Institute and Faculty of Actuaries

Regulatory Board Horizon Scan

Overview

The IFoA's regulatory horizon scan highlights themes within the scope of actuarial work where there is potentially significant risk to the public interest.

The scan is maintained and updated by the IFoA Regulatory Policy team through a series of internal discussions and desk research, regular bilateral meetings with other regulators, and expert inputs from the IFoA's Practice Boards. It is reviewed and owned by the IFoA Regulatory Board. At its regular meetings, the Board hosts a series of discussions with topic experts and assesses the risks associated with these broad topics. This allows the Board to consider what regulatory actions they may take in mitigation. Actions available to the Board are outlined in the Regulatory Toolkit.

In accordance with its Royal Charter, the IFoA has responsibility for regulating the actuarial profession in the public interest. Under the terms of the IFoA's Governance Manual, Council delegates that responsibility to the Regulatory Board. The IFoA's Regulatory Policy Statement indicates the Board's commitment to a **risk-based approach**.

Identify risks → Horizon scan → Mitigate risks → Regulatory Toolkit

Current horizon scan items

HS01 - Failure to appropriately promote and allow for climate change, biodiversity, and sustainability risks

HS07 - Advances in AI and Data Science techniques brings new risks and enhances existing risks

HS08 - Risk of unfair consumer outcomes and poor financial inclusion

HS09 - Established practices and theory fall short, in the face of significant economic, environmental, and societal changes

HS10 - Managing the risks associated with an ageing population

HS11 - Systemic risk arising from risk transfer between financial institutions

HS01 Failure to appropriately promote and allow for climate change, biodiversity, and sustainability risks

Links to HS08, HS09

Description

- Actuaries may not sufficiently allow for climate-related risks in the work that they carry out, including potential catastrophe outcomes.
- Actuaries may not sufficiently promote risks to climate, sustainability and biodiversity within their organisations, and guard against greenwashing.
- Actuaries do not appropriately account for the risks to human health as a result of increasing environmental and biodiversity adverse outcomes.

Examples

- Stress testing underestimates true risks
- Disclosures exaggerate extent of true activity
- Insurability comes under threat for some customers
- Insufficient investment strategy changes to drive shift from carbon to renewables
- Scenario analysis not sufficiently developed across industry

Board activity

- Climate related risk report: an information gathering report on actuarial involvement (July 2021)
- Risk Alert (April 2022)
- Ethical and professional guidance on climate change (January 2024)
- Risk Alert (June 2024)
- Key focus session, climate-related risk, (July 2024)
- Launched climate and sustainability thematic review, report on November agenda, due to be published December

Other activity

- Climate Risk and Sustainability Course
- Climate change curated library, Sustainability Board
- IFoA Climate change statement
- IFoA Biodiversity and nature-related risks policy statement
- IFoA Sustainability hub
- Thought leadership - Climate Emergency – tipping the odds in our favour (November 2022), Emperor's New Climate Scenarios (July 2023), Climate Scorpion – the sting is in the tail (March 2024)
- Changes to Technical Actuarial Standards (TAS) 100, (FRC March 2023)
- Consultation on update to SS3/19, (PRA April 2025)

Possible next steps

Given extensive actions by IFoA and other regulatory bodies, next steps may be better focused on assessing actuarial activity and how this has progressed in recent years.

A thematic review launched in April 2025. The review closed to submissions in July and the draft report is on the November Board agenda.

Most recent, or next scheduled, Board agenda item July 2024

HS07 Advances in AI and Data Science techniques brings new risks and enhances existing risks

Links to HS08, HS09

Description

- There may be inappropriate bias or discrimination in the underlying data, or models, increasing the risk of unfair outcomes.
- Complex data and modelling techniques may inadvertently breach existing regulatory requirements, particularly in relation to protected characteristics and data privacy.
- The use of third-party large language tools or models may lead to increased risks in relation to veracity of output, privacy, and copyright.
- Explanations and validation of complex data and modelling techniques are likely to be more challenging than for more traditional actuarial models.

