The Institute of Risk Management

Risk Trends 2023

Led by the IRM's global network of risk practitioners and professionals

The IRM is the leading professional body for Enterprise Risk Management. We help build excellence in risk to improve the way organisations work.

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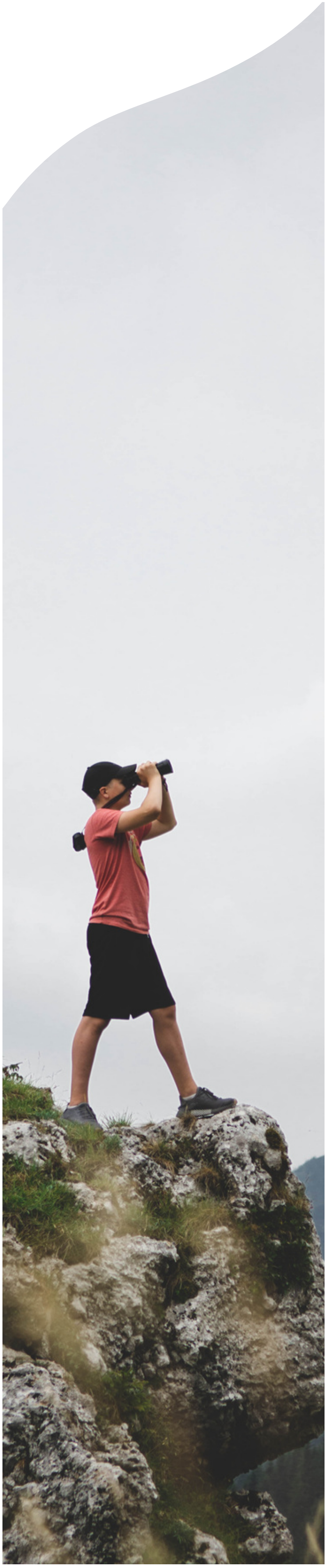

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Introduction from the Chairman

Stephen Sidebottom

IRM Global Risk Trends 2023

This year we have decided to switch the focus from Risk Predictions to Global Risk Trends, with a more detailed update to our Risk Agenda 2025 survey to follow soon.

The world has never been more complex and volatile, as seen in the daily news and felt in Boardrooms. War, climate change, cyber-risks, the energy crises, the cost of living and the fallout from the pandemic is still sending shockwaves around all organisations.

The World Economic Forum has recently published their Global Risks Report, permacrisis is not only the word of the year, but also the context in which people and organisations will need to learn how to navigate: systemic, interrelated challenges and risks increased volatility, shortages in natural resources (biodiversity loss, food, water, metals, and minerals) will be the new normal.

As Saadia Zahidi, Managing Director at the World Economic Forum points out: “We are immersed in an era of polycrisis, where low-growth, low-investment and low-cooperation era further undermines resilience and the ability to manage future shocks".

With increasing complexity and uncertainty in the business environment, organisations are recognising the importance of proactively identifying and managing risks. This will only drive-up demand for skilled Enterprise Risk Management (ERM) professionals who can help organisations make informed decisions.

As risk practitioners know a career in ERM is challenging, but rewarding, as it offers many opportunities for growth and advancement. Risk Managers have never been in more demand across every sector globally.

In what seems like an increasingly fractious and changing world, I envisage the business response to global risks evolving throughout 2023 and beyond through investment in risk management capability, assessing and evolving your risk frameworks, continuously improving data insights, and building risk management skills throughout your workforce. Thank you to all our Group/Chapter Chairs and Committee members, and our Global Ambassadors for their ongoing support and views for this publication.

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> Saadia Zahidi,
> Managing Director at the
> World Economic Forum

IRM Special Interest Groups

Armed Forces Community Group

Chris Blockley-Webb IRMCert, FAPM, Armed Forces Community Group Chair

Risk trends for 2023 for the Armed Forces and its connecting business areas are going to be dominated by the continued unrest within the European theatre. This draws on topics such as supply chain fragility, economic instability, geo-political instability as well as the global financial uncertainty around fuels and monetary trading. The human element cannot be discounted nor underplayed. As history shows, the forced relocation of communities only ends in pain and disaster and the risks surrounding such events are wide ranging in timescales.

With European unrest and global financial instability gathering momentum the ability of the state to continue to fund its armed forces to the levels of its ambition will raise the level of capability risk. This may well become acute if domestic industrial unrest continues to a point (or increases) where Military Aid to Civil Authorities (MACA) requires escalation. This may also be the case if there is a resurgence in the COVID virus.

Globally, the Chinese response to various strategic agreements is yet to be fully understood in both the military and economic sense, as well as any response to the global financial downturn. In the longer term, the risks associated with the financial downturn and fuel requirements and the various countries' responses to them may well change the geo-political and socio-economic landscapes. From a strategic perspective, the requirements for the UK to achieve its climate change responsibilities will require the defence sector to increase its reliance of various fuel sources whilst reducing on others.

The risk picture for the Armed Forces / defence sector is varied, multi-layered and complex and will be a challenging landscape to operate in.

Charities Group
Steve Brown, Group member

The charity sector is diverse, and this creates challenges when making generic predictions about the key risks that charities will face in the future. Charities working in the international aid sector will be facing significant risks associated with political turbulence and conflict, whereas charities working in the UK in health and social care, will be facing risks associated with the cost-of-living crisis, backlogs in the NHS and changes in statutory contracting. Some smaller charities may find the cost-of-living crisis difficult to survive as need for their services increases at the time that their costs are rising, and fundraising becomes increasingly challenging. However, there will be some risk themes that will be recognisable to many in our sector.

As we came out of the pandemic and started to return to business as usual in 2022, the main challenges arose from the continuing political and economic turbulence both internationally and in the UK.

Key risks in 2023

Cost-of-living crisis

The cost-of-living crisis in the UK is an evolving issue that is expected to have a very significant impact both for our beneficiaries, our workforce and our organisations for at least the next 12-18 months. Inflation is now above 10%. Increase in petrol, food prices, and home energy costs is now very apparent with many people facing significant mortgage increases, and real pressure on day-to-day living costs for millions of people.

Risk managers should enable their organisations to focus on the impact of the cost-of-living crisis in the following areas:

- Beneficiaries – many of our beneficiaries are disproportionately negatively impacted by the cost-of-living crisis and your charity may have seen increased demand for your existing services as well as demand for financial help and support.
- Income – if your organisation relies on voluntary income – what are your fundraising targets for the coming year, and how resilient have your income streams been in 2022?
- Costs – the overall impact of inflation on bought in goods and services is currently estimated to be around +5-10%. This could be significantly higher in 2023/24 if the rises are not suppressed by fixed cost contracts with your suppliers.
- Workforce – many charities' employees are facing hardship – can you afford to retain them through offering pay award increases in 2023/24, are these sustainable in the medium term? Has your organisation considered other options such as one-off cost of living payments, hardship fund grants, provision of online information and support around debt management?

Income

It is becoming increasingly difficult for charities to achieve full cost recovery from statutory service contracts at the same time as it is increasingly challenging to raise unrestricted voluntary income to subsidise those contracted services. The fundraising environment is likely to get more competitive. We see a crowded market for individual giving, societal shifts in the causes that people and corporate partners want to support, and tougher criteria from trusts and funding bodies.

Costs

Charities costs are rising, especially in relation to salaries, utility costs, supplier costs and insurance premiums. This could be more challenging for those charities that have a buildings-based service delivery model. There continues to be financial uncertainty in relation to inflation, energy prices including the future of the energy price cap, rising costs of suppliers, and the impact on income raised from legacies and investments.

It was predicted during the pandemic that this could be mitigated by increased mergers and takeovers. This option has not been realised in practice and the most recent Good Merger Index 2021-22, published by Eastside People, found mergers declined by around a third during the year after activity rose to a five-year high in 2020-21.

Employees and volunteers

Employee and volunteer recruitment and retention is challenging in the context of low unemployment and rising pay levels in other sectors. This may be a significant risk for charities with a high proportion of living wage employees, who can earn more money in other sectors. This risk also applies to highly transferable technical roles, such as finance, technology, fundraising and marketing (to name but a few), where we are in direct competition with the commercial sector. These challenges are taking place in a wider context of continuing uncertainty in the economy and a backdrop of increasingly poor industrial relations in other industries, which can cause service disruption. There has not been significant strike action by the charity sector workforce, but risks associated with industrial relations need to be considered.

Some charities are also seeing their volunteer numbers decline, which is partly associated with the cost-of-living crisis as people may need to remain in or return to paid employment. Attracting and retaining volunteers is likely to remain a significant risk in 2023.

Other risk areas

Cyber crime

Cyber risk continues to be a theme that we will face as cyber criminals continue to develop the sophistication of their attacks, including ransomware. As such, cyber and information security should be a recurring point of focus for risk managers. The shift to new ways of working after the pandemic, which includes more remote and hybrid models of working present both opportunities for cost reductions but can also create increased technology and cyber risks.

Equality, Diversity and Inclusion

In 2022 there were some high-profile cases in the media of large charities being called out for institutional racism and allowing a culture of bullying and harassment to go unchallenged in their organisations. Equality, Diversity, and Inclusion (EDI) risks will need to remain a focus as many charities lack diversity in their leadership.

In 2022, for example, there was a recommendation from MPs on the cross-party International Development Committee to enforce the larger charities the Foreign Commonwealth and Development Office (FCDO) funds to publish their diversity data. Although the FCDO rejected this proposal, the recommendation suggests that there is political interest in this area, which is unlikely to go away in the context of increased media interest in the charity sector's EDI performance.

Campaigning and lobbying

In 2022 there has also been an increasing focus and scrutiny on the campaigning and lobbying activities of charities. Some charities feel that the law itself discourages charities from legitimate activity because compliance is seen as burdensome, and many are worried about breaking the rules by mistake. Recent research suggests that almost three-quarters of local charities do not engage in political debates. This is a missed opportunity to campaign for the improvement in the lives of our beneficiaries, many of whom are disproportionality negatively impacted by the cost-of-living crisis.

High profile patrons and ambassadors

In 2022 we have continued to see reputational damage arising from media coverage of the behaviour of high-profile patrons and ambassadors. These can undermine the public's trust in the cause of the charities impacted and it is often difficult to predict when this type of risk will occur as by their very nature the circumstance underlying these risks are hidden. Once out in the public domain these risks can materialise very quickly through social media.

Conclusion

Despite the challenges, the forthcoming period presents a significant opportunity for risk professionals to make a real contribution to their organisation. We have viewed an increased sector focus upon risk as an enabler – particularly in the consideration and application of risk appetite. More Boards and management teams are having active conversations as to what their risk appetite is and what it should be. Surviving and growing in the context of economic and political turbulences is a real challenge and unfortunately, some charities will not survive the economic crisis. A clear risk appetite position helps to provide the framework for leadership and the wider organisation.

