Introduction

Last year in my introduction to Spotlight I said that the ‘avalanche of challenges’ in 2020 felt, at times, almost insurmountable. It would be hard to argue that the way ahead feels any easier now. The turmoil caused by COVID-19 worldwide is staggering. Complex challenges, such as the shared need to tackle climate change globally or to address both the causes and consequences of migration, jostle for attention with other issues that affect the security, prosperity, and wellbeing of communities.

For these reasons, our work at RAND Europe has only intensified. Our researchers continue to seek out evidence and apply objective analysis to create clarity. Our experts are working to find new solutions to society’s most challenging problems. We are also exploring new areas of research that may be crucial in helping us prepare for what lies ahead.

This year’s Spotlight highlights the variety of our work in 2021, including: helping the UK Ministry of Defence develop their first sustainability and climate change strategic approach; defining a research agenda to tackle societal challenges in Norway; analysing whether US ‘Truth Decay’ trends have reached Europe; developing a framework to improve societal resilience; investigating the digital skills gap; examining the potential impact of telemedicine in Canada; and assessing support to working parents during the pandemic, ‘what works’ in early childhood development and initiatives to improve workplace financial wellbeing and help people with mental illness into work.

In 2022, we celebrate RAND Europe’s 30th anniversary. Our ambition is to make an even bigger difference to policymaking in future years. As ever, thank you for your continued support of RAND Europe.

Hans Pung, President
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Watch this space
Action stations
Enhancing the UK’s response to climate change crises
The number of people affected each year around the globe by natural disasters such as floods, droughts and wildfires has more than doubled since 2000.

With climate-related hazards projected to increase, the UK’s Ministry of Defence (MOD) asked RAND Europe to assess the implications for humanitarian assistance and disaster relief operations (HADR) and military aid to civil authorities (MACA).

At the strategic level, we found that demand for HADR and MACA operations is likely to grow, stretching resources and making coordination more complex and urgent. At the operational level, deteriorating conditions, such as rising sea levels, could make access difficult or impossible. Climate change impacts may also disrupt or destroy critical infrastructure and supply chains, contaminate water supplies and create food shortages. Greater demand for supplies such as medical technology and engineering kit will likely increase costs and deplete finite stores.

The study concludes that many challenges could be mitigated by improved collaboration across Whitehall and with multilateral and regional partners. It further suggests that the UK’s crisis response could benefit from shifting from an ‘emergency’ mindset to a more proactive, adaptive ‘resilience’ approach.

The study was conducted in collaboration with the University of Exeter through the Global Strategic Partnership (GSP). The MOD drew on our findings and recommendations for its 2021 Climate Change and Sustainability Strategic Approach which will help UK Defence meet the challenge of climate change.

The study recommends five concrete actions:

- Create a single HADR doctrine and a generalisable plan to deliver HADR operations
- Strengthen the role and wider network of officers involved in HADR response
- Explore setting up enabling contracts for HADR and MACA operations
- Design a roadmap to enhance the resilience of defence infrastructure
- Incorporate climate change content into education and training for defence staff
Caring through COVID
The European Platform for Investing in Children (EPIC) is an evidence-based online platform that shares information on practices and policies to help children and their families, funded by the European Commission (EC). RAND Europe created the EPIC framework and has maintained the platform since 2013.

The COVID-19 outbreak in 2020 led to widespread temporary closures of schools and care facilities across the EU27. Eurofound noted that in 2020, for the first time ever, parents reported a worse work-life balance than non-parents. Single parents, families of children aged under 12 and mothers faced particular challenges.

Given the exceptional demands placed on working parents by the pandemic, we decided to focus EPIC’s 2020 annual report on how governments acted to support them. We reviewed data published on all 27 Member States and conducted a deep dive for 10 of them.

We found three main policy responses by the 10 countries assessed in depth:

1. Extraordinary leave created to allow parents to look after their children at home. Leave was usually paid, covered both work at home and elsewhere, and was available to one parent at a time.

2. Provision for essential workers and/or children with special educational needs. While most early childhood care closed, some countries maintained services for certain families (Czechia, France, Ireland and some German states).

3. Financial support for working families. Some countries adapted existing financial support structures to address rising financial insecurity, by extending eligibility for child benefits (Germany, Austria and Czechia) or increasing existing benefits (Germany and Czechia). Some countries created new benefits or support (Sweden and Germany).

While we found a wide variety of practices, a unifying feature was a lack of information on how Member States intend to monitor or evaluate these policies.
Exploring Truth Decay in Europe

The uncertainties of the COVID-19 pandemic have highlighted the need for accurate information to support sound decisions. However, having access to more information can make it harder for people to decide what to believe or not believe.