Examples

- Large language models
- Use of third-party data
- Unfair pricing outcomes
- Inadequate challenge and validation
- Indirect discrimination against protected characteristics
- Lack of inclusive insurance
- Enhanced cyber risks through malicious AI

Board activity

- Ethical and professional guidance on Data Science updated and reviewed December 2024
- A Guide for Ethical Data Science, A collaboration between the Royal Statistical Society (RSS) and the Institute and Faculty of Actuaries (IFoA) (2018)
- Thematic review - General insurance: involvement of actuaries in pricing for UK home and motor insurance (June 2021) highlighted the risks around data science.
- Risk Alert (September 2023)
- Thematic review - Actuaries using data science and artificial intelligence techniques (February 2024)
- Key focus session, Data Science deep dive, (July 2023)

Other activity

- CISI Certificate in Ethical AI
- Wide consideration of issues by IFoA Data Science Community and range of other working parties.
- Technical Actuarial Guidance: Models includes material relevant to AI and machine learning techniques
- Research on the use of Artificial Intelligence and Machine Learning in UK actuarial work (October 2023) by the Financial Reporting Council and Government Actuary's Department
- Various global initiatives (including EU and USA)

Possible next steps

There is significant UK and international government and regulator focus, as summarised in the IFoA thematic review report *Actuaries using data science and artificial intelligence techniques* (February 2024).

Most recent, or next scheduled, Board agenda item | July 2023

HS08 Risk of unfair consumer outcomes and poor financial inclusion

Links to HS01, HS07, HS10

Description

- IFoA research and publications, such as the Great Risk Transfer, Inclusive Insurance, and the Poverty Premium, have highlighted where there are increasing questions around fair consumer outcomes, including for more vulnerable consumers.
- Wider industry work looking at gaps in protection and savings (including pensions) suggests that financial services is not delivering well for society and consumers.
- In the UK, the FCA's Consumer Duty aims to address certain aspects, and the regulator will track how organisations are implementing its requirements

Examples

- DB to DC, and new CDC/Superfund options
- GI pricing
- Lifetime mortgages
- Funeral plans
- Implementation of Consumer Duty
- Benefits of AI – poverty premium
- Pensions Gap
- Protection Gap
- Social Care

Board activity

- RB Chair worked with IFoA Policy team on the published Great Risk Transfer document in 2021
- Thematic reviews on GI Pricing, Funeral Plan Trusts, and Equity Release mortgages.
- Watching brief on FCA Consumer Duty following deep dive at Feb 2023 Board
- Key focus session, FCA Consumer Duty (February 2023)
- IFoA Consumer fairness thematic review beginning scoping in Q4 2025

Other activity

- Significant amount of activity on the part of the regulators on DB to DC transfers, including publication of further FCA guidance and joint guidance between the FCA and TPR
- Funeral plans moved under FCA regulation during 2022
- Introduction of FCA Consumer Duty in 2023 likely to have a significant impact in this area
- FRC TAS 200 updated to include focus on customer outcomes

Possible next steps

Professionalism material being developed. As the Consumer Duty beds in it would make sense to discuss with FCA at regular IFoA catch-up meetings.

A thematic review in this area, focused on actuarial input across a range of domains is planned for 2025/26.

Most recent, or next scheduled, Board agenda item	Related item HS04 covered February 2023

HS09 Established practices and theory fall short, in the face of significant economic, environmental, and societal changes

Links to HS01, HS07, HS08, HS10

Description

- Actuarial training, in common with other financial disciplines, uses established financial economic theory in relation to the pricing and valuation of market assets.
- This may lead to valuations driven by short-term benchmarking whereas long-term value may come under increasing pressure from the impacts of climate change, significant technological advances, or geopolitical upheaval.
- This could be extended to other aspects of the actuarial skillset, where established thinking may need constructive challenge.

Examples

- Long-term asset values due to climate change
- Societal benefits of AI
- Hedging strategies
- Future pandemics
- Appropriate levels of stress testing

Board activity

- Retirement factors thematic review
- GI pricing thematic review
- Data Science and AI thematic review
- Inflation Risk Alert (August 2022)
- LDI key focus session, (July 2023)
- Key focus session, challenging established economic theory, (February 2025)
- Key focus session, concentrating on changing mortality trends, (May 2025)

Other activity

- The Pensions Regulator, and other market regulators taking steps to strengthen collateral arrangements and reporting of Liability Driven Investments
- Work and Pensions Select Committee report on LDIs (June 2023)
- Climate Scorpion (March 2024) and Planetary Solvency (January 2025) reports
- Why actuaries need a new economics, IFoA webinar, April 2025

Possible next steps

Investigate what activity there is within IFoA working parties related to this theme.

Consider potential thematic review, thinking about what the particular scope might be.

Liaise with IFoA education colleagues on any planned curriculum developments.

