aids) – 99.8% Availability.

Category 2 (Important Aids) – 99.0% Availability.

Category 3 (Necessary Aids) – 97.0% Availability.

Meet Wreck Risk Response Targets

Respond to wrecks within 24 hours – 85%

Publish 5 Year Aids to Navigation Reviews

Comply with III Code Implementation Plan and IMO Member State Audits

Emerging Requirements and Developments over the life of the Strategy and Beyond

Complementary Positioning, Navigation, & Timing (CPNT)

Space Based Navigation and Communications Systems

Vessel Traffic Services (VTS) and Vessel Traffic Management Services (VTMS)

Marine Autonomous Surface Ships (MASS)

Maritime Connectivity Platform (MCP)

VHF Data Exchange System (VDES)

New AtoN (e.g. Machine Vision, Inertial, Absolute radar positioning, Quantum)

FOCUS AREA 1: ENSURE SAFE NAVIGATION FOR ALL

Strategic Objectives 2025-2030

1. Fulfil the mandatory IMO SOLAS obligations for Ireland and the UK (Northern Ireland) in relation to the provision and regulation of AtoN in accordance with IALA Standards.
2. In conjunction with our GLA partners, maintain the required resources for immediate response to dangerous wrecks outside of harbour areas within agreed response times.
3. Work with relevant statutory bodies in Ireland and Northern Ireland to implement an effective and streamlined maritime consenting regime.
4. Continue to provide thought and knowledge leadership and innovative use of new technology to deliver reliable, low maintenance, environmentally responsible, AtoN systems.
5. Ensure our essential assets including, ship, coastal AtoN networks, and communications infrastructure are reliable, secure and resilient.
6. Support the development of international maritime data standards.



In delivering our services Irish Lights relies substantially on the capability of our buoy tender vessel, the ILV Granuaile; the third Irish Lights vessel to bear the name Granuaile. Built in 2000, it is a versatile Class 1 dynamic positioning vessel capable of working in difficult sea conditions. The vessel's primary function is to place and service offshore buoys, which warn mariners of the location of sand banks, reefs and other offshore hazards near shipping routes. The vessel also serves as a helicopter platform for servicing offshore lighthouses and is available to assist with search & rescue, oil pollution control, surveying and offshore data collection. Credit: Andrew Collins

Essential Enablers and Core Capabilities that must be in place to deliver Focus Area 1

Enabler / Capability	Purpose / Requirement
Ship	The ability to operate at sea in challenging conditions is an essential capability. The ILV Granuaile is required for AtoN maintenance and inspection, maritime expertise, project and maintenance support, outage response, personnel transfer, wreck response. A replacement vessel is required for 2030.
Aircraft	Required for personnel transfer, project and maintenance support, outage response. A new helicopter contract is required for 2027.
Outage Response Plan	Respond to critical defects and outages alerted via our 24/7/365 monitoring networks within agreed response times to ensure compliance with availability standards.
AtoN Capital Plan	Annual capital investment to ensure that equipment replacement, building conditioning, environmental and safety resources are provided for in programmes of work that are risk based and incorporate the use of technologies which deliver reliability, and reduce maintenance and environmental impact.
AtoN Coastal Maintenance Plan	Annual maintenance investment in equipment around the coast to ensure reliability and compliance with required standards.
Asset Management System and Inspection Regime	An asset management system and a comprehensive inspection regime which uses data to inform management decisions and prioritisation of work based on risk reduction or alternative use opportunities.
Buoy Refurbishment Plan	An annual Buoy Refurbishment Plan to ensure that buoy refurbishment is managed, monitored and reported to meet our statutory requirements.
Monitoring Network	Provision of real-time health and performance status of all AtoN components/equipment and also any defects, failures or outages. Enables timely intervention and/or response to inform planning.
Data Security and Authentication	Continuous enhancement measures to protect our infrastructure and data from unauthorised users and cyber threats.
Marine Spatial Planning and National Marine Planning Framework (NMPF)	Irish Lights will take account of the Safety at Sea Policy provisions in the National Marine Planning Framework when making consenting decisions on local AtoN. Essential to safe shared use of marine space.
Research and Development	Research and development via GRAD to ensure input to determining the most technologically advantageous systems are developed and used.
IALA Membership	To influence and take account of international standards.



FOCUS AREA 2 :

Demonstrate Leadership, Collaboration and Alignment

– Act as trusted experts working in co-operation with our national, GLA, and international partners, to align the development of safe navigation services to evolving policy, regulatory and industry needs, using innovative technology and promoting the shared and safe use of the maritime domain.

Focus Area 2 of the strategy is concerned with how Irish Lights engages with people and organisations outside of Irish Lights. These relationships range from individual users of our AtoN services, industry and representative groups, Local Lighthouse Authorities, Government Departments and Agencies, key partners in the UK and international organisations.

Navigation takes place in a shared sea space and responsibility for Marine Spatial Planning and different aspects of safe navigation is shared across a number of Government Departments and Agencies. A coordinated approach with the Department of Transport (DoT), Department of Climate, Environment and Energy (DCEE), Department of Housing, Local Government and Heritage (DHLGH), Department of Agriculture, Food, Fisheries and the Marine (DAFFM) and associated agencies is essential to optimise delivery of the services involved.

