



Engineering a safer world

Lloyd's Register Foundation Strategy 2024-2029



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A message from our Chief Executive

Ruth Boumphrey, Lloyd's Register Foundation

Lloyd's Register Foundation has come a long way since its creation in 2012. As a Foundation, we take a long-term view, and so in developing our strategy for 2024–2029, we are building on – and learning from – our work to date, focusing our areas of action, and scaling our impact to make a real difference.

We will deliver our strategy in the context of a rapidly changing world. Although we are working hard to decarbonise our energy systems, we are seeing the effects of a changing climate all around us. We must make sure that our infrastructure is resilient to these changes because our growing global population is dependent on this critical lifeline infrastructure to provide water, food, energy, communication, and transportation.

The next stage of our journey will see us focus more of our resources in areas where we can make a distinctive difference, to where safety is most needed, and to listening to those whose safety is most affected. With this in mind, we will increasingly move towards locally and end-user led initiatives and partnerships, and towards activities, geographies and technologies where rapid change provides the opportunity for transformative safety interventions, which you will read more about in this document.

Our strategy explains our investment priorities and the changes we would like to see as a result of our work and funding. In addition, in delivering our strategy we are committed to modernising our digital estate; to providing better access to our physical assets such as our archive, our library and our heritage building; and to supporting diversity and inclusion.

We are passionate about what we do, and we work with remarkable partners from all around the world who share our values and our vision. I hope you will join us in the next stage of our journey to Engineer a Safer World.



About the Foundation

Lloyd's Register Foundation is a global safety charity with a mission to Engineer a Safer World.

Building on the Foundation's partnerships and impact to date, and harnessing over 250 years of maritime safety knowledge, we focus on enhancing the safety of life and property through the development of standards and education.

The Foundation has a unique structure. Our income comes from dividends through our investments, and from Lloyd's Register Group (LR), a global trading company. As well as financial contributions, LR is a global provider of safety services, that aligns to our mission. Plus, we draw on LR's knowledge, networks, and expertise to drive more impact through our work.

Our vision

Our vision is to be known worldwide as a leading supporter of engineering-related research, training and education, which makes a real difference in improving the safety of people and the critical infrastructure on which modern society relies.

Our charitable purpose

Our charitable purpose is the basis for our mission; to Engineer a Safer World. Our purpose is:

- To secure for the benefit of the community high technical standards of design, manufacture, construction, maintenance, operation and performance for the purpose of enhancing the safety of life and property at sea, on land and in the air.
- The advancement of public education including within the transportation industries and any other engineering and technological disciplines.



Scaling our impact

Our 2024–2029 strategy will see us build on and learn from our work to date. We will focus our resources across three interconnected priority areas: Safer Maritime Systems; Skilled People for Safer Engineering; and Safer, Sustainable Infrastructure. In addition, we will continue to invest in the Foundation's own assets and expertise which are our maritime heritage and safety evidence and insight.



Throughout the next five years, we will scale our impact in five ways:

O1 Internationalise

Led by local voices, we will make sure that the people most affected have the strongest say in identifying safety problems and finding solutions to make themselves safer.

O2 Influencing others to act

Recognising that change comes through others, we will target our resources where we can catalyse change at scale, building strong partnerships and creating compelling communications.

O3 Leverage additional resource

We will use our own funding to attract resources from others to keep people safer.

A trusted voice in safety

We will find, share and, where needed, commission the best evidence about safety, so that others can act with confidence.

O5 Strengthening our voice in the maritime system for the future

The maritime economy is growing rapidly around the world bringing huge risks and opportunities for safety. Because we have a long heritage in maritime, we have the opportunity to strengthen our collective voice to ensure that this growth is safe, sustainable and equitable.

The Foundation's strategic framework

OUR CHARITABLE MISSION: TO ENGINEER A SAFER WORLD

We are living through a time of global change. New technologies, a changing climate, and the need to provide new infrastructure to serve changing populations all provide opportunities for ambitious partnerships to build a safer world for all.

PRIORITY AREAS FOUNDATION CAPABILITIES Safer Maritime Safer, Sustainable Skilled People for Evidence and Heritage Safer Engineering Infrastructure **Systems** Insight OBJECTIVES The Foundation's heritage archive Harm is reduced and prevented New technologies and Development of skills for safety, Growing the Foundation's capability for those working in growing methodologies are developed knowledge, leadership, and processes and reputation as a trusted source of and assets are maintained and open maritime economies. and used safely within broader where they are most needed. safety evidence and insight. to the public to promote learning engineering practices, without and education. Everyone across the maritime Global safety evidence and insights causing harm elsewhere. Numbers and diversity of engineers, system is motivated to work are generated and openly shared. Maritime heritage is mobilised as a and those in engineering-related Critical infrastructure is resilient and together towards an ocean driver for change. professions, are increased, especially Evidence is used to inform decision economy that keeps people safer fit for purpose to meet the changing in sectors and geographies where we making, fill knowledge and data gaps Perspectives on maritime heritage on land and at sea. needs of society. can have the most impact. and lead to safer outcomes. are widened to learn from the past.

