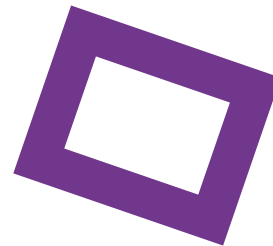
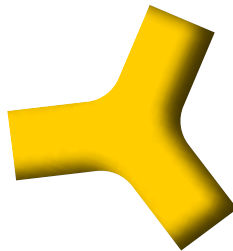


# Engineering a safer world

Lloyd's Register Foundation Strategy  
2019 - 2025



Lloyd's Register  
Foundation

**How can we make the world a safer place?  
What are the biggest safety challenges?  
How can we increase our impact?**

### **Engineering a safer world**

Lloyd's Register Foundation is a growing global charity and this new strategy will enable us to have greater impact than ever before. Our strategy starts with evidence – we will strive to understand the complex factors that most affect safety. Our interventions will be driven by evidence of what works – in fact, we plan to build the world's best centre for safety evidence and insight which others can use. We want to have a big impact, so we are coalescing around just a few big challenges with big goals – making the sea safer, making food safer and improving society's understanding of risk.

Global challenges need global solutions. They cannot be tackled by working alone. We will be at the forefront of building new coalitions,

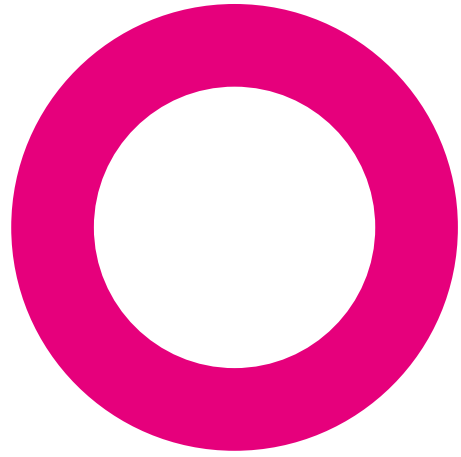
tirelessly promoting the issues and seeking out willing collaborators who share our deepest values and strong social purpose. We will need the brightest minds and a flow of skilled people, so we will also be inspiring the next generation of scientists and engineers through education and engagement.

Although a modern charity, we recognise the value of our heritage. We will use our extensive collection to help people understand the relevance of our technological and engineering past, and how it can help inform the future.

I'm excited to be leading this special charity. By bringing together our unique strengths – our global reach, the trust in our brand, the technical expertise in our grants community, and the extraordinary breadth and depth of the Lloyd's Register Group – we can truly engineer a safer world.

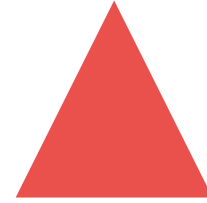
**Professor Richard Clegg**  
**Chief Executive**  
**Lloyd's Register Foundation**





**317**

million accidents occur at work annually



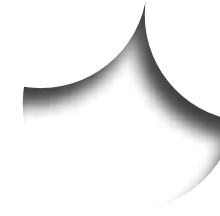
**100**

large ships are lost per year around the world



**40%**

of foodborne disease is carried by children under the age of 5 resulting in 125,000 deaths every year