As Irish Lights has responsibility for AtoN in Ireland and Northern Ireland, the Ireland - UK relationship is particularly important and valued. Inter GLA working provides significant benefits including co-ordinated fleet management, helicopter operations and out of hours monitoring continues to ensure that risk response to wreck and new dangers and critical AtoN outages are managed effectively on a 24/7/365 basis around the island of Ireland.

Our shared research and development team GRAD, which is based in Harwich, is engaged in a range of research activities related to lights, resilient PNT (position, navigation and timing), cyber security, data and systems security, environmental and climate issues, all of which will have a direct bearing on the development of our services in the future.

Our recently published tri-GLA Marine Navigation Plan 2040 and our Navigating to 2040 Strategy have informed the development of this strategy. These plans take account of the key relationships that exist with the Department for Transport (DfT), Secretary of State's Representative for Maritime Salvage and Intervention (SOSREP), Maritime and Coastguard Agency (MCA) the UK Hydrographic and Met Office's. The seamless nature of these collaborative working relationships with colleagues in the UK are long-standing and bring significant safety benefits to mariners.

The EU through the European Commission, Parliament, and agencies such as the European Maritime Safety Agency (EMSA), and European Union Agency for the Space Programme (EUSPA), plays a significant part in determining the requirements for safe navigation within the EU and provides important navigation services such as Galileo (a Global Navigation Satellite System) and the European Geostationary Navigation Overlay Service (EGNOS) (a Satellite-based Augmentation System - SBAS). Irish Lights and GRAD have worked with the EUSPA to validate the improvement in positional accuracy delivered by EGNOS using equipment deployed on the ILV Granuaile.

International organisations play a key role in standardising key components of AtoN services. The core AtoN standards are set at IALA where Ireland is represented by Irish Lights. However, the standards for other important components such as radio communications, and hydrography, are set at other international organisations. Irish Lights will support the representatives at these organisations to ensure that issues affecting AtoN are reflected and reciprocate in ensuring other issues are correctly taken into account at IALA.

Finally, working in collaboration we will continue to seek opportunities to deliver mutually beneficial and added value services as a means of optimising the value to stakeholders of Irish Lights assets.



The Irish Delegation to IALA General Assembly in Singapore with IALA Secretary General and Council President: (L-R) Ronan Boyle, Director of Navigation, Maritime and Consenting, Irish Lights; Yvonne Shields O'Connor, CEO, Irish Lights; Marcos Almeida, IALA President; Francis Zachariae, IALA General Secretary; Eamonn Kelly, Assistant Secretary General, Department of Transport; William Priestley, Principal Officer, Department of Transport.



Focus Area 2: Key Components – Demonstrate Leadership, Collaboration and Alignment at National and International Level

Ireland	UK	EU & International Organisations	Provision of Services to Third Parties
<p>Dept. of Transport / DCEE / DHLGH / DAFFM / MARA / ABP / Coastal Planning Authorities / IRCG / Navy / Air Corps / Irish Meteorological Office / MI / GSI / SEAI / EPA / BIM / SFPA / COMREG.</p> <p>Working Groups - MSPAG / ORE Regulators Forum / Seafood/ORE / Maritime FAL / Irish Sea WG / Marine Safety Comms Group / IRCG Aviation Forum</p> <p>Ports and Harbours</p>	<p>DfT (Dept. for Transport)</p> <p>Trinity House and Northern Lighthouse Board</p> <p>MCA / SOSREP / UKHO / UK Met Office / OFCOM</p> <p>Working Groups - NOREL, UKSON. ORER-NI</p>	<p>EU EMSA EUSPA North Sea Energy Co-operation WIGOS</p> <p>IALA IMO WRC IHO ITU</p>	<p>Navigation Expertise</p> <p>Ship Support</p> <p>Environmental Monitoring from coastal buoys and lighthouses</p> <p>Data acquisition</p> <p>Monitoring and inspection</p>
<p>AtoN users in shipping, fishing, and leisure sectors and their representative organisation.</p>	<p>Ports and Harbours</p> <p>AtoN users</p>		<p>Advice and Information</p>

ASSURANCE

Meeting SOLAS Convention Requirements
 Supporting the achievement of other International Maritime Conventions
 Supporting the implementation of National Legislation, Policies and Plans
 Publishing AtoN and MetOcean data on Open Data portal (opendata.gov.ie)

Emerging Requirements and Developments over the life of the Strategy and Beyond

Designated Maritime Area Plans (DMAP)
 Offshore Renewable Energy Roll Out – Powering Prosperity
 Marine Protected Areas
 National Marine Research and Innovation Strategy - Ocean Knowledge 2030
 Maritime Security Strategy
 Critical Entities Resilience Directive
 National Risk Assessment 2025
 New Legislation

Note: Refer to Glossary of Terms on page 59 for a complete list of acronyms.

FOCUS AREA 2: DEMONSTRATE LEADERSHIP, COLLABORATION AND ALIGNMENT AT NATIONAL AND INTERNATIONAL LEVEL

Strategic Objectives 2025-2030

1. Engage with national and international organisations concerned with shipping and navigation safety, in particular in the delivery of IMO coastal state responsibilities for AtoN.
2. Represent Ireland within the IALA IGO and contribute to the development of international AtoN standardisation, through the assessment of new technologies (supported by GRAD) and the development and/or adoption of approved IALA standards, recommendations and guidance.
3. Collaborate with Trinity House and Northern Lighthouse Board at strategic and operational levels to deliver safe navigation, value and efficiencies for key stakeholders.
4. Work with Government Departments and State Agencies that have a lead role on maritime issues and participate in relevant working groups and fora to ensure alignment with Government Policy where there are overlapping interests.
5. Collaborate with other agencies to:
 - Promote and facilitate improved maritime incident response capability.
 - Share and leverage coastal and afloat resources and develop added value services where mutually beneficial.
 - Roll out of the National Flood Forecasting System.