Join the Charities Group here.

Climate Change Group

Martin Massey MIRM, Climate Change Group Chair

In 2022 the Climate Change Group Chair published (with IRM and Kogan Page) Climate Change Enterprise Risk Management – a practical guide to reaching net-zero goals.

This book was published on the 3rd of December 2022 and is intended for all who want a comprehensive introduction to current and new Enterprise Risk Management practices aimed at integrating climate change into the risk strategy of organisations. Many of the Climate Change Group committee members provided their insights and support including specific case studies for the book so it was a great collaborative effort.

The book builds on the work undertaken by the IRM which has, for example, identified key enablers that would require the most attention to facilitate the development and execution of a climate change risk management strategy.

The book focuses on two foundational components of climate change risk management namely 'resilience', and 'sustainability'. In respect to risk trends, the book includes two chapters specially focused on emerging risks – Chapter 8 "Designing an effective emerging climate risk management process" and Chapter 9 "Emerging climate trends, issues and challenges".

In 2022 global events that were not predicted included the invasion of Ukraine by Russia which has led to the biggest land war in Europe since 1945. This has led to a significant increase in energy and food costs that has fuelled the highest rates of inflation since the 1980s, which is creating major macroeconomic challenges for most countries.

It can be argued that the main drivers of risks (or underlying root causes) have been geopolitical with the American-led post-war order being challenged and we are seeing the decoupling of the two biggest global economies of the USA and China.

World Economic Forum (WEF) Global Risks Report 2023

However, despite the short term concerns around the cost of living, climate change continues to be perceived as the gravest long-term threat to humanity and in the latest Global Risk Report 2023 that was published in January the respondents' rated "failure to mitigate climate change" and "failure of climate change adaptation" being the top two global risks likely to have a severe impact over a two year and ten year period".

The report goes on to state that "climate and environmental risks are the core focus of global risks perceptions over the next decade – and are the risks for which we are seen to be the least prepared. The lack of deep, concerted progress on climate targets has exposed the divergence between what is scientifically necessary to achieve net-zero and what is politically feasible."

Environmental Sustainability and Energy Trade-Offs

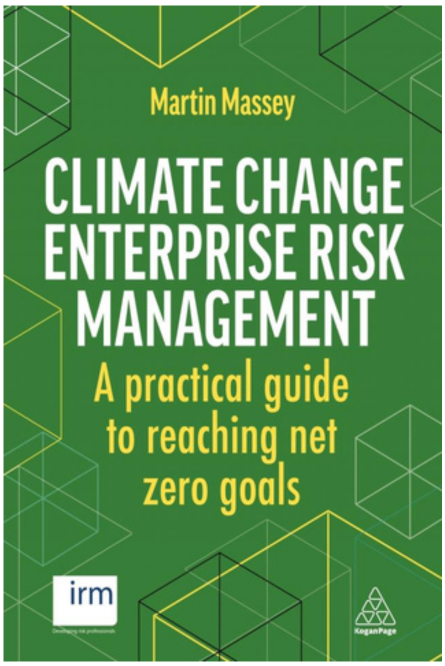
In respect to climate change and environmental sustainability, the Ukraine war has led to the biggest commodity shocks since the 1970s, which has in turn led to the reshaping of the energy system. This has led to government trade-offs between ensuring energy supplies are affordable and secure whilst trying to meet net-zero global emissions targets. For example, the scramble for new sources of energy is leading to coal plants being turned on again or expanded for example in Germany.

In terms of electric vehicles, political tensions, and supply chain issues mainly related to lithium are now slowing down the production of electric cars. The average cost of charging for electric cars is also increasing, this is reducing the demand and increasing the operating costs for consumers and businesses. The slowing down of climate change, however, may be possible in the long term with new forms of greener energy through a more efficient and safer version of nuclear power in the short-term and nuclear fusion in the longer term.

Nuclear fusion promises limitless energy from relatively small amounts of water and lithium. Researchers at the US National Ignition Facility in California have conducted fusion experiments and have noted that these have released more energy than was pumped in by the lab's enormous, high-powered lasers. This is a landmark achievement known as ignition or energy gain.

However, the technology is far from ready to turn into viable power plants at this moment in time, as citied in this recent Guardian article. [i]

There continues to be a significant increase in renewables such as wind, solar, hydro energy etc. Green Hydrogen is one the latest developments. In early 2023, India announced a $2.3 billion plan to promote "green hydrogen" (hydrogen produced with renewable energy) which experts predict could be the clean fuel of the future.



Climate Risk Trends

The IRM Climate Change Group have set out a few key themes that risk managers should focus on in terms of risk trends and predictions for 2023 (in the context of managing and mitigating their risks in their business.)

Increased Focus on Resilience Strategies due to Extreme Weather Events

We anticipate the continued trend in volatility in temperatures and extreme weather events that we have seen over the last few years will lead to continued disruption to businesses, and volatility in financial performance unless organisations develop improved risk mitigation strategies.

We anticipate that there will be an ever-increasing number of extreme climate events such as storms, floods, heatwaves, wildfires, and droughts affecting a wider set of organisations and sectors and related business risks. The recent earthquakes in Turkey and Syria demonstrate the risks of Mother Nature. One of the worst events in 2022 were the floods in Pakistan which affected more than 30 million people from June to September. In the UK, the heatwave in July resulted in a record-breaking temperature of 40.3 degrees and led to a series of fires that broke out across the country. A more recent example in January this year has been the unseasonably warm record-breaking warm weather that has spread from France to Poland. This has led to sparse snowfall which in turn has led to ski resorts closing and is a great concern for the entire ski industry.

Risk managers and businesses therefore need to continually review options to improve their resilience strategies including pre and post risk management controls. There is an increasing range of sophisticated strategies that organisations can seek to utilise including use of new technologies such as alert systems to help reduce the impact on assets are in high flood areas or where suppliers are susceptible to supply chain disruptions. In respect to risk transfer solutions with the increasing pressure on the insurance industry to reduce coverage and increase premiums; new insurance solutions are being designed.

With the rise of new datasets, satellites, and Internet of Things (IOT) sensors, parametric or index-based insurance solutions are expected to expand fast and become an alternative or in many cases the only option to insure climate-related risks that can provide organisations with improved resilience.

Increasing Regulatory Reporting Requirements

The Financial Stability Board created the Task Force on Climate-Related Financial Disclosures (TCFD) to improve and increase reporting of climate-related disclosure. Disclosures is a way for organisations to report their progress to stakeholders on the implementation of their climate strategy and the roadmap and performance against their climate targets.

In the UK the Government intends to roll out mandatory TCFD-aligned climate disclosures across the economy by 2025. As countries around the world roll out their own TCFD roadmaps, there is a growing trend to advocate consistency, alignment, compatibility, and standards at national, EU, and global levels.

The nature-focused TNFD aims to build on the work of the TCFD Financial Disclosures seeking to provide comparable, financially relevant, decision-useful information. The goal of the TNFD is to provide a framework for organisations to report on risks from biodiversity loss and ecosystem degradation. In turn, improving the availability of data and information will enable organisations to integrate nature-related risks more accurately and reliably into decision-making.

Increasing Climate Litigation and Regulatory Censure

Climate litigation is increasing and concerns about emissions under-reporting and greenwashing have triggered calls for new regulatory oversight for the transition to net-zero. We can expect to see a rise in regulatory fines/censure as global regulators start reviewing the submissions and behaviours of market participants.

This links to greenwashing (from a product perspective) but also to financial and climate change disclosures. It would not be unexpected if a few higher profile organisations were made an example of if they are not meeting their climate change responsibilities or if there were gaps between the stated green credentials of products and the reality. This is applicable to all sectors.

Greater Need for Comprehensive Climate Data

From a practical risk management perspective, organisations will need to continually seek to identify, collect, transform, maintain, and utilise increasing volumes of complex forms of climate data that are required for them to meet their regulatory and business requirements. There is a need to embrace technology, review and revise internal processes, and identify how climate data can provide a competitive advantage if organisations want to meet their regulatory requirements in a commercial and cost-effective way.

This data is also required for managing both physical, transition, and liability risks. Some of the main trends are to support the reporting of Scope 3 emissions in areas such as supplier management and customer engagement. Many risk managers are now focused on designing key risk indicators to monitor and report climate risks to their respective risk committees so the underlying data sources will to be a key factor in the success to integrate climate change risks into risk management frameworks.

Join the Climate Change Group here.

Cyber Group

Alex Stezycki IRMCert, Cyber Group Chair

As we draw into the first months of 2023, without any earlier consideration, I was asked to contribute to this IRM piece and make some cyber-related risk predictions for 2023!

Well, I'm going to be totally unimaginative, my prediction for 2023 is that it will be more of the same, with further refinement by attackers as they pursue ever more elaborate and imaginative ways of trying to monetise your production IT and OT systems for their own financial gain or political agendas. Cyber risk will drop in priority as other new more pressing risks such as climate, energy, and environmental issues take center stage leaving cyber-attacks to become an acceptable cost of doing business.

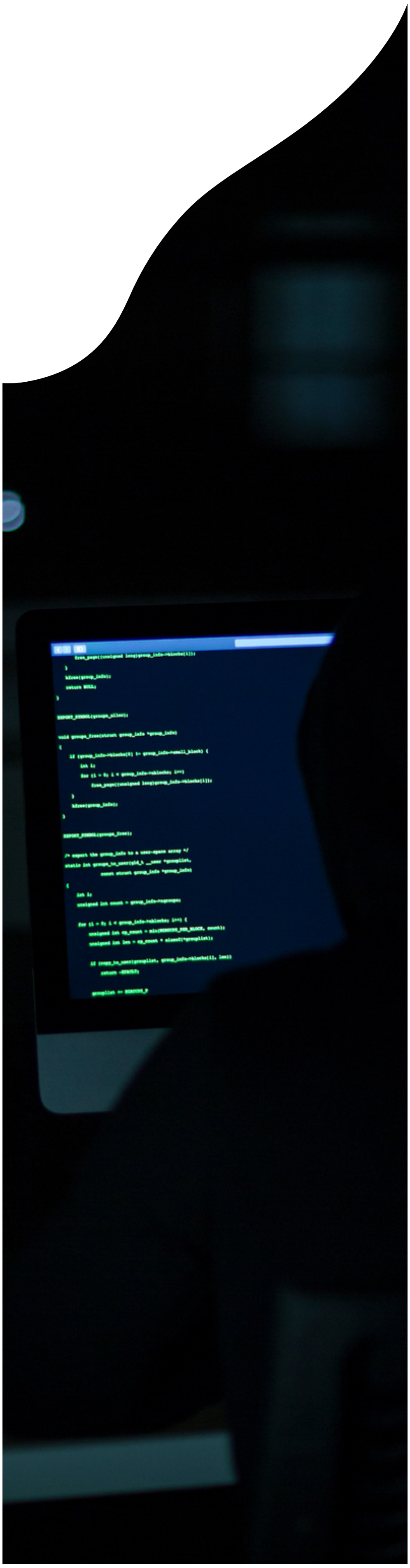
I will even go so far as to disagree with one of my Capgemini Directors who predicts that "Cyber will … find a more permanent home within the business risk hierarchy (rather than often lurking uncomfortably alongside it), and that moves towards operational resilience will give security considerations a more widely accepted and understood set of foundations to build upon. Yes, cyber will remain a specialism, however, that does not mean it has to be special." Personally, I feel that although the cyber risk is moving in that direction and finally being brought into the fold of ERM, I do not see that convergence completing in 2023 and indeed I feel it is still some way off, with the move still in its embryonic stage. Facilitating this remains a primary goal for the Cyber Group.