OUR PRIORITY AREAS

FOUNDATION CAPABILITIES

Safer Maritime Systems

Safer, Sustainable Infrastructure

Skilled People for Safer Engineering

Evidence and Insight

Heritage

PROGRAMMES

Convening communities from across the complex global maritime system for improved collaboration on safety challenges, for example within fishing communities.

A safe journey to decarbonisation that protects people and the economy while promoting social equity and technological innovation.

Learning from our past for a safer maritime future, for example managing wrecks safely. Supporting the safe development and adoption of digital technologies across critical infrastructure.

Develop foresight to understand future challenges. For example, artificial intelligence and nature positive engineering.

Adapting infrastructures for a changing climate.

Engineering skills capability and capacity development, particularly in less developed economies.

Increasing capacity to develop, implement and enforce international standards for safety.

Initiatives to improve skills for enhanced safety in engineering and technology sectors.

Safe adoption of new technologies.

Identifying people's perceptions and experiences of risk to their safety through the World Risk Poll.

Using insights from the World Risk Poll to influence others to act.

Understanding and sharing which safety interventions work.

Highlighting gaps in safety data and knowledge, especially in relation to our three priority areas.

Archive digitisation, investment in our heritage assets, and ensuring our archive and library are accessible.

Using our historic building in London as a place to convene and learn across all the Foundation's work.

Highlighting the role of women in maritime to ensure their historical role is recognised and to support equity and inclusion today and into the future.

CROSS-CUTTING PROGRAMMES

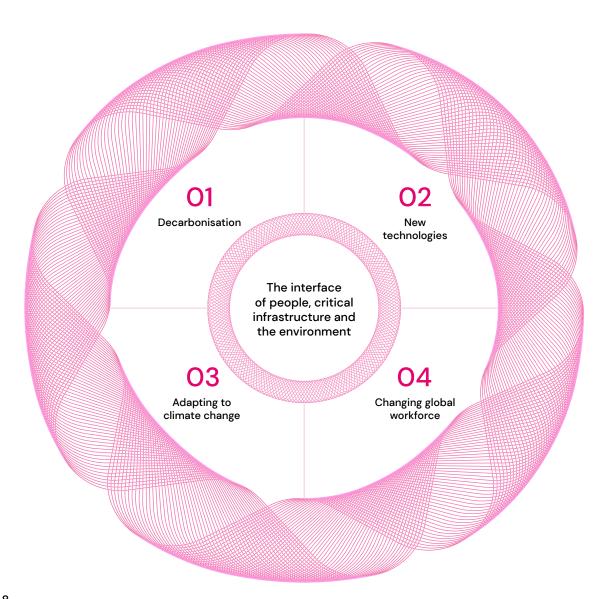
Building locally led networks to enhance engineering skills and safety in fast growing economies.

Commissioning and sharing high quality evidence and insight to support decision making.

Applying learnings from our major programmes of work and investments to shape future investments that align to our strategy.

In delivering our strategy we, along with our partners, are responding to common global challenges that demand collective action.

Most notably the decarbonisation of our energy systems; adoption of advanced digital technologies; our need to adapt to a changing climate; and the changes that global population increases place on critical infrastructures, alongside a growing global workforce needing safe and decent work. We will ensure we can scale our impact and make a positive difference across these challenges within our three interconnected priority areas.



Decarbonisation

As we decarbonise our energy systems, ensuring the infrastructures that enable the energy transition are safe for people and the environment.

New technologies

Support safety processes, practices, standards and skills so we can be confident in the benefits of new technologies.

O3 Adapting to climate change

Safer and more sustainable solutions to industrial infrastructure both on land and at sea will help us adapt to climate change.

Changing global workforce

Support a skilled and safe workforce including knowledge of what works, preventable measures, and understanding data gaps, and in supporting training and education.

Safer Maritime Systems

Globally, we all rely on the ocean to provide food, energy, and the transit of goods and people. Yet, those who work at sea have some of the most dangerous jobs in the world.

Changing global workforce patterns, the impact of climate change, the energy transition and innovation in technology, all bring both threats and opportunities across a maritime system that is incredibly complex.