The Irish Lights buoy team preparing the Type 1 buoy for Codling Bank for deployment at sea, where it will be transferred to ILV Granuaile for installation. This buoy is one of three Type 1 buoys strategically positioned to ensure safe navigation around the coast of Ireland. Standing nearly 10 meters high, these buoys are critical aids to navigation, each with a range of 9 nautical miles. In addition to their navigational role, these buoys are also equipped with MetOcean sensors, providing real-time meteorological and oceanographic data. This information is essential for Met Éireann and other agencies in monitoring and modelling sea conditions, wave heights, wind speed and direction, and weather patterns, contributing to maritime safety and forecasting around the Irish coast. Credit: Andrew Collins

Essential Enablers and Core Capabilities that must be in place to deliver Focus Area 2

Enabler / Capability	Purpose / Requirement
IALA Membership	Represent Ireland at IALA to influence international AtoN standardisation.
Inter GLA Collaboration with Trinity House and Northern Lighthouse Board	Maintain strong collaborative working relationships to deliver cost and operational efficiencies particularly in relation to co-ordinated fleet management, out of hours monitoring and shared Research and Development, governance and stakeholder engagements and international coordination.
Relationships with Government Departments	Maintain key relationships with DoT / DfT in order to deliver on SOLAS requirements. Ensure alignment with other relevant government departments, government policy and plans.
Relationships with Government Agencies	Working with other government agencies to ensure alignment with government policy and plans, deliver synergies and value for money and provide mutual support where required.
Relationships with Industry Working Groups	Collaboration with working groups to support industry.
AtoN Users and Representative Organisations	Necessary to ensure that services remain competitive and relevant.



Irish Lights collaborates with the Coast Guard during joint exercises to enhance coordination, response capabilities, and maritime safety. These efforts also focus on environmental protection and improving search and rescue operations, including access to helipads at Castletownbere and Blacksod. Credit: Irish Lights



FOCUS AREA 3:

Commit to Sustainable Operations, Climate Action, Protection of the Environment and Biodiversity – Make a difference by managing climate risks, reducing our impact on the environment, promoting biodiversity and capturing the opportunities that sustainability can bring.

Climate change impacts on multiple levels across Irish Lights operations. Our Climate Action Roadmap sets out the specific measures required to achieve our climate change objectives. Irish Lights will be one of the organisations most affected by the negative impacts of climate change. Our buoys and coastal infrastructure will be directly impacted by changing weather patterns, sea level rise, and flooding events. Our users and the coastal communities in which we operate will also suffer adverse effects. We are already experiencing some of these impacts. As well as increasing the challenge of maintaining a reliable service for our users, these events can significantly increase the cost of maintaining our coastal assets.

Irish Lights has a comprehensive Sustainability Strategy and Action Plan adopted in 2023 which sets out a vision for sustainability with detailed objectives, goals and timelines which are monitored and reported, bringing sustainability into the mainstream both from an operational and governance perspective. We have commenced the introduction of an environmental management system to ISO14001 standard as part of an integrated Health, Safety, Quality and Environmental management system. This will monitor compliance with environmental legislation building on the baseline compliance audit of our activities carried out in 2022. This allows us to monitor and continuously improve in areas such as environmental emissions, waste management, resource management, water discharge, noise and biodiversity.

Statutory measures to address the climate crisis, and to protect our marine environment, while essential and welcome, also bring a requirement for increased resources to ensure compliance. This will drive a requirement for additional funding. As part of this strategy, opportunities to partner with other organisations to secure funding will be pursued where mutual benefits are clear.

Irish Lights, through this strategy, will continue to strongly support the Climate Action Plan, the implementation of the Birds and Habitats Directives, compliance with environmental legislation and measures to protect, secure and improve our coastal environment and biodiversity aligned to the National Biodiversity Plan.



Focus Area 3: Key Components – Commit to Sustainable Operations, Climate Action, Protection of the Environment and Biodiversity

Climate	Sustainability	Biodiversity	Environment
Increase energy efficiency	Minimise use of non-renewable resources	Improve Environmental Protection	Avoid or mitigate environmental impacts
Reduce carbon emissions	Prioritise waste prevention	Promote biodiversity outcomes	Provide data to enhance safety of navigation
Adapt to climate change	Reuse, recover and recycle		Provide data to support marine sector
Reduce and mitigate risk	Minimise, air, water and noise pollution		

ASSURANCE

- Publish Annual Climate Action Roadmap
- Produce Annual Sustainability Report
- Sustainable Energy Authority of Ireland (SEAI) Energy Performance Scorecard
- Achieve ISO 14001
- Maintain Environmental Aspects and Impacts Register