## The global context

**600**

million cases of foodborne disease every year, of which 420,000 result in death



**24,000**

fishing fatalities every year, mainly in Asia



**\$110bn**

the cost of lost productivity due to public food safety in developing countries



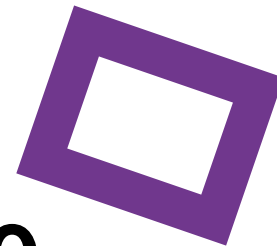
**153**

workers have a work related accident every 15 seconds



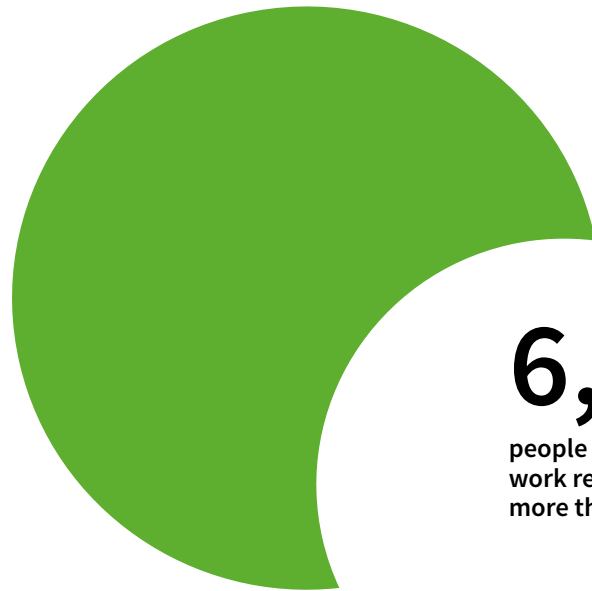
**6,300**

people die every day as a result of work related accidents or diseases, more than 2.3 million deaths per year



**1,000**

fatalities per year within the global passenger ferry industry





# Lloyd's Register Foundation

Lloyd's Register Foundation is an independent global charity with a unique structure and an important mission: engineering a safer world. We reduce risk and enhance the safety of the critical infrastructure that modern society relies upon in areas such as energy, transport, and food. We do this by supporting high quality research, accelerating technology to application, and through education and public outreach.

Our unique structure comes from the fact that we own a significant trading company,

Lloyd's Register Group. We share the same mission and work together to make the world a safer place. We have a long heritage, going back to 1760. In that year, 11 men met in Edward Lloyd's coffee house to talk about publishing a list of ships, a register to define their quality and safeguard life and property carried on them.

In just 6 years, the Foundation has grown to a portfolio of over £130m in active grants and supports work in 100 different countries. We are proud of what we have achieved so far...

## Our trustees

The Foundation is governed by a Board of Trustees, which is responsible for setting the Foundation's strategy, and for ensuring good governance that fulfils its objectives - delivering public benefit.



**Thomas Thune Andersen**  
Chairman



**Sir Brian Bender**  
Trustee



**Ron Henderson**  
Trustee



**Lambros Varnavides**  
Trustee



**Rosemary Martin**  
Trustee



**Carol Sergeant CBE**  
Trustee



**Andreas Sohmen-Pao**  
Trustee



**Ishbel Macpherson**  
Trustee



### 2012

Lloyd's Register Foundation created.

### 2013

The Lloyd's Register Foundation Research Collegium brought together **24 students from 22 countries** to develop imaginative solutions to the problems faced as the world's population concentrates more and more near the coast.

### 2014

Launched our first major programme, the **National Structural Integrity Research Centre**.

Invested £10m in a pioneering programme for data centric engineering, becoming a founding partner of the new **Alan Turing Institute**.

### 2015

Following our Foresight Review on Nanotechnology, we award £3m to create the **International Consortium of Nanotechnologies (ICON)** at Southampton University to develop a global capability in nanotechnology.

### 2016

Joined with **Arup** to establish a £10m programme (Resilience Shift) to make infrastructure more resilient to shocks and stresses.

Partnered with NUS to establish the world's **first institute for the public understanding of risk**.

### 2017

Our funding supported the creation of the **World's first 3D printed steel bridge**.

Created the **Assuring Autonomy International Programme** at the University of York.

Initiated the Lloyd's Register **Safety Accelerator** to increase safety innovation in industry.

### 2018

Launched a **vocational training initiative (SEASEP)** to upskill people in South East Asia countries and save 100,000 lives every year.

Established the first **Maritime Blockchain Lab** to explore blockchain for safety and assurance.

### 2019

Invested £10m to transform our **Heritage and Education Centre**.

Launched the world's largest study into how people around the world think and feel about risk and safety, the **World Risk Poll** in partnership with Gallup.