A 2018 RAND study examined the diminishing role of facts and analysis in American public life; a phenomenon the authors called ‘Truth Decay’ and framed as a system of trends, drivers, agents and consequences. Against a volatile policy backdrop, RAND Europe analysed existing literature to understand whether Truth Decay is taking hold in Europe.

We found evidence that all four key Truth Decay trends are occurring in Europe, though not to the same extent as in the United States. This offers hope that there may still be time to act to counter the trends. There is also diversity between countries, suggesting that some factors in Europe may mitigate against Truth Decay.

Our hope is that this work will stimulate wider debates about democracy and policy priorities. The report offers some pointers on possible ways to strengthen society against Truth Decay:

- **Equip citizens to play their part in democracy and avoid becoming agents of Truth Decay.** For example, investing in media literacy skills to help people overcome cognitive bias and distinguish fact from opinion.
- **Ensure traditional media operate in an environment in which they can remain trustworthy.** For example, public funding (conditioned on quality pledges) to help media reduce reliance on advertising-led business models which drive sensational content.
- **Introduce measures that elevate honest political debate.** For example, funding non-partisan fact-checking and research, tightening donor rules, protecting whistle-blowers.
- **Improve access to anonymised social media user data.** Allowing independent analysis could flag ways to build more socially sustainable (yet profitable) businesses.
- **Expand the Truth Decay research agenda to better understand the phenomenon in Europe.**
TRUTH DECAY’S FOUR TRENDS: WHAT WE FOUND IN EUROPE

Evidence of increasing disagreement about facts and data.
- Growing misperceptions about migration levels in many countries, e.g. Spain, Germany, the Netherlands, France and Poland.
- Increased vaccine hesitancy, particularly in France and Italy.
- Disagreement about the impact of climate change.
- Evidence that disagreements and misperceptions are increasing in some countries.

Evidence of the line blurring between opinion and fact.
- Increased prevalence across Europe of interpretive journalism and advertorial content mixed with news.
- A north–south divide with more neutral news reporting in Nordic countries, Germany and Switzerland, and more blurring of news and opinion in southern Europe.

Evidence of increasing relative volume of opinion over fact.
- An explosion of online news outlets, including niche media that cater for people sharing similar beliefs.
- Rising popularity of global social media platforms, exposing Europeans to opinion-based content from users worldwide.
- Some indications that opinion-based news has greater influence than traditional media, due to its ‘louder’ voice.

Some evidence of declining trust in institutions and the media.
- Trust in political institutions declined in the late 1990s and early 2000s, but this trend seems to have reversed since the financial crisis.
- Trust in the media has declined gradually for two decades, particularly in Slovenia, the Netherlands, Czechia and Poland. Only in Finland has confidence increased.
- Increased reliance on online sources for news, but confidence in these is decreasing.
- Trust in traditional press has remained stable, but these sources are decreasingly used.
Defining ‘terrorism’ is the first step to defeating it

by Diana Dascalu and Benedict Wilkinson

Right-wing terrorism is on the rise in Europe and the United States, fuelled by increasing online access and transnational grievances such as migration. Meanwhile, the success of the Taliban has emboldened jihadist groups worldwide. The changing nature of terrorist threats makes it essential that domestic counterterrorism policies keep pace so that governments can respond effectively.

However, defining acts of extreme violence remains a complicated and inconsistent process:

• Mutations in ‘traditional’ right-wing ideology complicate the ability of governments to recognise right-wing violence as terrorist acts, aided by social media features such as anonymity and ease of posting and sharing. For example, the August 2021 Plymouth incident in the UK, when a gunman killed
five people, has not been classified as terrorism despite evidence suggesting he was motivated by incel ideology.

- Canada has seen a shift to attach terrorism charges to all relevant cases. Two incidents in February 2020 were first charged as murder, then as terrorism: one in which a man stabbed a woman to death, allegedly because of incel ideology, and another in which a man killed a woman and made a statement concerning the Islamic State. An incident in June 2021 in which a man drove into a Muslim family and killed four represented the first time Canada's counterterrorism laws were used to prosecute an Islamophobic act.

- In the United States, a similar debate continues over what to classify as murder, hate crime or terrorism. This is especially relevant to mass murders involving gun violence, where perpetrators are often inspired by right-wing ideology such as white supremacy, homophobia or sexism.

A recent RAND Europe study found continuing disagreement among experts on how to classify acts of extreme violence. Such disagreements have significant policy implications. Not charging suspected acts of terrorism as such may distort statistics and leave decision makers unaware of the true scale of the problem. Failing to charge offenders with terrorism may also deny them access to deradicalisation resources, or see them released while still a threat to society.

Enhancing communication between those involved in defining and charging acts of extremist violence, such as policymakers, police and prosecutors, could help build consensus. Without this consistency, counterterrorism policies may always lag behind a constantly morphing threat.