Emerging Requirements and Developments over the life of the Strategy and Beyond

- Climate Mitigation and Adaptation Plans
- National Coastal Change Management Strategy
- Marine Protected Areas
- Designated Maritime Area Plans (DMAP)
- Sea Level Rise Adaptation
- Flood Forecasting

FOCUS AREA 3: COMMIT TO SUSTAINABLE OPERATIONS, CLIMATE ACTION, PROTECTION OF THE ENVIRONMENT AND BIODIVERSITY

Strategic Objectives 2025-2030

1. Ensure that climate, environmental, sustainability and biodiversity goals are incorporated into AtoN service provision and day to day operations.
2. Monitor and adapt to climate and sustainability needs and implement technologies and approaches that reduce environmental impact.
3. Achieve high standards of sustainable practise and comply with applicable legislation.
4. Support research and monitoring to build up a knowledge base to understand the impacts of climate and biodiversity change, asses impact on assets and operations and adapt or mitigate where possible.
5. Design and implement a 'Manage for Nature and Biodiversity Programme' to deliver value to the public and biodiversity enhancement at key sites.
6. Secure third-party funds where possible to enable required works.



Straw Island Lighthouse is a Category 1 aid to navigation in Killeeny Bay, northeast of Inishmore in County Galway. Island lighthouses face increasing challenges due to climate change, including rising sea levels, coastal erosion, and more frequent extreme weather events. These factors threaten the structural integrity of historic lighthouse sites and make maintenance access more difficult. Additionally, changing wave patterns and storm intensities can impact power systems, light visibility, and solar energy efficiency. To address these challenges, Irish Lights are investing in resilient, energy-efficient technologies and exploring sustainable solutions to ensure these vital aids to navigation remain operational in an evolving maritime environment.

Essential Enablers and Core Capabilities that must be in place to deliver Focus Area 3

Enabler / Capability	Purpose / Requirement
Technology & Innovation	<p>Monitor and adopt new technologies and approaches that reduce environmental impact.</p> <p>Identify opportunities for use of remote monitoring and technology to address climate challenge</p>
Research and Development	<p>Build an evidence and knowledge base to support the development of appropriate policies and procedures and identify programmes and resources needed for climate, biodiversity and environmental mitigations and adaptations.</p>
Funding	<p>Collaborate with others with mutual interests to secure third-party funding for research, monitoring, demonstration or site management projects.</p>
Promote Public Awareness, Education and Support	<p>Ensure that the public understands and supports the actions that are required to achieve positive environmental outcomes and to achieve support for Irish Lights agreed approaches.</p>



FOCUS AREA 4:

Serve Coastal Communities, Safeguarding and Sharing Our Maritime Heritage – Build relationships at a local level, by promoting the use of maritime heritage assets and by growing and harnessing our all-island Great Lighthouses of Ireland tourism partnership to maximise local benefits.

Irish Lights is embedded across the entire coast of Ireland. Our core safe navigation services exist to serve mariners, coastal communities, ports and harbours. Arising from the properties we hold for operational purposes we are also the custodians of a suite of iconic lighthouse heritage sites and associated heritage structures. In total we own approximately 290 heritage structures across Ireland and Northern Ireland that are of heritage significance by virtue of their inclusion on the National Inventory of Architecture Heritage or are protected structures / listed buildings.

We also hold a significant archive and rich artifacts, which are a source of maritime history and are also important for the wider social, political, military, engineering, architectural, scientific and administrative history of Ireland in the 19th & 20th centuries. In addition, there is an equally important intangible heritage including local and oral history that exists in relation to the entire operation of Irish Lights since it was established. This is a rich and significant source of heritage which lives on in the coastal communities in which Irish Lights operated and has interacted with for over 240 years.

Irish Lights has for many years recognised the importance of preserving its physical, cultural and natural heritage together with protecting and sharing Irish Lights maritime history for future generations.

A particular success story has been the Great Lighthouses of Ireland brand partnership. This is a strategic all-island tourism initiative to revitalise lighthouses and related structures through collaborative efforts with local authorities, community groups, and government agencies. In supporting Great Lighthouses of Ireland, Irish Lights is committed to the development of a sustainable economic model and the reinvention of individual lighthouses as visitor attractions and unique self-catering accommodation that contribute to local communities.

The partnership now represents 15 community, public, and private operators, who collectively manage 16 lighthouse sites around the island of Ireland. Each site offers valuable, innovative, and sustainable lighthouse and maritime visitor experiences, delivering socio-economic benefits to coastal communities around Ireland. GLI currently offers over 22 visitor experiences, including guided and self-guided tours, boat tours, and a variety of self-catering accommodation. An independent socio-economic report commissioned in April 2019 confirmed that Great Lighthouses of Ireland delivered economic benefit of €16.86 million to the economy and supported 409 jobs in coastal communities. The recently launched Great Lighthouses of Ireland Strategy 2025-2030 estimates that the value of lighthouse tourism can grow by 25% to 2030.

Collaboration facilitated by Irish Lights, with tourism agencies is a crucial element of the Great Lighthouses of Ireland brand partnership and Irish Lights has a Strategic Memorandum of Understanding (MOU) with Fáilte Ireland and Údarás na Gaeltachta and is a strategic partner for Tourism Northern Ireland's "Embrace a Giant Spirit" visitor brand. Tourism Ireland and Tourism Northern Ireland have both contributed to marketing and promotion activities.