People, infrastructures and organisations together have an influence on, and are impacted by, global and local commercial maritime activity such as shipping, ports, regulation, finance, offshore wind, fishing, and aquaculture. Often the unintended consequences of advances made in one industry or location can unintentionally impact other parts of the maritime system.

Our focus

The maritime economy is fragmented, and workers are often informally employed. We will work to bring together diverse and unheard voices to share good practice and perspectives on safety challenges, towards interventions that improve safety and reduce risk to people across the maritime system. We will do this in a number of ways.

We will use the best available evidence and insight and work with those that have a stake in safer maritime systems to make targeted actions that improve safety, particularly in high-risk sectors like fishing, ferries, and seafaring.

We will work with stakeholders from across the maritime system and create partnerships to drive actions around safety risks. These partnerships, alongside the evidence we gather, will accelerate solutions for safer outcomes to the major challenges facing the maritime system, such as decarbonisation, digitalisation, and the impacts of climate change. In addition, Lloyd's Register Foundation and Lloyd's Register will continue to collaborate to serve a safer ocean economy.

Priority Area Objectives

Harm is reduced and prevented for those working in growing maritime economies.

Everyone across the maritime system is motivated to work together towards an ocean economy that keeps people safer on land and at sea. "Just like the maritime system itself, we cannot scale change unless we work together. This is why developing partnerships to drive change and make a real difference to the safety of people across the maritime system is so important."

Jan Przydatek, Director of Technologies, Maritime Systems and Future Infrastructure, Lloyd's Register Foundation



Safer, Sustainable Infrastructure

The lives we live today are made possible by the infrastructures that provide us with critical services such as energy, food, communication, and transportation.

As we look to the future, higher temperatures, rising sea levels, and more frequent severe weather patterns all expose vulnerabilities in our infrastructure systems. Artificial Intelligence and autonomy will disrupt how we design, build and operate critical infrastructure. Urgent technical, social and physical changes are needed to successfully and safely decarbonise our energy systems.

Our focus

A key part of our strategy is to ensure that critical infrastructure is safe, resilient, and sustainable for years to come. The engineering systems that make up these infrastructures are increasingly interconnected so in partnership with others, we will work to ensure that disruptive technologies are adopted safely.

By understanding the technology and the system within which it will be applied, we can influence the steps needed to avoid harm.

In addition, we will focus on working in partnership with others towards the safe decarbonisation of the energy system. This transition relies on significant growth of supporting infrastructures which must be built and operated safely. Plus, we will focus on ensuring critical infrastructures are developed to be resilient to climate change and work with nature.

Priority Area Objectives New technologies and methodologies are developed and used safely within broader engineering practices, without causing harm elsewhere.

Critical infrastructure is resilient and fit for purpose to meet the changing needs of society.

"Focusing on the increasing deployment of cyber-physical systems, the scaling of sustainable assets and the adaptation of infrastructures to the effects of climate change, our strategy targets safer outcomes for all."

Jan Przydatek, Director of Technologies, Maritime Systems and Future Infrastructure, Lloyd's Register Foundation



Skilled People for Safer Engineering

Safe infrastructure needs qualified engineers, and to meet the demands of urbanisation, industrialisation and a rapidly growing population, we need a new approach to engineering education that has diversity, equity and inclusion at its heart.

Equally, this approach needs to ensure there are safe and decent work opportunities for an engineering workforce that has the capacity, capability and understanding to adopt new and emerging technologies, safely.

Our focus

We are building a global evidence base to understand where engineering capacity and capability are most lacking, helping identify which interventions are most effective to address safety challenges in their local context. We will champion skills initiatives that will support a safe, equitable and just transition to zero-carbon fuels, and we will work with others to develop the capacity to implement and enforce international standards for safety.

Through targeted interventions aimed at better safety outcomes, we will build partnerships that help to remove barriers for new talent and underrepresented demographics to enter the engineering workforce. Plus, we will ensure engineering skills and education develop at a pace that aligns with rapid technological innovation, including robotics and autonomous systems.

In addition, we will fund initiatives that effectively upskill engineers where they are most needed to ensure our built environment remains safe, sustainable and resilient.

Priority Area Objectives

Development of skills for safety, knowledge, leadership, and processes where they are most needed.

Numbers and diversity of engineers, and those in engineering-related professions, are increased, especially in sectors and geographies where we can have the most impact.



"As the global population grows and becomes increasingly urban, we need to build, maintain and operate resilient critical infrastructure on a large scale. But the world is facing an engineering skills shortage. By working in partnership with others we can focus on where engineering capacity and capability are most needed, collectively enhancing the skills that increase people's safety."