When Russia attacked Ukraine early last year there were lots of warnings and alerts from various government agencies suggesting that Russian-affiliated cyber attackers would begin in earnest, targeting both business interests alongside Critical National Infrastructure. As it turned out that did not quite materialise at the time, although it appears to have begun manifesting itself now in the UK with attacks crippling the Guardian newspaper and the UK overseas Postal Service as the year turned. There is definitely an uptick in malicious cyber activity, and it remains to be seen how this pans out as more governments are warning of a more aggressive and proactive response.

There is growing concern that cyber-attacks will lead to widespread business blackouts because of power grid disruption.

Lloyds have developed few new realistic disaster scenarios yet scenario 17 has been added and relates to Business Blackout, Cloud Cascade and Ransomware Contagion, where cyber actors target the Industrial Automation and Control Systems (IACS) of power distribution utilities, causing widespread power outages.

> "There is definitely an uptick in malicious cyber activity, and it remains to be seen how this pans out as more governments are warning of a more aggressive and proactive response."



The sophistication of the attack leads to suspicion falling on several threat actor groups linked to Nation States. According to the WEF Global Risks Report for 2023 , alongside a rise in cybercrime, it predicts that attempts to disrupt critical technology-enabled resources and services will become more common, with attacks anticipated against the agriculture, water, financial, public security, transport, energy, and domestic sectors, as well as space-based (satellite) and undersea communication infrastructure. This will also disrupt and lead to supply chain issues.

The Cloud cascade scenario involves a major Cloud Service Provider (CSP) suffering a total system outage across multiple datacentres located in the USA. The outage lasts for 48 hours and impacts all hosted services, cascading across infrastructure, platforms, and software. Businesses around the world suffer business interruption and data loss, among other impacts. Investigation shows that the outage was triggered by misconfigured cluster management software and exacerbated by malicious code.

The slow convergence and colocation of cloud services into key data centres echoes last year's IRM Cyber Group members response to the Department for Digital, Culture, Media and Sports call for consultation/views on the security of UK data centres and cloud services .

Touched upon above already, there is also growing concern that space operations are now a target for criminal or strategic reasons, potentially incurring cyber and property claims .

In early 2022, the FBI and CISA began warning against satellite ground-based and space-based infrastructure attacks, which were soon realised with nation-state operations targeting Viasat and SpaceX's Starlink satellites. The US National Institute of Standards and Technology (NIST) and the MITRE Corp both released notes on how cyber-attacks are targeting space with initiatives to build a cyber security framework to address these risks.

The recent media noise relating to ChatGPT is perhaps the realisation of the progress that has been made as part of the fourth industrial revolution in Artificial Intelligence (AI) and the risks it poses?

If ChatGPT and similar services can now almost faultlessly code and produce legitimate-looking phishing emails just imagine their capabilities a year or so hence as processing power continues to improve and the AI algorithm is refined.

DeFi (decentralized finance), Fintech innovations, and the introduction of new digital asset classes shall lead to augmented cyber risks which involve new crypto assets, cryptocurrencies, and new cyber risk threats.

This article is based on the substantive research undertaken by Zhanar Tukeyeva, who sits on the Cyber Group committee and these form the focus of her primary concerns based on her research.

Join the Cyber Group here.

Energy and Renewables Group

Contributions by the Energy and Renewables Group Committee

The energy environment in 2022 has remained at the top of the agenda for governments globally, along with other factors such as mass immigration, law and order, and global geopolitical events and their role in global stability. These are all challenges representing significant risks for governments around the world.

With respect to Europe, what has been notable is the evident lack of foresight and strategic planning when it comes to gas and electricity, and in developing robust and workable solutions based around renewables and alternative energy sources as sustainable means of delivering and maintaining affordable, accessible, and reliable energy for industry and households. There is a strong likelihood of a deepening global recession with secondary and tertiary effects of the quantitative tightening regimes and unparalleled steep increases in interest rates, having yet to fully materialise. Further mass lay-offs, insolvencies and bankruptcies are to be expected, as well as personal defaults on loans and mortgages - with all its cascading effects on the housing market, consumer confidence, etc. Adding volatility to any projections about energy supply, distribution, and consumption.

Energy Leading Policy

Energy policy revision that favours ensuring energy security that is affordable over environmental and social imperatives will introduce both risks and opportunities as policymakers struggle to balance conflicting priorities of net-zero carbon emissions, cost, and energy reliability.

As an example of this, in aiming to mitigate the high cost of energy, governments may introduce subsidies and price caps that are paid for by diverting funding from other areas.

Asia Geopolitical and Macroeconomic Shifts

The first COVID outbreak in China, the world's largest importer of hydrocarbons, in 2020 triggered a significant reduction in demand for oil. Together with the global oil storage being filled to 95-98%, this led to negative prices for oil in the period.

During the summer 2022, China increased its crude oil imports from Russia benefiting from the discounted prices due to sanctions. This helped to ensure national oil storage filling to 80-85%. Hence, the further strengthening of COVID related quarantine norms in China may drive downward pressure on oil prices.

Conversely, the lifting of the quarantine program could act as a catalyst for surging oil prices. On December 27, 2022, Putin signed a decree that bans the supply of crude oil and oil products to nations that abide by the $60-per-barrel price cap on Russian seaborne crude oil. The ban should be valid from February 1-July 1, 2023, period (five months) and could add to price volatility.

Tectonic changes in the EU Energy Market

In 2021 the share of Russian gas in the EU market was about 40%. After the Russian military aggression against Ukraine in February 2022, nation-state sanctions led to tectonic changes in the EU energy market:

Gazprom has lost the status of a reliable gas supplier to the EU, with its share of the energy market down to 9% by the end of Q3 2022 with further decreases anticipated.

The loss of its share went to other players with increased pipeline supply from Norway and North Africa and LNG imports mainly from others such as the USA and Qatar. Many European countries (Germany, Italy, France, Estonia, Poland, and others) have plans to expand their LNG import capacity by deploying new terminals from 2023 onward. This will likely create supply side shocks for equipment, skills and materials related to these industries.

Planned decommissioning of coal-fired power plants are being put on hold, with possible "greening" initiatives for nuclear energy under debate, creating political pressure as interest groups seek to challenge this by seeking to impose an agenda that has a narrower ESG focus.

Liquified Natural Gas (LNG) Market Supply Side Challenges

LNG is increasingly seen as a solution for gas shortages, brought about by sanctions and the destruction of the Nordstream 2 pipeline. Predictably, Asian and European demand for LNG is surging, but this creates a risk related to the supply side.

The LNG supply chain starts from the development of natural gas resources, then piping to LNG liquefaction terminals, followed by loading onto purpose-built LNG carriers and then shipping to regasification terminals in the consuming region.

The liquefaction terminals are typically the most expensive and takes the longest to build across the entire LNG supply chain.

The rapid construction of the new regasification capacities worldwide will boost the demand growth that may overrun the supply capacities and in turn drive LNG prices up. Qatar, Australia, and the USA being the world's largest LNG suppliers, will play an important role in overcoming the LNG market supply-side challenges, that sequentially will increase their geopolitical influence.

"Qatar, Australia, and USA being the world's largest LNG suppliers, will play an important role in overcoming the LNG market supply side challenges, that sequentially will increase their geopolitical influence."

New Life of Coal Miners

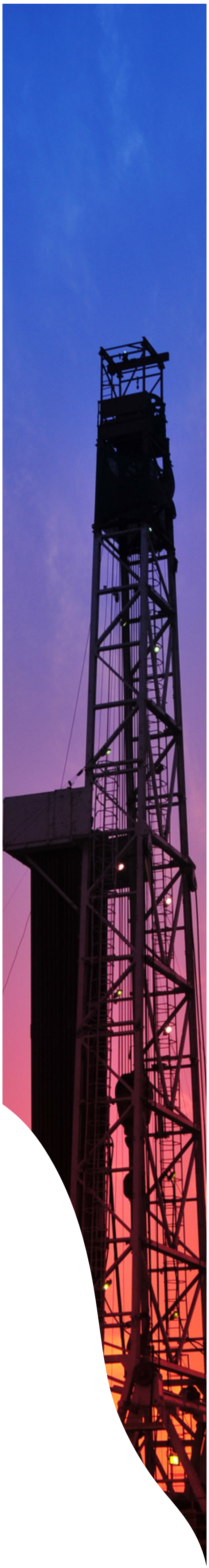
The global energy transition implies shifting away from traditional energy sources like coal to renewables. But this transition does not mean the end of the use of mineral resources that are actively utilised in the production of power grids, cables, electric vehicles, etc. These growing production volumes boost massive demand for copper, lithium, cobalt, and manganese. For example, an electric car requires more copper than a traditional one. Copper is key also in onshore and offshore wind as well as in solar panels and batteries. The UN Sustainable Development Goal #7 "Affordable and clean energy" may strengthen this demand even more. Overall, this growing demand may trigger the start of the commodities supercycle that in turn will create a new market niche and opportunity for coal miners, who can benefit from their assets, knowledge, and experience with a shift to highly demanded mineral resources.

Multi-Currency Oil Purchase Agreements (Petro-Dollar Decline)

Loss of monopoly of oil being sold in USD, the decline of the petro-dollar. Currently, agreements are in place between Russia-India, and Russia-Saudi, and anticipation of China-Saudi direct purchase agreements using native currencies. As Saudi Arabia positions itself to be a regional & global leader in infrastructure and technology. Recent Chinese Saudi relations could yield a major shift in global economics as Russia, China, and Saudi seem to align along common goals. The US has responded atypically by i) pushing its internal production and ii) increasing its extraction of oil in Venezuela. Economic sanctions on Saudi would speed up the transition from the petrodollar so the typical US policies on dealing with wayward nations won't work.