Not all lighthouses can be developed for tourism, and neither would this be desirable at all sites. For our non GLI sites, Irish Lights has committed to developing a 10-year Heritage Development and Management Plan. The plan will assess the current condition of our lighthouse estate in terms of heritage significance, identify and document the historical and cultural context of each lighthouse. It will identify the investment required to develop strategies for conservation, maintenance and restoration, and an associated land management plan to manage sites of cultural and natural heritage value for which we are responsible.

The plan will also continue the organisation's commitment to work closely with local communities, government agencies, environmental organisations and other stakeholders to foster greater appreciation for our lighthouse's natural beauty, biological importance and cultural significance. It will require ongoing collaboration with stakeholders including the Heritage Council, NPWS, OPW, Fáilte Ireland, Tourism Northern Ireland, Údarás na Gaeltachta, GLI partners, NGOs, Government and local authorities to name a few, as such partnerships are instrumental in leveraging each other's strengths.

The plan will also include a strategy for historical properties where "responsible withdrawal" and "manage by nature" policies are being applied to ensure that there is a "Palliative Heritage Management" plan in place where photographic and digital records are recorded and intangible heritage is collected, particularly in time sensitive areas.

Focus Area 4 of this strategy encompasses our approach safeguarding the past and working with local communities to protect and manage our unique heritage and history.



Focus Area 4: Key Components – Serve Coastal Communities, Safeguarding and Sharing Our Maritime Heritage

Great Lighthouses of Ireland	Heritage Development and Management Plan	Archive and Artifacts	Supporting Relationships
<ul style="list-style-type: none"> Lighthouse Accommodation Lighthouse Visitor Attractions Associated Visitor Experiences 	<p>219 Heritage Structures Across 28 sites in ROI; 68 Heritage Structures Across 10 sites in NI</p> <p>Responsible Withdrawal Policy</p> <p>Manage by Nature Plans</p> <p>Palliative Heritage Management Plans</p>	<p>Baily Museum</p> <p>Artifact Loan Scheme</p> <p>Archive Management Plan</p> <p>Archive Outreach Strategy</p>	<p>GLI Brand Partnership, Failte Ireland, Tourism Northern Ireland, Tourism Ireland</p> <p>Department of Housing, Local Government and Heritage (NPWS), OPW, Heritage Council</p> <p>Department for Communities - Historic Environment Division (HED), Northern Ireland Environment Agency, National Heritage Lottery Fund</p> <p>Local Authorities</p>

ASSURANCE

GLI Brand Partnership Charter
 MoU's in place with key strategic partners
 Great Lighthouse of Ireland Strategic Plan 2025 -2030
 Operational Policies and Procedures
 International Standards of Archive Management
 Achieving the required planning approvals and consents

Emerging Requirements

Need to understand and respond to public expectations
 ESG (environment, social and governance) obligations

Great Lighthouses of Ireland was developed by Irish Lights in partnership with local communities and other public bodies to open lighthouses to visitors. It is a great example of a public, private and community partnership and is recognised as a valued tourism asset which positively impacts coastal communities. Featuring twenty two lighthouse experiences in breathtaking coastal locations, Great Lighthouses of Ireland offers visitors from home and abroad the chance to visit or stay in a lighthouse. Credit: Great Lighthouses of Ireland



FOCUS AREA 4: SERVING COASTAL COMMUNITIES, SAFEGUARDING AND SHARING OUR HERITAGE

Strategic Objectives 2025-2030

1. Implement the Great Lighthouses of Ireland Strategic Plan 2025-2030 with a view to:
 - Growing and positioning Great Lighthouses of Ireland as an exemplar in the delivery of quality maritime and tourism experiences for the benefit of all partners, stakeholders, and coastal communities.
 - Protecting and sharing the rich maritime heritage and culture associated with lighthouses and coastal communities.

2. Develop a 10-year Heritage Development and Management Plan with a view to:
 - Identifying what heritage means to Irish Lights including the wider impact and significance of Irish Lights Heritage in the wider context of the history of Ireland.
 - Safeguarding the historical and cultural integrity of lighthouse structures and associated heritage assets and sites.
 - Considering the unique and difficult environment in which some of Irish Lights heritage assets exist, exploring innovative ways to efficiently and effectively preserve the heritage at these locations.
 - Identifying ways in which the Irish Lights Archive can be further developed and brought to life to promote the history and heritage of Irish Lights and its connection to local communities.
 - Incorporating strategies that enhance and protect biodiversity in and around the heritage sites.
 - Developing management practices that promote the sustainable use of resources associated with the heritage sites and articulate the approach to be taken in balancing technological advancement of aids to navigation whilst preserving heritage.
 - Involving local communities and stakeholders in the heritage management and development process.
 - Ensuring compliance with relevant legislation and best practices in heritage and biodiversity management.
 - Securing funding to support Heritage Development and Management, including the Archive.

Essential Enablers and Core Capabilities that must be in place to deliver Focus Area 4

Enabler / Capability	Purpose / Requirement
Partnerships	Continue to support the Great Lighthouses of Ireland Brand Partnership, and partnerships with government departments, national and local agencies and international organisations to deliver tangible and mutually beneficial outcomes.
Capabilities	<p>Commercial and market capabilities to support community and social enterprise activity.</p> <p>Heritage and environmental capabilities to maximise the benefits of our heritage assets and coastal locations.</p>
Funding	Additional third-party funding required to protect and manage heritage and archive assets for future generations.