# What makes us special

## Technical Authority

Our global community of experts

## Global Reach

Active in 100 countries

## Independent

We are a politically and financially independent global Foundation able to take the long view and invest where we can make the greatest difference

## Lloyd's Register

Working with our trading company Lloyd's Register Group, we're a 21st century model for doing social business

## Our People

Passionate people who want to make a difference

## Heritage Collection

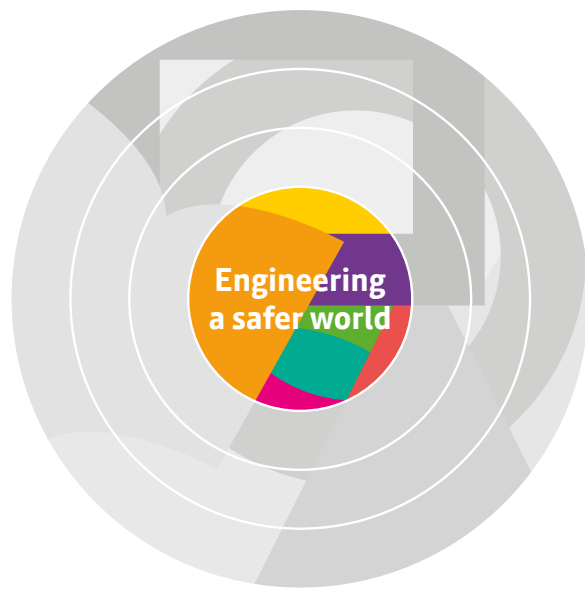
A unique historical and educational resource





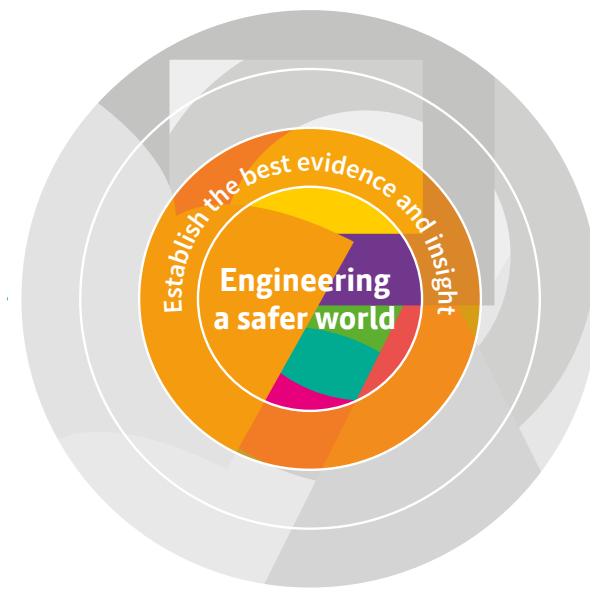
# Our approach

## How can we have even greater impact?



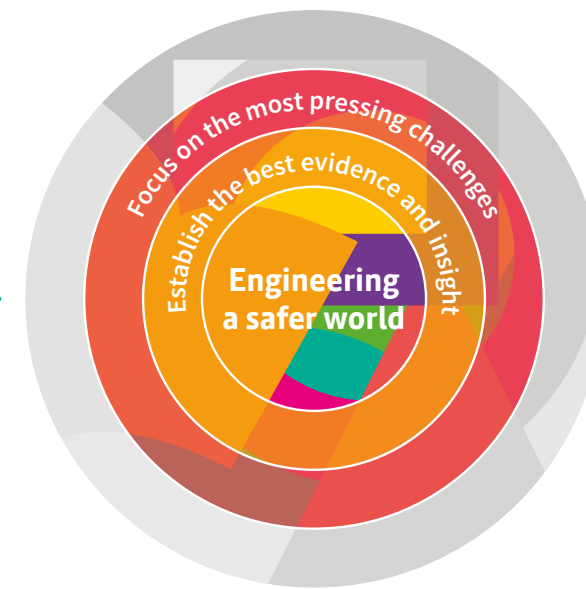
**Our vision:**  
**Engineering a safer world**

Our purpose is to secure high standards of design, manufacture, construction, maintenance, operation and performance, enhancing the safety of life and property at sea, on land and in the air. We also advance public education and skills for engineering.