Tim Slingsby, Director of Skills and Education at Lloyd's Register Foundation

Evidence and Insight

Evidence is critical to improving safety, but often does not yet exist or is not easily accessible. Across the world and in different sectors, there is a huge opportunity to improve safety outcomes by finding, sharing and growing better quality evidence on both the scale and nature of the challenges, and on what works, to address them.

But simply finding and generating that evidence is not enough – it must also be relevant, understandable, accessible, and actionable by those in a position to put it into practice.

Our focus

To support us in delivering impact across our new strategy's priority areas we will take an evidence-led approach. Whether it is in the maritime sector, on critical infrastructure, or building skills and education, we have a commitment to find, share and grow more robust evidence to better understand the complex factors that affect safety.

Taking this commitment one step further, we are working towards the establishment of a Global Safety Evidence Centre, which will serve as a 'one-stop-shop' for anyone who needs to know 'what works' to make people safer – collating the best evidence from our partners and other sources, as well as providing a home for the Foundation's own evidence outputs, such as our flagship World Risk Poll, which is the first and only global study of worry about, and harm from, risks to people's safety.

Foundation Capability Objectives Growing the Foundation's capability and reputation as a trusted source of safety, evidence and insight.

Global safety evidence and insights are generated and openly shared.

Evidence is used to inform decision making, fill knowledge and data gaps and lead to safer outcomes.



"Evidence is key to improving safety, yet it is often limited, fragmented or hard to access. By finding, sharing and growing evidence that is robust, trusted and accessible, we can help people in all sectors make confident and effective decisions to create safer environments and tackle challenges with informed, practical solutions."

Nancy Hey, Director of Evidence and Insight at Lloyd's Register Foundation

Building on Lloyd's Register's Heritage

For more than 250 years, Lloyd's Register has been ensuring that ships, their crews and cargoes are safe to go to sea. This puts us in a unique position to be able to learn from the past to inform, inspire and shape a safer, more sustainable, and resilient ocean economy.

Our focus

The Lloyd's Register Foundation archive is a unique research resource which offers a unique perspective on the evolution of maritime safety and the complex factors that drive this process.

Our collection of over 1.1 million documents shows the construction, maintenance and development of ships and maritime trade from the 1830s, and is freely available to all, both on-line and in-person at our new heritage centre.

Our heritage team works with a diverse range of partners across the globe to unlock both the value of this archive and supporting a 'learning from the past' approach to maritime safety and sustainability challenges more broadly.

Foundation Capability Objectives Foundation's heritage archive and assets are maintained and open to the public to promote learning and education.

Maritime heritage is mobilised as a driver for change.

Perspectives on maritime heritage are widened to learn from the past.



"Our maritime heritage enables us to support the Foundation's wider strategy to keep people safer. By unlocking historical insights, we can deepen our understanding of present and future challenges across the maritime sector and help to build a safer, more sustainable, and resilient ocean economy for generations to come."

Alex Stitt, Director of Heritage and Education at Lloyd's Register Foundation

Our global partnerships and impact

The Alan Turing Institute

United Nations
Global Compact



Together we launched our Data-centric Engineering programme, championing world-leading research and innovation across all areas of engineering.

We work with the United Nations Global Compact on global initiatives, including the Maritime Just Transition Task Force and Ocean Stewardship Centres. We established a partnership with the University of York in 2018 funding a programme which evolved into the recently launched Centre for Assuring Autonomy to develop concepts, models, and methods for assuring the safety of robotics, autonomous systems and Al.



Lloyd's Register (LR) is a global professional services organisation, operating in marine classification, engineering, and risk services. Lloyd's Register Foundation is its sole shareholder.



Together with The Seafarers' Charity and the Fishing Industry Safety & Health (FISH) Platform we launched a new fund aimed at raising the safety standards of the global fishing industry, with a focus on the Global South.

Engineering





In 2019, the Foundation provided funding to the Royal Academy of Engineering to help establish Engineering X. Active in over 35 countries, Engineering X is a growing collaboration that promotes the role of engineering in tackling safety and sustainability challenges by building global connections across sectors and disciplines.

The International Congress of Maritime Museums (ICMM) programme, 'Global Maritime Histories: Case Studies for Change', builds connections with cultural heritage organisations around the world, harnessing rich collections and local networks, to deliver new perspectives on global safety and sustainability challenges in the maritime economy, enabling local voices to speak in a global context.

We are supporting a global network of maritime law experts, providing fellowships for postgraduate students at the IMO International Maritime Law Institute.

GALLUP®

We partner with Gallup to deliver the World Risk Poll, the first global study of people's perceptions and experiences of risks to their personal safety.



A multimillion-pound programme with Seoul National University funded by the Foundation to generate innovative research that drives the development of standards and safer operations to advance maritime safety.



Lloyd's Register Foundation

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