Visitors at Fanad Head Lighthouse, Co Donegal.
 Credit: Great Lighthouses of Ireland



FOCUS AREA 5:

Deliver Excellence and Stay True to Our Values – Combine the skills and expertise of our employees with new technologies to drive quality, reliability and continuous improvement, maintaining excellence and staying true to our values of Professionalism, Quality, Respect, Innovation, Trust and Collaboration

Focus Area 5 builds on previous work of developing new ways of working and thinking, using existing and emerging technologies to transform and simplify work practices. It promotes innovation and new service delivery, incorporating digitisation and increased use of technology to improve the working lives of employees.

Irish Lights is committed to delivering its services in an agile, efficient, innovative and effective manner. The continued success of Irish Lights depends on the commitment and professionalism of our employees. Recognising the significant changes in our operations, culture and employee profile over the term of the last strategic plan (2018 – 2024) this new strategy outlines our planned investment in our people and work practices as we enter our next phase of development.

The new strategy will see a move towards assurance with the introduction of a health and safety, environmental and quality Integrated Management System (IMS) to achieve and maintain certification to ISO 45001, ISO 14001 and ISO 9001 which will improve operational efficiencies, ensure regulatory compliance, and promote a proactive risk culture and drive continuous improvement.

We will continue to empower our employees to develop their capabilities to deliver on the emerging maritime safety, sustainability, data analysis and technology skills requirements to deliver on our future vision. We will also focus on enhancing the work environment, and optimising our structures, processes, work practices and physical environment to meet the objectives of the strategic plan.

People Strategy

Our people are our greatest resource. Working together, we will live our values through our actions as we strive to reach our individual and collective potential. We will work collaboratively and flexibly in pursuit of our common goals and create an inclusive environment. This strategy seeks to preserve and enhance our workplace culture, which is rooted in our values of Professionalism, Respect, Trust, Quality, Innovation and Collaboration.

Investment in our people is key to our future success. We will systematically and strategically identify, develop, recruit and retain talent from diverse backgrounds. We will continue to support career development and provide our people with opportunities for development, knowledge sharing and quality enhancement.

Acknowledging the importance of strategic, inspirational and effective leadership in achieving our objectives, we will invest in the development of our current and future senior managers.

We will enhance our communication through regular engagement forums, such as workshops, to build relationships across Irish Lights and provide opportunities for collaboration.

Small innovations can have big impacts. We will empower our people to innovate and think creatively about how we work and live sustainably. We will create opportunities and resources for initiatives that support 'next generation' practices for enhancing quality, excellence and agility across all our activities, and developing employee engagement and wellbeing.

Health and Safety Strategy

Safety will continue to be prioritised and monitored with an emphasis on compliance with health and safety regulations. We will continue to assess ourselves against best practice and requirements using the live safety legislation register. This strategy will broaden the focus from carrying out safety inspections at lighthouse stations to carrying out audits of safety systems and procedures across a range of operational activities, focusing initially on high-risk areas which will provide assurance of safety management systems in place.

To reinforce this new approach, we have commenced the introduction of health and safety management system to meet the requirements of ISO 45001 under an overarching integrated management system. Going forward, the auditing of our Safety Management System (SMS) against the requirements of ISO 45001 will provide assurances that our SMS and safety related policies, procedures, risk assessments are meeting our statutory safety requirements.

The adoption and implementation of an Environmental Management System certified to the ISO 140001 standard, is an agreed strategic priority for the organisation, and will provide assurances that our environmental policy and procedures are meeting regulatory obligations and government climate action targets along with our wider sustainability objectives and ambitions.

Operational Effectiveness and Resilience Strategy

To enhance operational efficiency, we will implement a comprehensive strategy focused on optimising resource allocation, leveraging advanced technology, and fostering a culture of continuous improvement. This approach will include the interrogation of the AtoN monitoring system to review trends, and anomalies with a view to reducing outages. This will allow us to make better use of our maintenance resources and allow further improvements to the planning and scheduling of works.

We will invest in employee training in key technical areas such as monitoring software and data management that will enhance operational planning, enabling our teams to respond swiftly and effectively to operational challenges.

We will continue to apply innovative technical applications to allow remote interventions where feasible. We will continue to add resilience and contingency into AtoN designs providing standby backup. Work package delivery will to be reviewed in the context of most efficient delivery and bringing consistency across our AtoN infrastructure.

Additionally, we will closely monitor and measure efficiency gains and identify areas for further improvement. By prioritising these initiatives, we aim to reinforce our commitment to providing reliable maritime navigation with in-built resilience while maximising the value of our operational resources.

Data Strategy

Irish Lights generates data of national importance and relies on internally generated data to inform its broad range of activities. The organisation continues to demonstrate a strong appetite and interest in developing and improving its data related activities and data is identified as a key strategic asset supporting the overall Irish Lights strategy.

Irish Lights has developed a Data Strategy which will be rolled out in parallel with this Strategy. The vision for our Data Strategy is to provide an authoritative single source of truth for all Irish Lights data. The data strategy and the related work programme will continually evolve, the added value is in the continuous change and evolving nature of data processes and activities and the organisation's ability to adapt and capitalise on these changes.