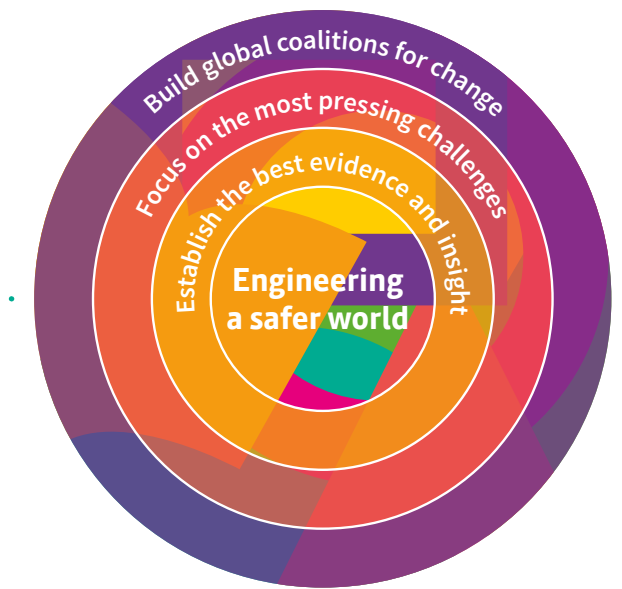
**Goal 1:**  
**Establish the best evidence and insight**

We will use the best data, evidence, and insight available to better understand the complex factors that affect safety.



**Goal 2:**  
**Focus on the most pressing challenges**

We will focus on the biggest safety challenges, where there's clear evidence and a compelling need for change.



**Goal 3:**  
**Build global coalitions for change**

We will promote safety and convene international partnerships to have greater impact and make a real difference.

# Goal 1: Establish the best evidence and insight

We will use the best data, evidence, and insight available to better understand the complex factors that affect safety to identify areas of greatest need and areas where we can make a real difference. Our interventions will be driven by evidence of what works and we will build the world's best source of safety evidence, making it open to all. Opposite are examples of our funding.

## World Risk Poll GALLUP

The World Risk Poll is the world's largest study into how people around the world think and feel about risk and safety including at work. It surveys over 140,000 people from more than 140 countries to better understand how to improve our understanding of risk and make the world a safer place.

Part of the Gallup World Poll will be conducted through interviews with nationally representative samples of more than 95% of the world's population in 145 different languages. It will be the first ever globally comparable, publicly available data set on the public understanding of risk.

## Evidence & Insight Centre

We are creating the world's best centre for safety evidence and insight. This new centre will support robust interventions by us and others. The Centre's role will be to source, analyse, visualise and communicate data and other safety evidence and contribute to the identification of new challenges and areas for intervention.



Lloyd's Register Foundation  
Institute for the Public  
Understanding of Risk

The Lloyd's Register Foundation Institute for the Public Understanding of Risk at the National University of Singapore was launched in 2017 to undertake research on the scientific understanding of risk and its practical application through a multi-disciplinary approach that brings together science, engineering, social sciences, and humanities. They are building the world's biggest data set on public perception of risk.



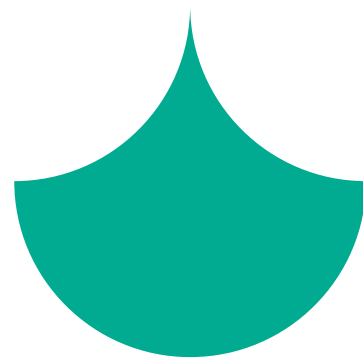
## DISCOVERING SAFETY

We're investing £10m in a 5 year research programme, Discovering Safety that will use novel insights from data and analytics to improve global health and safety performance. The programme is jointly delivered by the Health and Safety Executive (HSE) and the University of Manchester through the recently established Thomas Ashton Institute.

## Goal 2:

# Focus on the most pressing challenges

We will focus on the biggest safety challenges, where there's clear evidence and a compelling need for change, to make a real difference. We will work in areas where we can harness our unique strengths and assets.



## safety at sea

Given the increasing demands we are placing on ocean space and the challenges of working in ever more extreme environments, how do we better protect people and property from harm?



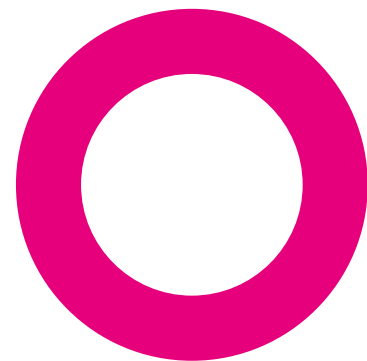
## safety of food

Given the demands placed upon the food supply system, how do we ensure that food continues to be safe for the long term?