About this study: RAND Europe invited 25 subject matter experts from a range of backgrounds and fields to classify 12 acts of violence and explore the results in a workshop. Their classification of ‘terrorism’ comprised many facets, including the perpetrator’s motivation, online presence and mental health, and the classifier’s own knowledge, experience and possible biases.

Diana Dascalu is an analyst at RAND Europe. Her research interests include violent extremism, terrorism, insurgency, the impact of emerging technologies, and Russia-centric military and political topics.
Serious and organised crime (SOC) groups in the EU are increasingly transnational, trafficking illegal goods and services across borders and laundering the proceeds through legitimate businesses.

Addressing SOC infiltration of the legal economy is a top EU priority, with over 5,000 groups under investigation at last count.

A major study by RAND Europe and partners used in-depth interviews with over 100 experts and EU-wide analysis of assets, public contracts, company data and case studies to examine the scale and dynamics of the illegal economy. We found that the nine main criminal markets generated estimated annual...
revenues of €92 to €188 billion in 2019, with Missing Trader Intra-Community (MTIC) fraud, illicit drugs and tobacco, and illicit waste the largest — and growing — markets.

SOC groups favour property/real estate, transport and construction to reinvest criminal proceeds in the legal economy. We found no single ‘red flag’ signalling a company at risk of infiltration. Rather multiple factors are relevant, including cash intensity, corruption index, share of current assets and asset volatility. In public procurement, factors such as single bidding, contracts per procurer and supplier share of spend all affect probability of SOC infiltration.

Cash remains the preferred currency, though SOC groups also move funds electronically through money muling or ‘smurfing’. Hawala and similar services outside the regulated financial system are often used when smuggling migrants. Cryptocurrencies are widely used in cybercrime for their perceived anonymity, global reach, transaction speed and regulatory and institutional gaps. However, use of new payment methods is inhibited by cost, fraud risk, the need for technical ‘savvy’ and growing risk of detection as monitoring increases.

The study offers a useful springboard and benchmark for future estimation efforts. It also makes over 35 recommendations to improve evidence and knowledge in this elusive field, including greater automation, standardisation and harmonisation of data collection.
Overcoming antimicrobial resistance
Antimicrobial resistance (AMR) – the emergence of bacteria, viruses, fungi and parasites that are resistant to existing treatments – poses a huge risk to society, with concerns that the COVID-19 pandemic may elevate the threat.

The AMR Industry Alliance (AMRIA) brings together resources and expertise across the life sciences industry to help tackle AMR. AMRIA commissioned RAND Europe to review its progress from July 2019 to March 2021 and highlight implications for the future. We found that AMRIA’s collective efforts are making a difference on diverse fronts, including:

• **Novel products and technologies.** AMRIA members contributed to 93 R&D initiatives to tackle AMR, spanning antibiotics, vaccines, diagnostics and non-traditional products.

• **Access to AMR-relevant treatments.** 81 per cent of companies surveyed took action to improve access, for example through efforts targeting product registration, affordability and availability. Some also acted to address substandard and falsified medicines.

• **Appropriate use of antimicrobials.** Almost all surveyed R&D pharmaceutical (92 per cent), generics (89 per cent) and diagnostics (80 per cent) companies took steps to support appropriate use, for example through education and awareness raising, reviewing promotional activities against stewardship commitments and gathering surveillance data.

• **Responsible manufacturing.** Most surveyed members with manufacturing operations are acting to reduce environmental risk from antibiotic manufacturing discharge. 76 per cent of sites met all the requirements of a common risk-assessment framework and 87 per cent of products assessed against discharge targets met them.

The key challenge ahead is to find innovative ways to align the urgent global need to tackle AMR with the operational and commercial realities for industry. The study identified opportunities to scale up collaborative efforts between public, industry and not-for-profit stakeholders to help overcome the scientific challenges of creating new antimicrobials and diagnostics. With industry investment still fragile, sustainable R&D incentive systems are also needed, along with support for prescribing-related and other behaviours to minimise AMR risk.

There are also opportunities for industry to work with governments, healthcare providers and non-government organisations to bolster patient access to novel and off-patent antibiotics and diagnostics, especially in lower-middle income countries.
Survival kit

Solving persistent problems in UK defence procurement

Equipping the Armed Forces to deliver their outputs is one of the most important and complex tasks faced by the UK government. As RAND Europe has carried out many analyses of defence spending over the years, the National Audit Office (NAO) asked us to help shed light on the underlying causes of equipment procurement problems and why they persist.
We reviewed dozens of past RAND studies on defence acquisition, looking at three broad drivers of cost, schedule and other performance problems: skills and capabilities; contracting, incentives and supplier performance; and programme management. Through this process, we identified recurring themes, plus cross-cutting issues.