To deliver the data strategy, Irish lights will develop and continually review and revise a development roadmap for its data systems and associated business processes. This will be organisation wide involving all employees to ensure timely and reliable data collection, data accuracy and currency. Clear data ownership and adherence to good practice, industry standards and Irish Lights policies will be followed to deliver the vision. Key elements of the work programme will include:

- Working with business and functional areas to identify and document current work processes and key data resources used or generated as part of business processes.
- Completing regular data audits and updating data catalogues to ensure all data repositories and assets are identified.

- Identifying requirements and opportunities for business process automation, data rationalisation, systems rationalisation, integration and/or enhancement.
- Supporting all employees to identify opportunities and document requirements for enhanced systems, user interfaces, reports and dashboards for internal and external stakeholders.
- Establishing and maintaining an Information Asset Register to identify, document, manage and protect all data that is important to the organisation.

Irish Lights will continue to be flexible and adapt to meet current and emerging data related challenges and opportunities, continue to make data publicly available in line with the requirements and spirit of Open Data, INSPIRE, and other relevant and emerging data standards or platforms. Quality Irish Lights data sets will continue to be a key focus and enabler for efficient and effective operational delivery and provision of services to all stakeholders.

Commercial Strategy

Where compatible with the requirements of our core service, commercial income is derived from use of the resources required to deliver that service. Our primary sources of commercial income are reserve ship capacity, buoy services and property. However Irish Lights continuously seeks to expand compatible commercial opportunities as a means of reducing the funding burden on stakeholders.

Stakeholder Engagement

Delivery of the correct mix of AtoN Services to our users and value for money to our funding stakeholders requires agile and effective communications with all stakeholders. Maintenance of this essential relationship with stakeholders is an important part of this strategy. This includes:

- Regular meetings with line Government Departments in Ireland and UK.
- Close relationships and collaboration with other relevant Government Departments and Agencies.
- Annual AtoN User, AtoN Provider and Joint User Group meetings.
- Peer reviewed 5 yearly AtoN Review process across Ireland and the UK.
- Feedback from our coast teams and attendants.
- Online internet and social media presence.
- Stakeholder surveys.

Corporate Governance

Irish Lights is committed to the highest levels of Corporate Governance following Irish and UK Codes and Standards. The CEO, as Accounting Officer, is responsible to the Board for ensuring compliance and our Corporate Governance is overseen by the Board and the Audit and Risk Committee. Clear guidance is provided to all employees through the Employee Handbook. This strategy will be delivered in accordance with best practice in Corporate Governance.



Focus Area 5: Key Components – Deliver Excellence and Stay True to Our Values

People and Capabilities	Data and Information Strategy	Effectiveness & Efficiency	Governance, Compliance and Assurance	Stakeholder Communications
Diverse and Inclusive Culture Performance and Development System Formal Induction and Mentoring Programmes HR Policy Framework aligned to Strategy Employee Engagement and Wellbeing Frameworks Clear Training and Development plans	Data Audit Data/Information Asset Register Data Management Plan Systems Upgrade, Replacement and/or Development Roadmap	KPI Reporting Integrated Quality, Environmental and Health and Safety Management System Commercial Activity Re-engineered processes Internal Audits Continuous learning and improvement reviews	Non-Executive Board Corporate Governance Manual and Codes of Practice Audit & Risk Committee Policies and Procedures Management of the Risk Register	Government Departments and Agencies AtoN User and Provider meetings Shipping and Fishing Industry Leisure Community MSP (Marine Spatial Planning) and Environmental Interests

ASSURANCE

- Stated Values
- Annual Report and Accounts
- Internal and External Audits
- Up to date Policies and Procedures
- Legal and Regulatory Standards
- Accreditation to ISO Standards applicable across all standards (i.e. ISO 9001, ISO 14001 & ISO 45001)
- Application of Data and Information Governance and Management Frameworks
- Adherence of National and International Data Standards
- Comply with Centre for Internet Security - Cyber Security Controls Framework
- Stakeholder Feedback

Emerging Requirements

- Skills & Capabilities



ILV crew carrying out routine maintenance on the Tuns Buoy in Lough Foyle, part of an eight-year cycle to ensure this aid to navigation remains reliable for mariners. Credit: Andrew Collins

FOCUS AREA 5: DELIVER EXCELLENCE AND STAY TRUE TO OUR VALUES

1. People

- Create the culture and environment where all employees can develop and contribute to the success of Irish Lights
- Promote a diverse and inclusive workforce which is motivated and engaged to meet the current and future needs of Irish Lights
- Invest in leadership and management structures to meet the challenges facing a modern maritime organisation.
- Support employee innovation to contribute to the development of new practices across our activities.
- Enhance belonging and connection through strong communication and engagement models.

2. Health and Safety

Ensure continuous improvement, compliance with updated standards, risk management, and a strong safety culture throughout the organisation at all levels.

3. Operational Effectiveness and Resilience

Optimise operational efficiency, reliability and resource allocation, where possible leveraging advanced technologies.

4. Data and Information Management

- Provide an authoritative single source of truth for all Irish Lights data.
- Implement the Data Strategy
- Implement development roadmap for data systems and associated business processes

5. Commercial

Position Irish Lights as a high-quality provider of commercial services targeting markets where we can capitalise on our expertise, experience, and infrastructure and deliver value to our stakeholders without compromising our ability to deliver our statutory services.