Step Change in Energy Storage

Limitations in energy storage result in significant losses when excess energy is produced, we've observed a significant increase in the capacity and reduction in the size of EV Cells over the last five years, and expect to see further advancement in this space, this could significantly be curtailed by the regionalisation occurring due to the current geopolitical landscape where raw materials, knowledge, expertise, and technology could be the limiting factors in the advancement of all technologies in the energy space. As an example, this can be seen in the curtailment of Chinese access to advanced microchips from Dutch microchip machine manufacturer, ASML. This has significant implications for any advanced energy-related technologies coming out of China, that require the most advanced microchips.



Photovoltaic System Efficiency

Over the last five years, we've observed a nominal increase in PV system efficiency, traditional PV cells average 20-27% efficiency while multijunction PV cells have ~40% efficiency. Going forward, due to the existing energy demands pressure and climate pressures, solar efficiency could exceed 50%. Such a development could have a significant impact on the energy mix in developed and developing nations. However, resource conflicts over rare earth metals, uranium, lithium, and other materials required for energy production may curtail any advancements in this area.

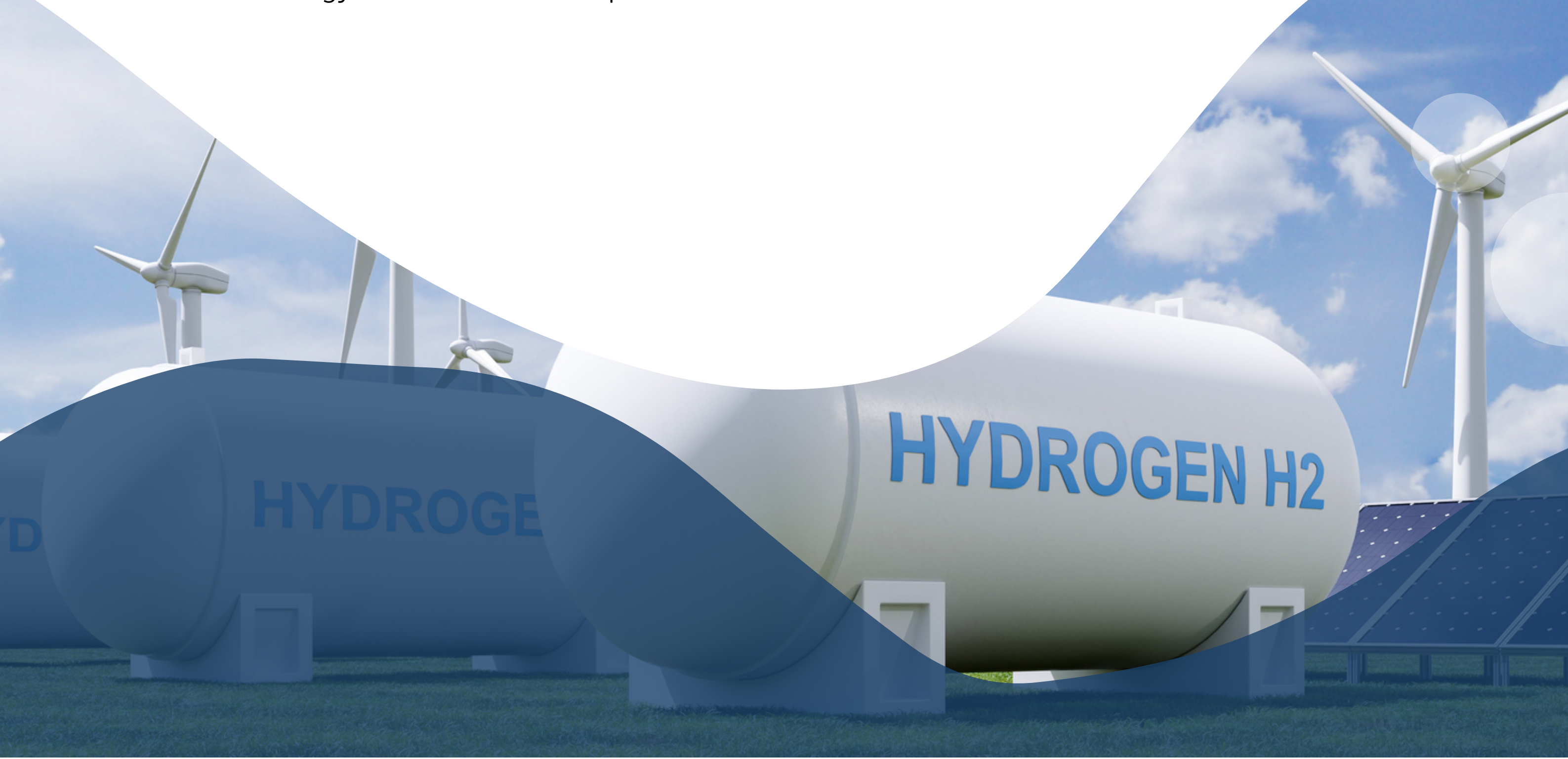
Accelerated Development of Hydrogen Fuel Cell Technologies

The development of hydrogen fuel cell technologies has not only been driven by advanced research and technology companies alone. Due to the simplicity of the technology and the ease of access to the basic components (water, electricity, anodes, and cathodes), the technology is analogous to open-source software. The observed exponential development in open-source software (apps, etc) and its ubiquity, is the same kind of development expected to be seen for the development of hydrogen fuel cells / combined hydrogen and fuel systems. This is already the case with numerous YouTubers already demonstrating homemade systems that can be replicated by anyone, anywhere. 2023 will see exponential growth of hydrogen fuel systems.

Bitcoin and Energy

Unique emerging opportunities in the energy sector are being introduced by the Bitcoin protocol's proof of work consensus mechanism. ERCOT, the State of Texas' energy regulator, has demonstrated these benefits to the environment and the efficiency of the grid by using Bitcoin miners to load balance their extensive renewable energy network. Other areas being investigated include methane flare reduction, enabling rapid deployment of renewable resources, energy grid management, and upscaling Ocean Thermal Energy Conversion.

Join the Energy & Renewables Group here.



Environmental & Social Governance (ESG) Group

Anita Punwani CFIRM, Alex Hindson CFIRM, Abdul Mohib CMIRM and Harriet Milsted on behalf of the ESG Group.

In 2023, the nature of the volatility, uncertainty, complexity, and ambiguity we predicted would describe 2022 will continue to present organisations across all sectors with challenges. Our views are that the following risks need to be considered by risk professionals seeking to support good governance during 2023:

Real-Time Public Scrutiny

The court of public opinion in the form of the media and 'grandstand public experts' will continue to scrutinise in real-time how organisations handle the various crises they face. In this context, risk professionals need to help identify and assess threats as well as put in place mitigation and crisis management plans. Trust and reputation will continue to be important assets to be protected in every organisation, notably when action or behaviour falls short of expectations; experience again and again shows that how you react under pressure is a predictor of an organisation thriving or failing. The greatest risk will be posed to those organisations incapable of organisational change. Protecting assets will not only take more effective risk management – it will also take meaningful strategic action toward Environmental & Social Governance.

Transparency and Accountability

While legal, regulatory, and fiduciary responsibilities will continue to be important, many organisations are starting to be more transparent about meaningful accountability through proactive action. The pressure for greater transparency and accountability from an array of different sets of stakeholders will continue to influence the need to address risks related to modern slavery, inequality, diversity, inclusion, safeguarding, security, welfare, and sustainability. In relation to the risks associated with the current topic of organisations involved in 'Greenwashing', risk professionals have a role to play in addressing this risk by looking at the reporting of risks - including in relation to exposure to litigation from over or under-reporting - and help organisations define the risk appetite for such issues, then help them to put in place the controls to ensure reporting is timely, accurate and complete.

Changes in Risk Reporting

As part of meeting a wide range of stakeholder requirements, the greatest risk will be posed to those organisations which fail to demonstrate that they are being governed ethically and sustainably. The risk professional will need to lead the development of conventional risk reporting into more mature processes. There will be a shift in emphasis from measuring the impact of risks in financial terms to considering reputational impacts in the context of stakeholder expectations and the real-time public scrutiny and transparency pressures described above. With the nature of legislative change on the way, together with the scale of organisational change required to meaningfully work on these matters, it makes sense to be ahead of the curve in ESG.

Role of the Risk Professional

ERM is a field now covered by several professional bodies across the world. There is a risk that the role of the risk professional may be diluted if organisations fail to recognise this profession to be one which needs to have its practitioners formally educated in the fields necessary to understand the changing nature of the context described and the complexity involved. The risk professional will be able to navigate risk management decisions and risk appetite choices as outlined above if they are (a) armed with the knowledge, experience, and confidence to do so, and (b) they are at the table and being listened to.

> "The risk professional will be able to navigate risk management decisions and risk appetite choices if they are armed with the knowledge, experience, and confidence to do so, and they are at the table and being listened to."

Environmental & Social Governance

'ESG' was in the news even more in 2022 than ever before, or rather the letters 'E, S & G' were the topic of discussion, however, as part of these conversations, sustainability was not always aligned with organisational purpose and strategy; in some ways 'ES & G' risks becoming a compliance tick-box exercise. Further, 'ES & G' may become a strategic risk for organisations failing to recognise they must fundamentally change, for the reasons set out, if they are not only to survive but thrive in the current global context.

Environmental & Social Governance performance on the other hand, however, will become a 'golden thread' running through the achievement of the strategic objectives/priorities' of 'ESG-intelligent' organisations - it will be an enabler in relation to opportunity management.

The contrasting behaviour between 'purpose-driven' versus 'profit-driven' organisations will continue to form part of the IRM Environmental & Social Governance Group led conversation and communication with professionals operating in the private, not-for-profit, and public sectors.

Join the ESG Group here.

ERM in Insurance Group

Group Co-Chairs: Isaac Alfon and Justin Elks

Five Risk Themes for Insurers to Respond to During 2023

While insurers have been thinking about sustainability for some time, 2023 is the year to turn ambitions of making good on net-zero commitments and integrating sustainability into actions. The need to respond to the evolving economic and social environment will be a high priority on businesses agendas and the devil will be in the detail of reforms to Solvency II in the UK and EU.

Consumer focus will present both challenges and opportunities, in whether to simply meet regulatory requirements or go beyond them to make businesses more customer-centric.

Success in addressing these themes has the potential to impact positively on the relationship between insurers and their customers – creating opportunities in what is a business about trust and making good on promises and commitments.