Most recent, or next scheduled, Board agenda item	February and May 2025

HS10 Managing the risks associated with an ageing population

Links to HS08, HS09

Description

- Actuaries are considered experts in the domain of pensions, and key associated demographic insights. This extends to other later-life considerations such as social care and potential utilisation of property wealth.
- As a result, actuaries are heavily involved in how relevant products and investments are designed, and how various risks are managed on behalf of financial institutions, the public sector and wider society.
- There is a risk that sub-optimal outcomes in retirement income and social care are to some extent blamed on actuaries. This may be exacerbated where reasonable advice at a micro level is not necessarily beneficial in a wider societal context.

Examples

- Automatic pension enrolment (UK)
- Pensions Gap
- Life insurance - younger customers
- Social Care

Board activities

- Collective Defined Contribution Scheme Actuary Practising Certificate introduced (March 2023)
- Corporate pensions: actuarial advice given to pension scheme sponsors (April 2023)
- Pension Scheme design thematic review (June 2025)
- Key focus session Pensions development deep dive, (May 2024)
- Key focus session Focus on UK Pensions recent developments, (July 2025)

Other activity

- New DB funding code of practice from The Pensions Regulatory (April 2024)
- Technical Actuarial Standard 300 update (December 2023)
- New Technical Actuarial Standard 310 : Collective Money Purchase Pensions introduced (May 2024)
- IFoA Social Care Working Party
- IFoA Equity Release Working Party

Possible next steps

Investigate what activity there is within IFoA working parties related to this theme.

Revisit themes from the Great Risk Transfer to assess if IFoA regulatory activity might help mitigate certain aspects.

Most recent, or next scheduled, Board agenda item N/A

HS11 Systemic risk arising from risk transfer between financial institutions

Links to HS08, HS09

Description

- Actuaries advise financial institutions on transferring risks to other financial institutions, whether to multiple clients in the context of consultancy, or to their own employer when working in-house
- Whilst any one piece of actuarial advice may be appropriate for a specific risk transfer from one institution to another, there is a risk that, taking in to account multiple such individual cases, systemic risk is introduced. Often a key risk relating to commercial risk transfer relates to collateral arrangements, which under stress can lead to significant liquidity problems.
- Where underlying risks remain in the economy, the potential for unforeseen systemic risk may lead to economic instability. Although such risk transfers may be beneficial for individual institutions, the overall economic risk may not be well understood and subject to unexpected shocks.

Examples

- Bulk purchase annuities (BPA)
- Liability driven investments (LDI)
- Reinsurance of high-risk customer groups
- Reinsurance in deregulated markets
- Complex reinsurance programmes for property
- Basis risk where hedging approaches do not fully replicate risk exposure
- Part VII transfers

Board activities

- LDI key focus session, (July 2023)
- Corporate pensions: actuarial advice given to pension scheme sponsors (April 2023)
- Pension Scheme design thematic review (June 2025)

Other activity

- Work and Pensions Select Committee report on LDIs (June 2023)
- Range of relevant IFoA working parties
- PRA PS13/24 on funded reinsurance

Possible next steps

Reach out to a range of IFoA working parties to establish a common understanding of risks and potential avenues to explore.

Most recent, or next scheduled, Board agenda item	N/A

Past horizon scan items

Code	Summary	Rationale for removal	Date retired
HS02	Complex models insufficiently validated and understood, or poorly communicated	Adapted and restated as HS03	24 September 2024
HS03	Risk associated with multiple significant pensions developments over a short period of time	Adapted and restated as HS10, with a broader scope	2 September 2025
HS05	Products which combine higher risk of adverse outcomes with significant actuarial involvement	This has been developed to focus on consumer fairness, in HS08	24 September 2024
HS05	Actuaries not appropriately allowing for significant changes in economic environment	This risk has been redefined in HS09	24 September 2024
HS06	Risk of inaccurate pandemic modelling and future path of longevity as a result of the COVID-19 pandemic	Specific COVID-19 risk has been downgraded. The general risk regarding future pandemics is subsumed in HS01	24 September 2024