6. Stakeholder Communications

Ensure effective and responsive communications with all stakeholders including Government Departments, Agencies, Local Authorities, Ports, Shipping and Fishing Industries, Leisure users and Coastal communities.

Essential Enablers and Core Capabilities that must be in place to deliver Focus Area 5

Enabler / Capability	Purpose / Requirement
People	The right combination of people, skills, experience, motivation, and agility is essential
Training and Development	Ongoing training and development to meet evolving needs.
Culture	Continue to maintain and develop a workplace culture which is rooted in our organisational values to effectively deliver the new strategy.
Information Technology	Use of computer technology and systems to manage, process, protect, and exchange information and deliver services in a cost effective and efficient manner.
Core Systems	Central and fundamental set of software applications and technologies to support the core functions and business critical systems
Policies and Procedures	Develop and implement policies and procedures to ensure compliance with best practice in governance and operations.
Reserve Capacity	The requirements of the core safe navigation service require the retention of reserve capacity. Reserve capacity is limited and can fluctuate depending on statutory requirements and operational demands. Where reserve capacity exists, Irish Lights will endeavour to use this capacity to deliver commercial and added value services that maximise value for our stakeholders.
Governance and Compliance	Internal and External audit to provide assurance of compliance with standards.

Glossary of Terms

ABP	An Bord Pleanála
AIS	Automatic Identification System (radio based AtoN and communications network)
AtoN	Aids to Navigation (external to a vessel)
BIM	Bord Iascaigh Mhara
COLREGS	Collision Regulations
ComReg	Commission for Communications Regulation
CPI-X	Consumer Price Index
CPNT	Complementary Positioning, Navigation, and Timing
DAFFM	Department of Agriculture, Food, Fisheries and the Marine
DCEE	Department of Climate, Environment and Energy
DfT	Department for Transport (UK)
DHLGH	Department of Housing, Local Government and Heritage
DoT	Department of Transport (Ireland)
DGNSS	Differential Global Navigation Satellite System
DGPS	Differential Global Positioning System
DMAP	Designated Marine Area Plans
ECDIS	Electronic Chart Display and Information System
EEZ	Exclusive Economic Zone
EGNOS	European Geostationary Navigation Overlay System
EMSA	European Maritime Safety Agency
EPA	Environmental Protection Agency
EU	European Union
EUSPA	European Union Agency for the Space Programme
GALILEO	European GNSS
GES	Good environmental status
GLA	General Lighthouse Authority
GLF	General Lighthouse Fund
GLI	Great Lighthouses of Ireland
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System (US)

GRAD	GLA Research and Development
GSI	Geological Survey Ireland
IALA	International Organisation for Marine Aids to Navigation
ICT	Information and Communications Technology
IHO	International Hydrographic Office
IMO	International Maritime Organisation
IMS	Integrated Management System
IMSAS	IMO Member State Audit Scheme
INFOMAR	Integrated mapping for the sustainable development of Ireland's marine resources.
ITU	International Telecommunications Union
IRCG	Irish Coast Guard
ISO	International Organisation for Standardisation
JSB	Joint Strategic Board (Representatives of the three GLA)
LAtON	Local Aid to Navigation (responsibility of an LLA)
LLA	Local Lighthouse Authority
LED	Light Emitting Diode
MAP Act	Maritime Area Planning Act
MARA	Maritime Area Regulatory Authority
MASS	Marine Autonomous Surface Ships
MCA	Maritime Coastguard Agency (UK)
MI	Marine Institute (Ireland)
MetOcean	Meteorological and Oceanographic (Weather and sea state measurements)
MSFD	Marine Strategy Framework Directive
MSP	Maritime Spatial Planning
MSPAG	Marine Spatial Planning Advisory Group
MPA	Marine Protected Areas
MPPS	Marine Planning Policy Statement
NavAids	Navigation Aids (On board the vessel as opposed to external to it)
NI	Northern Ireland
NLB	Northern Lighthouse Board
NMCI	National Maritime College of Ireland

NMPF	National Marine Planning Framework
NOREL	Nautical and Offshore Renewable Energy Liaison Group
NPWS	National Parks and Wildlife Service
OFCOM	Office of Communication
OPW	Office of Public Works
ORE	Offshore Renewable Energy
RACON	(RA)dar Bea(CON)
RNLI	Royal National Lifeboat Institution
ROV	Remotely Operated Vehicle
RTCSM	Radio Technical Commission for Maritime Services
R&D	Research and Development
R-Mode	Ranging Mode
SDG	Sustainable Development Goals (United Nations)
SEAI	Sustainable Energy Authority of Ireland
SFPA	Sea Fisheries Protection Authority
SLA	Service Level Agreement
SOLAS	Safety of Life at Sea (IMO Convention)
SOSREP	Secretary of State's Representative (SOSREP) for Maritime Salvage and Intervention
TH	Trinity House
UKHO	UK Hydrographic Office
UKSON	United Kingdom Safety of Navigation Committee
UNCTAD	UN Trade and Development
VDES	VHF Data Exchange System
VHF	Very High Frequency (Radio waves)
VTMS	Vessel Traffic Management Services
VTS	Vessel Traffic Services
WFD	Water Framework Directive
WIGOS	World Meteorological Integrated Global Observing System



Commissioners of
IRISH LIGHTS | *Navigation
and Maritime
Services*

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