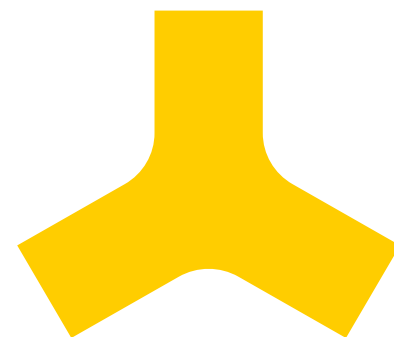
## skills for safety

How do we support the skills needed for global safety?



## safety of digital systems

Given the predicted growth of digital and data driven systems, how do we ensure that their benefits are safely realised?



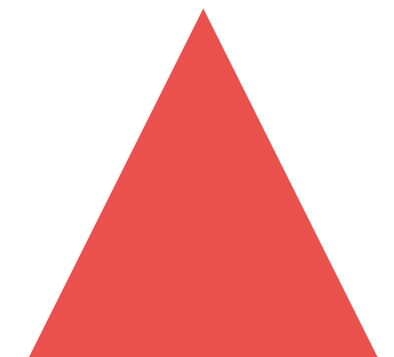
## safety for a sustainable future

How do we meet shared global goals for sustainability whilst also valuing safety of life and property?



## safety of physical infrastructure

How do we ensure the future safety of the complex infrastructure that modern society relies on?