Making Good on Net-Zero Commitments

Like many sectors, insurers have been making net-zero commitments. 2023 will be the year where these commitments will need to be evidenced by action and progress in delivering transition plans, with an increasing expectation that science-based targets will be set. Not only will there be an expectation to 'come good' on the promises, but there will be additional scrutiny to how this has been done and how robust the processes are that support these disclosures. Risk functions have a key role to play in ensuring ambition and organisational risks are well-balanced.

Integrating Sustainability into Underwriting

Underlying the pressure to deliver on net-zero commitments is the need for insurers to focus on their core business activity of underwriting, when pointing to their climate change and wider sustainability credentials. It will no longer be sufficient to integrate ESG into their business operations and investment activity, given that operations are unlikely to be the major component of their emissions. Each insurer will need to take a view on their risk appetite for disclosure, given that much of the underlying data is heavily dependent on assumptions and extrapolations.

Not to disclose opens up concerns over lack of transparency, while at the other extreme, lack of caution could lead to accusations of greenwashing. Any stance will need careful calibration and potentially revisiting over time. It may start to become increasingly obvious which companies are 'disclosure-led' and which are truly 'purpose-led'.

Economic and Social Change Challenges

Inflation is a huge challenge. In the case of insurers all aspects of the business model and balance sheet are affected. This can make pricing the product and estimating reserves extremely challenging, particularly if going through a hard-to-soft market cycle. Investment performance volatility and unrealised losses have been a feature of 2022 and are likely to continue as central banks seek to curb inflationary drivers.

Models underpin these considerations and model risk will become increasingly important. Governance and approaches will need to be enhanced to ensure that these challenges are adequately reflected.

If that was not sufficient, inflation also impacts the cost of doing business through wage inflation. There is a definite war for talent for highly skilled roles and the change in balance of power between employer and employee is creating the need for significant adjustment.

We now live in a very different economic and social world - given the low inflationary environment, organisational risk management approaches and 'muscle memory' in managing these areas needs to be built and enhanced in many organisations.

Solvency 2 Reform and the UK Stance

The European Union is busy consulting on changes to the Solvency II regulations which may include some mechanisms for making it easier for European insurers to invest in ESG-related infrastructure projects and hence deliver on their climate promises. With multiple changes in the UK government, it may be risky to predict where the UK's review may end, but we should expect the current conservative government to look for a Brexit dividend in lightening the regulatory burden.

However, the devil is in the detail, and regulators have a reputation for being cautious – the matching adjustment, fundamental spreads, and model assumptions are likely to be key battlegrounds, and regulatory engagement on detailed proposals will likely keep actuaries and those of a technical bent occupied for some time.

Balancing this desire for enhanced 'freedom' will be industry lobbying to ensure that Solvency II equivalence is not lost, which would be a further blow to ensuring London remains a major re/insurance centre. There is also the challenge for insurers that any change to UK Solvency rules, even one resulting in simplification, will require changes to processes and approaches – for example, while simplified reporting would be welcomed changing systems would come at a cost.

Consumer Duty, Operational Resilience, and Shifting Compliance Standards

The Financial Conduct Authority's new regulatory framework for Consumer Duty tilts the table further in the favour of consumers and small-medium enterprises. As often is the case the difference between the headline announcement of 'principles-based regulation' and the detailed guidance that follows has the potential to be extremely challenging for risk and compliance professionals in the financial sector. We have observed widespread differences in reactions from insurers – from companies anticipating minor changes to those considering wholesale reviews of their practices. It seems distinctly odd that a new set of rules can provoke such different responses from seemingly similar organisations – particularly when they build on previous initiatives. In the area of operational resilience, there have also been different approaches by firms – some have continued to build and develop their operating models to build operational resilience, while others have downed tools after having completed a compliance-focused product.

We think those who are successful in both areas won't look at Consumer Duty and operational resilience in isolation as compliance tick box exercises but will instead embrace the spirit and re-think how they run their operations and compliance. Hopefully, this re-think will give way to an environment where compliance is more 'by design' and less 'by force' within insurers, resulting in a more adaptable business model and approach. Perhaps this will enable enhanced customer centricity and social purpose – helping to build increasing trust between customers and the industry. If so, this could potentially be the most important area of risk consideration creating opportunities for the sector in some time.

Join the ERM in Insurance Group here.

Infrastructure Group

Contributions by the Infrastructure Group Committee

Our key areas of focus for 2023 are quite varied but all equally pertinent.

Energy Market Instability

As Europe looks to cut ties with Russia for gas and refined oil product imports, there's a looming threat of a global fuel crisis. Although Europe appears to have enough gas reserves to survive the winter of 2022/23, the demand for oil could keep driving energy prices up as other oil exporters fail to meet target outputs or seek to reduce export volume. The primary impact of this in our sector is seeing increased costs for capital delivery, as well as a higher threat of supplier insolvency. Tied to this is the ongoing pressure of inflation, with much of 2022's impact attributed to rising energy prices.

The energy crisis of 2022 does pose an opportunity for the UK's infrastructure sectors, though, as it seeks to prioritise bringing new energy streams online – expanding domestic supplies to keep costs down. The government released its Energy-Security Strategy in 2022, with 2023 being the year everything gets going. This strategy sets out the plan for the construction of new energy infrastructure in the UK over the next three decades, with projects planned for new oil and gas fields, wind farms and nuclear new build.

Political / Macroeconomic / Supply Chain Instability

Following the COVID pandemic, we've seen war in Ukraine, floods in Pakistan, wildfires in Australia and political instability in Taiwan; beyond the global material shortages, these events have shown that global supply chain networks remain fragile. Further deterioration in East-West relationships have the potential to further disrupt existing supply chain networks. This is important in infrastructure, where many specialist components (for example microchips) are reliant on a well-functioning supply chain in the other parts of the world. Figures from the Department for Business, Energy and Industrial Strategy found that a typical basket of construction products rose in price in the last quarter of 2022. Access to building materials and labour (skills shortage) – as well as access to credit – are issues that could prevail into 2023. That being said, big infrastructure projects already in progress, such as HS2 and Hinkley Point C, help to maintain activity levels in the sector. We're also seeing a move in some sectors to long-term delivery partnerships that span years, and in some cases decades; this approach brings confidence to the supply chain particularly when it comes to investing in bringing onboard the next generation of professionals and building capabilities in-house.

Recession & Reduced Capital Investment

The economic environment in the UK in 2023 is likely to mean there will be a greater drive towards improving productivity on infrastructure projects, through boosting efficiencies and adopting the use of new technology. New projects may be hindered by construction cost inflation, though thoughts at the end of 2022 are that inflation may flatten through 2023.

Of all construction, infrastructure spend is likely to be the least affected however, local authorities are expected to divert infrastructure project spend to cover other rising costs. The Facilities Management Journal reports that infrastructure output is forecast to rise by 1.6 percent in 2023, driven by larger projects already underway such as HS2, Hinkley Point C, and Thames Tideway despite the cost overruns and delays.

Industry professionals see huge potential for joined-up, national thinking around digital and data system improvement, including calls for a national digitalisation strategy.

Expect to see more efficiencies stemming from the adoption of AI and machine learning across the sector, as well as the potential for new ways of working through the government's 'Levelling Up' agenda.

The UK Autumn Statement 2022 provided guidance and reassurance to the infrastructure sector that investment and support will continue – including confirmation plans for the Sizewell C new nuclear power station, HS2, Northern Powerhouse Rail, and East West Rail projects. Indeed, the Chancellor committed to more than £600bn of national infrastructure investment over the next five years, including gigabit broadband rollout and a new hospitals programme, as well as protecting a £20bn research and development fund.

Driving Sustainability and Resilience in Infrastructure

There have been several events over the last 12 months that have served as potent reminders of the need for sustainable, resilient infrastructure: heatwaves and record high temperatures across Europe, hurricanes in the US, floods in Pakistan coupled with rising energy prices. We need to increase the visibility of the threat to services such as roads, rail, pipe and cable networks, bridges and tunnels and the consequences of failing to improve infrastructure resilience and protecting critical infrastructure.

The UK government is expected to publish a plan to support the actions needed in response to the UK Climate Change Risk Assessment, with resilience forming an important part of public investment decisions. As well as this being a consideration for new construction, there will be a focus on making existing infrastructure more resilient. This theme is coupled with the continued progression towards decarbonisation across the industry and more focus on continuing better socio-economic outcomes from infrastructure work, including ensuring long-term local employment where projects are undertaken and stronger linkages to the ecological system (which includes greater use of Nature-based Solutions).

We expect to see an emphasis on revised design and building standards, environmentally friendly construction practices and new ways of reducing the environmental impact of construction projects, including focusing on embodied and operational carbon.

Cyber Security

A volatile global political landscape can increase the threat of bad actors (including state-sponsored) which could put critical infrastructure at risk from the exposure of a cyber vulnerability. Experts are expecting critical infrastructure to remain a prime target for cyber adversaries through 2023.

Weaknesses exist through the changes brought by increasing ecosystem complexity (driven by digital transformation, remote working, non-secure collaborative tools, etc.). Supply chain vulnerability is becoming increasingly relevant, including the infamous SolarWinds attack which shows that no sector or business is immune.

Interestingly, experts are predicting that attacks are likely to move away from being focused on profit and more on stealing data.

For those businesses seeking ways to limit their exposure, to our top three areas of focus, we've prepared a couple of suggestions:

Re-visit existing contracts, in particular how the current contract deals with some of these 'force majeure' risks. In particular, reconsider how the impact of these risks is apportioned across the parties and options for remedies; after all, it is in neither party's interest for the project to fail because one of the parties did not have the capability to manage some of these events.

Review the procurement strategies for future work, where 'lump sum' contract forms may not represent best value for money as the supply chain may over-price many of these risks, and a contract form based on 'target price' or 'cost plus' may be more appropriate.

Review existing procurement plans and consider pulling some purchases forward to build in some contingency. Whilst this may mean paying an upfront premium during the current period of escalated prices, it may help to protect the delivery dates if there are further disruptive events in the future.

Join the Infrastructure Group here.

Nuclear Group

By outgoing Chair, Kathryn McCloghrie, CFIRM

Top five to watch:

1. Funding from the government and other investors
2. Access to skilled resources
3. Supply chain scarcity and lead times
4. Climate resilience
5. Permissioning / Regulatory framework

It is an interesting time for the nuclear industry, with the UK government decision to back Sizewell C and increasing interest in sustainable power including Small Modular Reactors (SMRs), fusion and advanced nuclear technologies. The combined impact of climate change, net-zero and energy security drivers has created an opportunity for nuclear growth not seen for decades. Building both physical assets and social capital is key to realising the opportunities.