Regulatory toolkit

How to

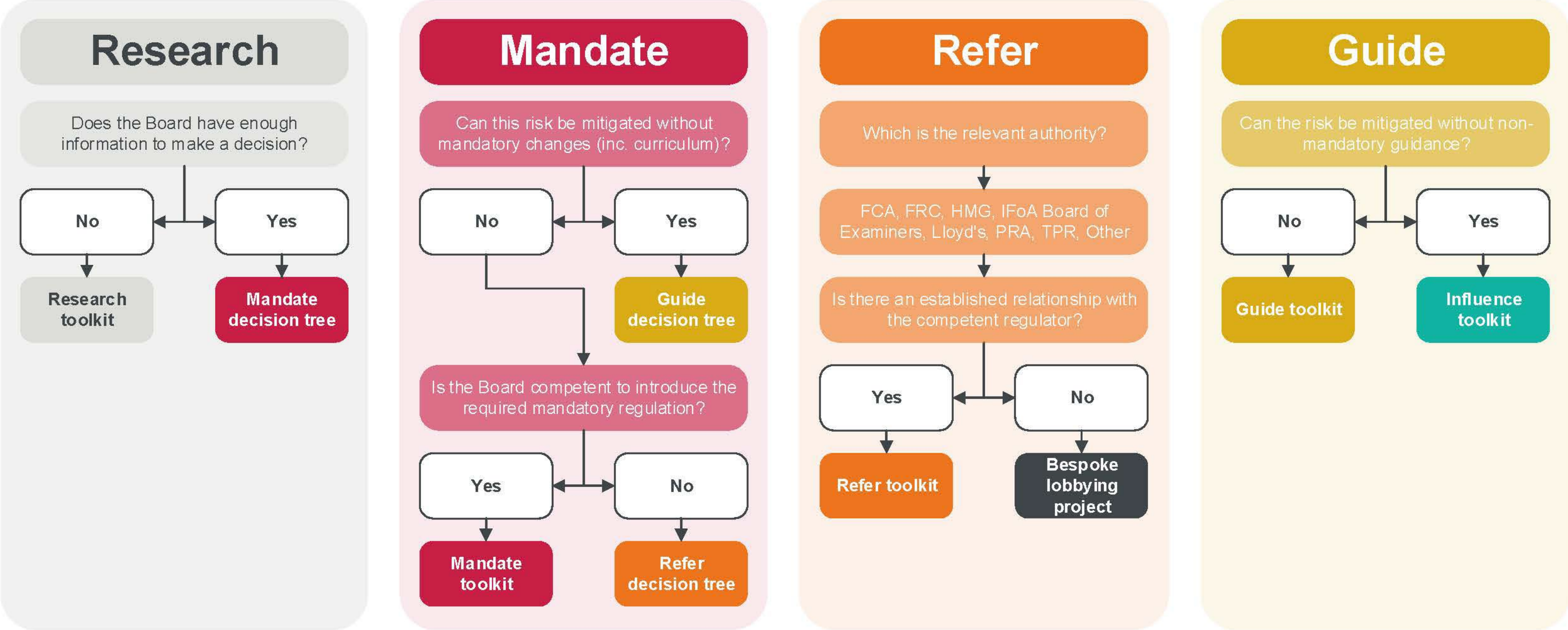
Identify the strongest regulatory tool which should be employed in the mitigation of a risk identified on the Regulatory Board's Horizon Scanning Register.

Start at the "Research" column, under "Decision trees".

Please note that, other tools may be used in conjunction with the strongest tool used. For example "New APS" appears on the "Mandate toolkit," but will require a "Webpage update" which appears on the "Influence toolkit".

Please note that, the "Decision trees" are designed to prescribe stronger mitigations for risks with higher impact. They do not account for urgency. Many of the strongest mitigations require several months, or more, to implement. If a risk is urgent, tools such as Risk Alerts should be considered.

Decision trees



Toolkits

Research toolkit

- Thematic review
- Round table event
- Request Practice Board research
- Deep dive from topic expert
- Executive desk research paper

Mandate toolkit

- Disciplinary Scheme update
- Actuaries' Code update
- New APS (all members)
- New APS (practice specific)
- Scheme update (CPD, PC, QAS)
- New Practising Certificate
- Updated APS
- Updated Practising Certificate

Refer toolkit

- Formal correspondence (senior level)
- Meeting (senior level)
- Executive level engagement

Guide toolkit

- New topical non-mandatory guidance
- Update topical guidance
- Update Actuaries' Code guidance
- Update APS specific guidance
- Withdraw outdated guidance
- New Professional Skills video(s)
- Professional Skills toolkit update

Influence

- Risk Alert (or other all member email)
- Comprehensive comms campaign
- Conference session (IFoA)
- Conference session (third-party)
- One off blog/article
- Regulatory newsletter entry
- Other newsletter entry
- Webpage update