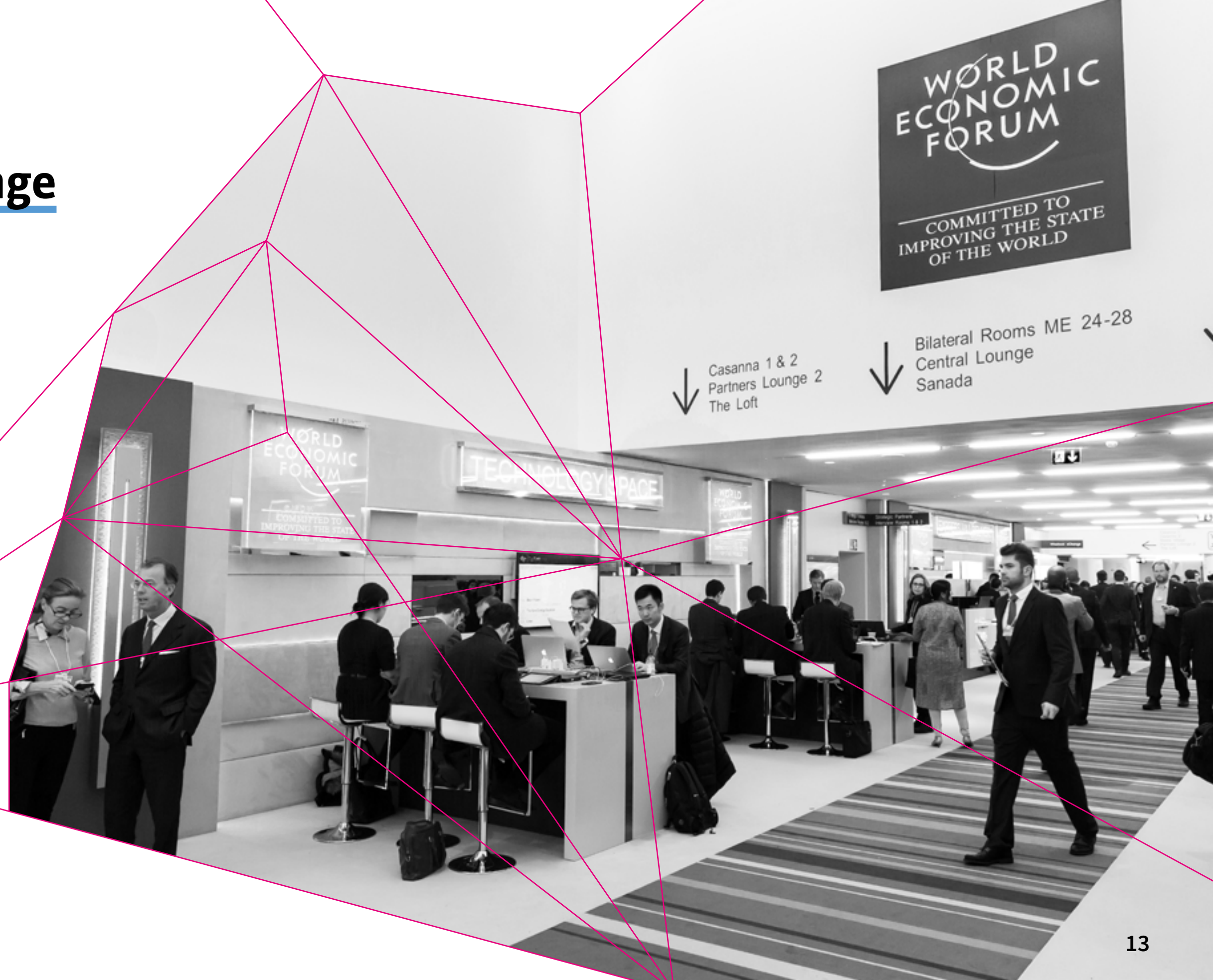
## public understanding of risk

How do we close the belief gap between public perception and real world risk to make people feel safer?



## Goal 3: Build global coalitions for change

Global challenges need global solutions. They cannot be tackled by working alone. We will be at the forefront of building new coalitions, tirelessly promoting safety issues and building partnerships with willing collaborators all around the world.





# Investing for the future

One of the Foundation's key attributes is our Technical Authority invested within Lloyd's Register Group and our global grants community. It enables us to be much more than just a funding provider, contributing technical solutions to deliver the challenges. We will increase our 'direct charitable activities' including in the Heritage and Education Centre, create a new Evidence and Insight Centre, and continue to make external investments in major programmes and centres of excellence.

We are building our capability through major programmes such as:

- The National Structural Integrity Research Centre (TWI)
- Lloyd's Register Safety Accelerator
- The World Risk Poll (Gallup)
- Resilience Shift (Arup)
- Assuring Autonomy International Programme (University of York)
- Discovering Safety (Health and Safety Executive)
- Data Centric Engineering (Alan Turing Institute)
- Institute for the Public Understanding of Risk (National University of Singapore)
- Royal Academy of Engineering Partnership (Safer Complex Systems, Developing Engineering Skills, and Safety in Decommissioning).



GALLUP



ASSURING  
AUTONOMY  
INTERNATIONAL PROGRAMME



The  
Alan Turing  
Institute

THE RESILIENCE SHIFT



DISCOVERING SAFETY

In addition to our challenge areas, we will support cross cutting Foundational programmes which will allow us to take a longer-term perspective, building our capability and capacity.

## Heritage and Education Centre

We are investing over £10m in our Heritage and Education Centre to become a globally-renowned resource for understanding engineering and technological innovation and its impact on society.

The Lloyd's Register Foundation Heritage & Education Centre is the custodian of Lloyd's Register's unique collection; one of the great resources still available for better understanding maritime history, marine engineering, naval architecture, offshore engineering and ocean technology.

Our investments will help to:

- Preserve the physical collection for future generations
- Digitise and make the collection accessible around the world through imaginative new education and outreach programmes
- Drive distinctive research to deepen understanding and further engagement
- Contribute to the understanding of the most pressing safety challenges
- Keep the collection modern and relevant



We're determined to make a real change in the world around us and will measure different types of impact to know if we are successful.



Evidence-based policy decisions which support safety



Adoption of new technologies, standards and ways of working



Others wanting to work with us for bigger impact



Decline in safety related incidents



People with the skills they need



...and the stories of how lives are changed

# Creating change & measuring impact

If we can identify those areas of the world where there is greatest need, collect the evidence to generate insight and build a coalition of support, we can make a targeted improvement in engineering a safer world.