Progress on the decommissioning legacy continues, particularly influenced by the progression of the UK AGR fleet into defueling and preparations for decommissioning. An increasing number of decommissioning sites will create potential for synergies as well as competing priorities to be managed.

All these developments increase the demand for nuclear experience and specialist skills, at a time when we see increased attrition across the sector linked to periods of significant graduate recruitment in our nuclear history. Two key impacts are likely to result, increased cost and time to deliver work with the knock-on consequence of undermining confidence, and loss of knowledge and experience which directly increases decommissioning challenges and indirectly contributes to safety and operational risks.

A linked risk is the attractiveness of the nuclear industry to talent. Increasingly, people entering the workforce are looking to avoid working for 'bad businesses'. Alignment of nuclear within the green finance frameworks is just the first hurdle in developing and maintaining a positive value proposition.

Suppliers are also looking to align their business with ethical or moral frameworks, making decisions about areas of the market they will or will not participate in. Proactive development of academies and apprenticeships for scarce and specialist skills is a vital mitigation as well as an opportunity for sustainable social value.

> "The combined impact of climate change, net-zero and energy security drivers has created an opportunity for nuclear growth not seen for decades."

The long history of nuclear sites undertaking proactive and supportive work for local communities needs to continue to develop into partnerships and aligned investment in sustainable socio-economic benefit. There is an opportunity to be more strategic in how we collaborate to create long-term benefits for communities.

Nuclear also suffers from some more generic risks, most notable at present scarcity, lead times and costs of materials and commodities. Driven by COVID related disruption, Russia-Ukraine conflict and challenges with Chinese supplies, this risk is not going away.

Climate resilience is an increasing focus for nuclear sites. Learning after the events from Fukushima led to significant investment in equipment and capabilities in preparation for a range of significant events, primarily sustained loss of power situations. Modelling has begun on scenarios for both acute (e.g., flooding) and chronic impacts (e.g., more days lost to high winds or hot temperatures). The challenge for nuclear is similar to others, but starker. Nuclear sites must develop resilience arrangements for the extreme ends of the range of uncertainty.

The legacy management of the sites also continues for many decades. There is very little guidance on the potential climate impact for the next ten years, and nuclear sites need to prepare for potential scenarios in 2100. There will be some challenging decisions around how much we invest in resilience for unlikely scenarios to the detriment of immediate priorities and business change.

Inflation and funding, either from government or private investors, will continue to be a risk. The large values and timescales for nuclear increase the influence of delivery milestones on investor confidence. Improvements to forecasting and predictability will be important mitigation.

Permission is also a key risk for the next few years, whether planning, regulatory or investment approvals. Effective management of investors, regulators, communities, and other stakeholders. The siting process for the Geological Disposal Facility is a good example of the risks associated with stakeholder support and confidence. In summary, there continue to be threats but this is also a time of opportunity for the nuclear industry if we act quickly and effectively to realise the opportunities.

Join the Nuclear Group here.

Non-Executive Directors and Chief Risk Officers

Socrates Coudounaris CFIRM, Non-Executives Directors and Chief Risk Officers Chair

Boards, Risk Committees and Chief Risk Officers are focusing on the following top five risk areas:

Economic Volatility

High inflation and low economic growth is now certain for the foreseeable future. The important question is, when will inflation start to retreat and how will it behave in 2023 and beyond.

There is also the question for the UK, when recession will hit and how bad it might be. Boards are focusing on rising expenses (increased salary costs to keep up with inflation).

On the positive note, such an environment has led to higher yields which should last for a sustained period, delivering higher investment returns.

Societal change (people agenda)

Coming out of the pandemic into a highly volatile inflationary period will undoubtedly impact people. Boards and senior management have elevated the people agenda throughout the pandemic putting metal health and wellbeing at the forefront of their agendas.

Discussions at risk committees focus on having the appropriate skillset to fulfil current and future organisational needs.

> Boards and senior management have elevated the people agenda throughout the pandemic putting metal health and wellbeing at the forefront of their agendas.

Geopolitical Volatility

Entering 2023 continues to see geopolitical risk as the new norm. Countries, businesses, and consumers are adjusting to what it means to them locally.

Technological Disruption

Cyber security and disruption to important or critical services and products continues to be in the top five risk on Risk Committees agendas.

ESG

Boards are actively involved in the direction of travel, and the commitments being made regarding their responsibilities around ESG.

Join the Non-Executive Directors and Chief Risk Officers Group here.

IRM Global Ambassador's view

Paul A J May, CFIRM, former IRM Board Director, former member of the Climate Change Group

We are living and working in an increasingly uncertain period with many historical views and solutions being challenged.

Selecting the five “top risks” for 2023 predictions has not been straight forward. I have had to leave out risks such as AI, Demographics, Cyber, Terrorism and Inflation, and have chosen:

1. Upside Opportunities
2. Glass Cladding
3. Concrete
4. Supply Chain
5. Corporate Governance.

Upside Opportunities

Risk management is often thought of as preparing for downsides. Creating responses to the upside risk can show the value that the risk function can bring to an organisation and its stakeholders.

There will be greater focus on identifying and preparing tactics to respond to unexpected events that open new opportunities for organisations.

Such responses may well require increased funding and changes to personnel, placing stress on unprepared organisations.

Glass Cladding

Considerable attention has rightfully been given to the flammability of external cladding with remedial measures and compensation in progress.

The use of large panes of glass for external cladding, especially to high-rise buildings, will receive greater scrutiny. There have been incidences of individual panes coming loose and falling to the pavement below.

Access issues and fire spread risk will receive increased scrutiny and potentially affect insurability, life-span and the value of the building, especially for residential leasehold apartments.

Concrete

As the third largest producer of man-made CO_2, concrete is a major contributor to climate change. The industry and its insurers may well be targeted and disrupted in ways similar to those that have been deployed against fossil fuel industries, and their insurers.

Supply Chain

The resilience and security of cross-border supply chains will receive increasing attention.
War, sanctions, and energy costs plus climate harm and nationalistic priorities are generating a cauldron of issues placing supply chain security at risk.

Production costs and re-locations will reduce profitability of many businesses.

Corporate Governance

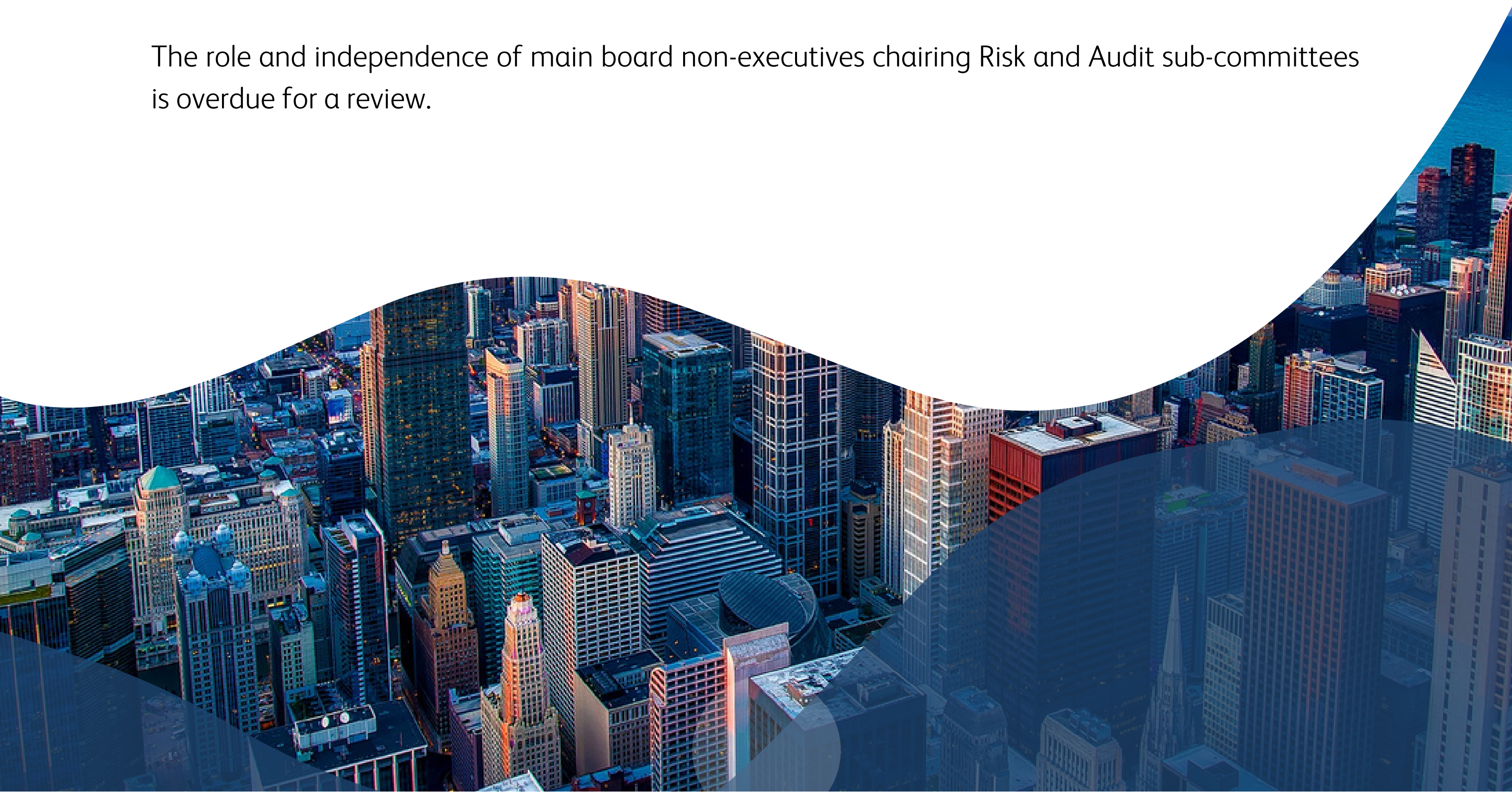
The risks presented to an organisation by the actions (and inactions) of individual directors and the Board will be increasingly analysed by external auditors and D & O insurers.

Although the Board is regarded as being responsible for holding management accountable, the current risk management frameworks leave the oversight of Governance Risk in the hands of those that are governing.

Questioning and challenging the main board and directors is not necessarily a career-enhancing prospect for those employed within Risk Management Roles.

The need for a Chief Risk Officer with a remit to review Governance Risk in conjunction with the external auditors is increasing.

The role and independence of main board non-executives chairing Risk and Audit sub-committees is overdue for a review.



IRM Regional Groups & IOR Chapters

Global Perspective

Hong Kong

Dominic Wu, Chair, Hong Kong Chapter

Inability to Hire and Retain the Right Talents due to a Mismatch of Skills Set

With high staff attrition rate, which is now at a historical high-end range due to the change of employee preference in the post COVID period and the social circumstances, organisations find it more difficult to hire and retain staff. Especially for those highly experienced and technical staff.

There is also an increasing skills mismatch between conventional employees, and job requirements due to technology upgrades and changes of market requirements.

Market Volatility Leading to Increasing Human and System Error

The big swing of market movement during a brief period of time has put pressure on the transaction volume which could increase the risk of human error and a malfunction of the system including both hardware and software.

Higher volatility means higher risk which rings alarm bells as most companies have undergone severe cost cutting, which trims down the level of resources and reduces the layers of controls that have weakened the capability to respond to change of market situations.

Geo-political Risk and Collapse of Critical Vendors Leading to Operational Resilience Concern

Geo-political tension is highly unpredictable which could cause both financial and non-financial exposure to the companies and the supply chain. Organisations might not create the playbook to deal with plausible and critical scenarios.

Also, organisations might not have adequate oversight and backup arrangements for those critical vendors who could fail suddenly due to its own or fourth parties.

This is vital for certain sectors which are monopolised by a few firms which makes it hard to find substitutes.

Discovery of Massive Investment Fraud during Recession Period

Market tail events like rogue trading, Ponzi scheme, crypto fraud and other large investment managers' fraud are more apparent during the recession period as the fraudsters could not cover the fraud anymore. Also, investors could start more litigation against the players of the trade life cycle.

The effect could far exceed our imagination and could cause a contagion effect along the supply chain that could lead to undesirable outcomes such as redemption of monies from investors,' market liquidity dry-up and big reputational impact.

Inadequacy of Risk Management Frameworks to Cope with New Emerging Risks such as Technology Development, Tightening of ESG Regulation and Customer Preferences Changing

Risks should be forward looking to support business to manage both the known and unknown risks. Deployment of new technologies has brought new types of risks which are unknown and could only be tackled by trial and error.

This is especially valid as there is a tendency for business and technology to adopt an agile approach in business and system development.

It requires risk management to be performed in a very dynamic environment which is hard to be attained and benchmarked.

Regulators are pushing hard on ESG regulation and there is increasing requirement from the market and the society on the ESG standard of the organisation. ESG is becoming a core element of counterparty due diligence and criteria of employees to find jobs.

The risk impact might not be fully assessed. Also, demographic change has shifted the customer preference which could change the business model and lead to more customer complaints.

Organisations might not be able to understand the change and assess the associated risks. This could be fatal if the risks are materialised.

Join the Hong Kong Chapter here.

India

Sunder Natarajan, CFIRM, Deputy Chair, Western India

An Inside View

A monk who had attained self-actualisation was once asked on the kind of books he reads to enhance his knowledge and wisdom. He stated that the biggest insights he gets are from within. While the outside world and the challenges it brings are immense, they are uncontrollable and the inside world in infinite but is controllable. This epiphany is true to risks in an organization as well. While there will be a plethora of uncontrollable external risks, there are a variety of internal risks which we may have a better degree of control over.

Blurring of Functions

With technology making a big difference in the way we work; role definitions are undergoing a change. A marketing professional can no longer be content with the 4 Ps and needs to be digitally savvy and make use of data analytics, AI & ML to cater to the hyper personalisation demands. An audit professional can no longer be content with providing assurance to the board using a traditional transactional audit using samples and is expected to provide insights into the adequacy of the process design. If people adapt to such rapid changes, they can stay ahead of the curve. Else, they may plateau setting off a downward spiral in the business they are managing.

Bound by the Next Quarter

There was a time when annual reports would be one of the most important tools by analysts to offer an advisory to Buy/Sell/Hold apart from the macro-economic factors. Instant dissemination of information through social mediums has crashed this outlook to a quarter or lesser. Short term outlook can impact the vision and longevity of companies leading to dilution of customer focus.

Fraud

Apart from being exposed to fraud across the supply chain, employee fraud is likely to go up. The rapid increase in remote work environments coupled with the dilution of controls brought to facilitate the same has created several gaps which are an opportunity for a fraudster.

Governance

An environment that is laced with war, pandemics, and recession is clearly one which makes good governance difficult. “Vinasha Kale Vipareetha Buddhi” is a Sanskrit phrase attributed in the Indian mythological texts to strange behaviour in testing times. Conversely, this also means that those who are resilient will endure and overcome difficult times.

Leadership

The great resignation wave hit the technology and related sectors in India badly and this put a spanner in the works for creating leaders for tomorrow. On the flip side, those who are gravitating to start-up’s or starting on their own will find themselves short on leadership experience.

People, Process & Technology

Improvements may sound cliched. Staying grounded to first principles, while giving importance to innovation and adaption to rapid changes, will help mitigate internal risks in the twenty third year of the century.

India Risks 2023: An External Perspective

Jitender Arora, CFIRM, Deputy Chair, Southern India

The post-pandemic world has changed dramatically with the way we do business, engage with our customers and work with our employees. During 2022, we had a series of events such as Russian invasion of Ukraine, extreme weather conditions, the re-emergence of the pandemic, an increase in interest rates, and high inflation rates, which have further complicated the already complex risk landscape. 2023 is not going to be very different and here are some of the risks that will potentially grab the headlines from India.

Cyber Attacks

One of the few positives that came out of the Pandemic crisis was the accelerated adaption of digital technologies and digitization. While this has led to better efficiencies, superior customer experience, and enhanced operational resiliency, it has also meant a potentially riskier operating environment for businesses as cyber-attacks and data breach incidents are becoming more frequent.

Organisations should focus on assessing digital risks before embarking on digitisation, invest in implementing a secure IT infrastructure, develop enhanced security and monitoring mechanisms to deal with potential cyber-attacks and focus on creating awareness around cyber-attacks and phishing in their organisations

Data Protection and Privacy

Many big organisations have moved towards a hybrid working environment where the employees are splitting their time between the office and home office. Efforts have been made to ensure that while working from home, employees are using secured networks and devices to connect to the office network remotely and ensuring that privacy standards are being adhered to, but in reality, this is one area that is still vulnerable with young people, who in many cases operate out of shared accommodation, while working from home, combined with low level of awareness around data security and privacy, could lead to some serious potential data protection and privacy risks and brand damage.

Organisations are working with their employees to provide them with secured devices to connect to the company's network, rolling out security patches more frequently, implementing Data Loss Prevention (DLP) tools, and continued awareness around these areas.

Human Risk

While work from home (WFH) and hybrid working environment has its advantages including having a workforce that is flexible and productive, it also leads to a situation where, the employees are not fully connected to and engaged with organisation's culture including risk excellence culture. There may also be instances where employees are feeling stressed and burnout due to factors such as limited interactions with their colleagues. Companies are working on ensuring that hybrid working is embraced fully, focusing on encouraging employee interaction and engagement including taking care of the mental wellness of the employees and elevating the risk excellence culture through awareness sessions and training.

"Companies are working on ensuring that hybrid working is embraced fully, focusing on encouraging employee interaction and engagement including taking care of mental wellness."

Climate Risk

As more and more cities are facing unusual climate changes and extreme weather conditions, environmental factors are coming up at the front and centre of various risk discussions among Indian corporates. Growing awareness about climate changes and its impact, focus on ESG, post pandemic, combined with the increased frequency of local events driven by these changes like higher frequency of cyclones, extremely hot weather, flash flood in cities, ice in Bangalore, Chennai and Pune have raised the awareness around this important topic.

Disruptive Technology

India is coming of age with disruption from new-age technologies and start-ups. A host of new-age companies and start-ups in many industries including finance, education, medical and health care, E-commerce, and other sectors are agile and using innovative technology and digitisation to provide superior services to customers, operate more efficiently and use technology to be more competitive in the marketplace and disrupt the dominance of established players.

Established players need to be aware of the technological advancements happening around them and how they can quickly adapt these innovations to maintain their competitiveness.

Geo-Political Issues

Constant tension and conflict with neighbouring countries, where some of which are going through major debt crises, is another factor that could pose a big risk, especially for the companies that may get directly or indirectly impacted by these events. Russia - Ukraine conflict has shown us that geopolitical tensions could erupt anytime and can exist for a prolonged period of time causing major disruption.

In summary, the increasingly complex and ever-changing world that we are living in redefining our risk landscape and reshaping the way we think about risks. Collin's Dictionary's word of the year "permacrisis" succinctly captures the world that we are living in. It indicates "an extended period of instability and insecurity, especially one resulting from a series of catastrophic events". Risk Managers will have to operate out of their skins to manage the complex risk landscape that will unveil in 2023 and beyond.

Join the India Group here.

Iraq

Hisham Khalid Abbas SIRM, Chair, Iraq Group

Cyber Security Risks

The dangers of cybersecurity in Iraq are considered one of the most important risks that must be addressed through awareness first, and the implementation of a set of preventive measures, and that is because of the rapid development in state institutions and the trend towards electronic governments.

Continuous intrusions in official and unofficial websites have led to the lack of confidence of external international parties in these institutions, and the failure to change the current electronic and technological systems or the inability to change due to lack of awareness has begun to affect all public and private sectors.

Fraud Risk

The risks of fraud in the Iraqi environment are many due to lack of awareness, whether financial or technological, and fraud cases abound, especially electronic. Electronic and non-electronic fraud operations continued inside the country from individuals and institutions, and the most important reason for the continuation of these operations is the lack of clear laws that explain and deter these matters, as well as the lack of awareness of citizens and some employees in institutions and the lack of electronic detection systems, which has a significant impact on the spread of financial and electronic fraud operations within public and private institutions.

Exchange Rate Risk

The decline in the value of the Iraqi dinar directly affected the economic movement, and living inside Iraq and was reflected in those with limited incomes and a deficit in the trade movement, which the Iraqi market and large investors depend on more than any other sector.

The fluctuation of the exchange rate and the use of the black market in exchanging foreign currency, especially the US dollar, because the dollar is considered a basic currency, especially in trade and in daily operations, whether commercial or otherwise, and because the government budget depends mainly on oil exports, and most of its revenues are controlled by this.

Changing the exchange rate will have a direct impact on all restrictions and sectors, especially financial ones, and because the cash currency auction is considered the main source of profit for banks and local exchange companies, the manipulation, so to speak, of the basic exchange rate can destroy giant institutions that rely primarily on to sell and trade the dollar in official or unofficial forms.

Reputational Risk

Because of the security and political events and the economic instability of the market, it negatively affected the reputation of the country and affected the reputation of local institutions, and therefore had a significant impact on the partial disruption of the economy and the failure to enter into any large projects for fear of the expected fluctuations, and reputational risk is considered one of the main elements in the continuity of the institution and the development of local and international relations.