# A safer world

Establish evidence & insight

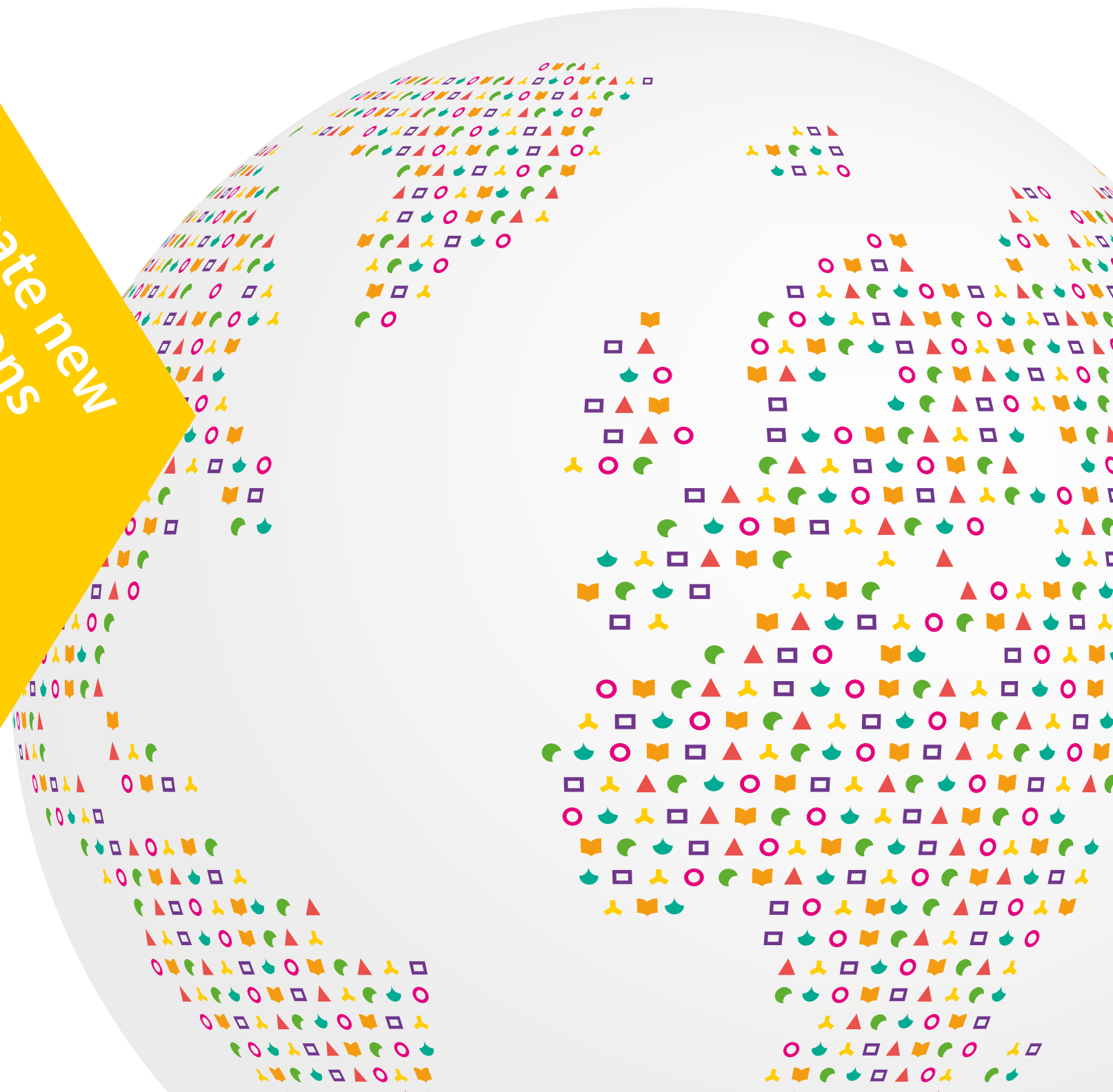
unique capabilities

Harness our

Focus on challenges

Build global coalitions

Create new interventions



## Contact us

**email:** [info@lrfoundation.org.uk](mailto:info@lrfoundation.org.uk)

**phone:** +44 (0)20 7709 9166

**web:** [www.lrfoundation.org.uk](http://www.lrfoundation.org.uk)

**find us:**

71 Fenchurch Street

London

EC3M 4BS

United Kingdom



Lloyd's Register  
Foundation