Credit Risk

The aforementioned risks, and the cause of the economic and financial recession of the country and local institutions, had a direct impact on borrowers, investors and financiers, and one of the most prominent risks that banking financial institutions are exposed to is the risk of non-payment that the sector has been suffering from for more than seven years, and the failure to properly develop intangible credit policies, procedures and analysis processes had a significant impact on credits, whether monetary or contractual.

Join the Iraq Group here.

South Africa

Zanele Makhubu, CFIRM, South Africa Group Chair

Future Disasters – Floods, Drought, and Global Warming Will Continue in 2023

There is a lack of effective business continuity plans and disaster management plans to manage global future disasters. There is inadequate planning across both the public sector and private sector to coordinate efforts in such a crisis. There is a need for collaboration to develop an initiative-taking disaster risk reduction management plan agreed upon by all stakeholders from all disciplines including: Regulators, health, business, NGOs, community, civil society groups, labour stakeholders, disaster management, and business continuity. We need to prepare for the worst to achieve the best.

Energy Crisis is Rendering the Country to be More Bankrupt

Load shedding and consistent daily scheduled blackouts are killing businesses, government service delivery, and the economy, with the majority of people losing their jobs and rising unemployment. The South African Economy has taken 20 years back by deepened poverty and inequalities. It will take a momentous task to rehabilitate, rebuild and reconstruct the vibrant economy. It requires all sectors of the economy to collaborate to find a better solution for alternative energy options.

Sustainability

There is a slow pace of investing in sustainability priorities (environment, economy, and society). Unmaintained dilapidated infrastructure also affects the environment (efficient use of resources, access to water, food security, air pollution, hazards management and environment preservation), economy (economic stability, unemployment, deepened poverty) and social (society's livelihood, health, human rights, inequalities). The country should meet the needs of the current generation without compromising the needs of the future generation. There is the need to revisit the UN Sustainable Development Goals.

Technology Risk

The risk of sourcing technological solution leads more organisations and business to be vulnerable to cyber risk cybercrimes. Are we agile enough to deal with the world of technology? Cyber insurance is the new consideration by CIOs, CEOs, and CFOs in the public and private sector. Adaptive Leadership is encouraged to initiate Adaptive Resilience Strategies.

Fraud and Corruption Risk

The risk of slow implementation of consequence management makes it difficult to mitigate such risks.

Join the South Africa Group here.

Turkey

Grant Griffiths, CFIRM, IRM Global Ambassador for Turkey & Region and Deputy Chair of the IRM's Energy & Renewables Group.

- Global recession. The signs are there, it's how global governments respond that will make the difference. Driven by risk to global trade unrest and risks to supply chains. This is a risk just waiting to happen particularly given some of the factors (below). One of the big uncertainties is whether China will blockade Taiwan, a situation which looks more likely than a full-on military engagement with their neighbours. This will place further strain on economies.

- The uncertainty in the Gulf region, notably Iran. Their recent growing ties with Russia will weigh more heavily on risk sentiment going into 2023. We can expect further escalation as speculation grows around Iran's ongoing nuclear efforts and capability, against a backdrop of civil unrest at home. This has the potential risk to significantly tip the scales of geopolitics in a way that could well lead to a much wider regional / international conflict with significant consequences. And with domestic challenges from ongoing protests and the government's response to the protesters, the world will continue to watch Iran to see how far they are prepared to go on the international stage to deflect from events at home. Any thoughts of The Joint Comprehensive Plan of Action (JCPOA) being struck now look dead in the water.

- On a more positive note, the increasing interest in developing risk and resilience capabilities across the Gulf Region are positive steps in advancing the development of both strategies and the required systemic capabilities needed to respond to events. With major programmes such as The Kingdom of Saudi Arabia's Vision 2030 initiative continuing apace, combined with a renewed drive towards hydrocarbons, with the strategy to transform and develop smart economies expect to see increased investments in the region which will also encourage innovation and growth.

- Responses to the energy crisis and inflation require more robust action by governments, regulatory bodies, and businesses to strengthen current vulnerabilities and tackle risks but this won't be easy. Innovation, investment (at a time of stretched economies and the potential for a global recession) will stymie efforts, particularly as people and businesses are looking for financial support in the current times of elevated energy prices.

- Political risks posed by mass migration, much of it facilitated by illicit people trade and smuggling, will remain a challenge. Among the many risks include pressure on social welfare systems, law and order and the potential for organised crime to expand and grow. These risks require a co-ordinated effort by multiple authorities and agencies to address both the causes and the consequences and achieve a level of balance between human rights, international obligations and societal well-being and maintaining the rule of law.

Full Perspective

Finally, we have seen some return to normality when it comes to pandemics but like most things in this uncertain and highly volatile world just as we start to recover from COVID, we now face significant economic concerns such as 40-year high levels of inflation and ongoing highly volatile geopolitical events which are exacerbating existing challenges as well as giving rise to new risks and even more uncertainty.

The headlines are now occupied by political events which have quickly, it seems, overtaken the uncertainty of COVID. The current sets of circumstances are well within the control of humans yet as we all know, politicians and politics are not simple and old alliances are giving way to new partnerships and centres of influence and power.

The old relationships and global order are under threat, globalisation is facing a re-think and the drive towards low carbon economic and net-zero are facing new challenges which put the current environmental agenda at risk.

Looking at Iran and China which have both witnessed large scale recent protest, domestic political agendas represent risks which could well spill-over into the international arena. At the time of writing, China seems to have settled down while the situation in Iran continues.

If there is one industry that has hogged the headlines in 2022, it's energy; energy has proven to be a pivotal topic and sits right at the centre of our current geopolitical, economic, and societal challenges. And as we look forward into 2023 that appears unlikely to change in a hurry.

Trying to forecast which direction energy and commodity prices might go given geopolitical uncertainties and disruption, combined with climate concerns, and relatively rapid changes to the regulatory environment and response to the current energy crisis (for example the fast-tracking of LNG facilities in Europe), is making it more difficult to gain a clear perspective as to how the energy markets, notably oil, gas and by extension, electricity, prices will perform.

These are at the centre of the energy price / inflationary cycle and pose significant ongoing risks to a wide section of businesses and communities.

And there are many more risks in 2023 which will continue from where we left 2022. Cyber, notably malicious attacks will continue to present challenges for everyone from individuals to the world's largest businesses and governments.

Resilience is the big message and many governments as well as businesses around the world have embarked on programmes to develop their risk and resilience capabilities in the face of higher levels of complexity and uncertainty as they look to drive better outcomes through transformation and innovation.

Proactively managing increasingly complex risks is the key to helping tackle many of the challenges we will face in 2023 and beyond and delivering on the outcomes we want to see, rather than trying to deal with outcomes we didn't expect.

United States of America

IRM Honorary Life Member and Global Ambassador Michael Rasmussen

The complexity of business combined with the intricacy and interconnectedness of risk and objectives necessitates that the organization implements a strategic approach to business and operational risk and resilience in 2023.

Gone are the years of simplicity in business operations. Exponential growth and change in risks, regulations, globalization, distributed operations, competitive velocity, technology, and business data encumber organizations of all sizes.

Keeping changes to business strategy, operations, and processes in sync is a significant challenge for boards and executives, as well as management professionals throughout all levels of the business in 2023 and beyond.

The interconnectedness of objectives, risks, resilience, and integrity require 360° contextual awareness of risk and resiliency. Organizations need to see the intricate relationships and impacts of objectives, risks, processes, and controls. It requires holistic visibility and intelligence into risk and resiliency.

The ecosystem of business objectives, uncertainty/risk, and integrity is complex, interconnected, and requires a holistic contextual awareness of the organization – rather than a dissociated collection of risk management processes and departments.

Change in one area has cascading effects that impacts the entire ecosystem.

This interconnectedness of business is driving demand for 360° contextual awareness in the organization's risk management processes in 2023 to reliably achieve objectives, address uncertainty, and act with integrity.

Organizations need to see the intricate intersection of objectives, risks, and boundaries across the business.

Organizations in 2023 are Focusing on the Following Five Areas in Their Risk Management Strategies:

Agility

The last few years global uncertainties, geo-political tensions with a war in Ukraine, and the impact on business operations and supply chains. Organizations are now turning their attention to being agile in risk in 2023. To see what is coming at the organization in the next six months, years, or two years and go through scenarios and prepare the organization for uncertainty to take the best path forward. Risk agility is looking ahead and preparing the organization.

Resilience

This is where many organizations have been focused, but still working on improving. Agility allows us to navigate our environment and see what is coming at us. Resilience is the ability to recover from a risk event and minimize the impact on the organisation. Risk agility and risk resilience are very symbiotic and play off each other, both have become essential to risk management programs in 2023.

Integrity

With a global focus on ESG risk management programs will shift from laying the groundwork for ESG in organization structures and reporting to operationalizing ESG within the organisation. At the end of the day, ESG is about the integrity of the business. What the organization communicates are its values, ethics, and commitments . . . is this being done? Risk management plays a critical role in navigating uncertainty to ensure the integrity of the organization in the era of ESG in 2023.

Accountability

There is a growing focus on board and executive-level accountability in 2022 that will extend and grow in 2023. Accountability regimes have expanded around the world – UK, Ireland, Australia, Hong Kong, Singapore, and now South Africa. There is a growing focus in the USA with the Department of Justice and SEC on greater accountability for risk and compliance. There are US state-level accountability focus on New York and California. Most recently, Uber's former CISO was held personally accountable for a security breach.

Engagement

Risk is not taken and managed in the back-office of risk management. Risk happens throughout the business at all levels of the organization.

This requires that organizations in 2023 focus on risk culture, risk awareness, and proper risk management skills from the front-line up through operational management to executives and the board. Good risk management engages all levels of the organization. It is time for organizations to take another read through the IRM Risk Culture: Resources for Practitioners as they enter 2023.

What is clear, organizations need complete 360° situational awareness and visibility into risks in 2023. Business operates in a world of chaos, and even a small event can cascade, develop, and influence what ends up being a significant issue. Dissociated siloed approaches to risk management that do not span processes and systems can leave the organization with fragments of truth that fail to see the big picture across the enterprise, as well as how it impacts their strategy and objectives.

The organization needs visibility into risk. Complexity of business and intricacy, as well as the interconnectedness of risk data, requires that the organization implement an enterprise view of risk monitoring, automation, and enforcement.

Successful risk management in 2023 requires the organization to provide an integrated strategy, process, information, and technology architecture. The goal is comprehensive straight forward insight into risk and resilience management to identify, analyze, manage, and monitor risk in context of operations, processes, and services.

It requires the ability to continuously monitor changing contexts and capture changes in the organization's risk profile from internal and external events as they occur that can impact objectives.

Resource Page

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Cyber sources

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