Our analysis informed the NAO’s own regular review of challenges in UK defence acquisition. The report also suggested specific measures to help the UK Ministry of Defence (MOD) improve programme delivery and address inefficiencies, namely to:

- Establish and embed effective challenge and scrutiny processes
- Professionalise, reinforce and enable programme management and cost assurance functions
- Drive a focus on risk management and understanding
- Embed clear processes to capture and share lessons learned.

RAND Europe’s recently established Centre for Defence Economics and Acquisition (CDEA) will further consolidate and build on our collective expertise in this area. CDEA aims to help decision makers understand the economic aspects of defence strategy and acquisition, using innovative research methods to identify optimal solutions.

### WHY DO DEFENCE PROCUREMENT PROBLEMS PERSIST?

#### Industrial and MOD capabilities

- Overly prescriptive or ambitious capability requirements contribute to poor performance delivery
- Production efficiencies are hard to achieve, depressing learning economies and returns
- Workforce and skills are critical enablers: not having the right skills undermines effective delivery

#### Contracting, incentives and supplier performance

- Assumptions underpinning capability delivery or acquisition plans must be shared by both the MOD and industry
- A shared understanding of sources of risk between customer and supplier is often lacking

#### Programme management

- There is imbalance and divergence between Services and domains in weapon system acquisition requirements and approaches
- Frequent adjustments to programme delivery undermine overall effectiveness
- Budgeting sufficient contingency for risk is not implemented in practice

#### Cross-cutting issues

- A culture of optimism permeates decision making, distorting assumptions and planning outcomes
- Lack of institutional memory means that past lessons are not learnt well – or not learnt at all
- Moral hazard often emerges due to limited negative consequences for poor delivery
Financial wellbeing is our ability to meet current and ongoing financial obligations and feel secure about our financial future. Poor financial wellbeing is known to affect mental health, and for many young working people COVID-19 has heightened financial anxieties around debt, high housing costs, low savings and uncertain earnings.

Our research study for the Wellcome Trust suggests that financial wellbeing interventions by employers are a potentially promising approach to prevent or address mental health problems in young workers.

To assess the impact of Workplace Financial Wellbeing Interventions (WFWI) on young workers, we analysed data from two surveys, Britain’s Healthiest Workplace and Asia’s Healthiest Workplace. These are conducted jointly by RAND Europe and insurance companies Vitality Health and AIA, with a combined sample size of almost 87,000 employees across 686 companies. We found that participation in WFWI is associated with better mental health, particularly for 18–24 year olds, lower-income groups and men. In the UK sample, this positive impact also extends to employees from ethnic minority backgrounds, or without university degrees, or who believe discrimination exists in their workplace. While more research is needed, there are steps employers can take now to help their younger workers feel better about their finances.

### Money matters

**Employers can help young people feel more secure about their finances**

**Workplace Financial Wellbeing Interventions**

- **Financial education** (e.g. courses and workshops, financial coaching, online tools, or gaming apps)
- **Financial benefits** such as reduced prices for goods and services (e.g. gym membership, bicycle schemes)
- **Advances on pay** (e.g. access to low-interest borrowing or advances on pay)
- **Automated saving schemes**
RECOMMENDATIONS FOR EMPLOYERS

Workplace Financial Wellbeing Interventions are a promising approach for preventing or addressing mental health problems in young workers.

**Advanced interventions should be personalised and culturally appropriate.**
Groups of workers at a higher risk of poor financial wellbeing should be encouraged to participate (e.g. women, low-income workers and renters).

**Offer a range of WFWI to increase engagement of young workers.**
Think about offering a range of WFWI (e.g. education, direct support and benefits), with different modes of delivery (e.g. online resources or gaming apps), to increase the chances of engaging a large number of young workers.

**Make the content of interventions appropriate for young workers.**
For example, assist young people to develop good money habits, learn financial concepts and support money skills for independent living.

**Increase employee awareness of WFWI on offer.**
Few young workers with access to WFWI are actually aware of them (19 per cent in the UK and 16 per cent in Asia). This could be improved by better (and targeted) advertising and awareness raising.

**Develop a strategy for encouraging participation.**
In the UK, only 10 per cent of those who know they have access to WFWI participate. In the Asian sample, however, almost half (45 per cent) of young workers take up the service offering. This could be improved by better education about WFWI programmes and making them easier to access.
Many people in the criminal justice system (CJS) have vulnerabilities such as mental health issues, learning disabilities or substance use disorders. Contact with the police or courts can be a valuable opportunity to intervene and offer help. In 2014, NHS England launched a national model for Liaison and Diversion (L&D) programmes to identify vulnerable people in the CJS, help them to access treatment or support, and ensure that relevant information about their needs is available to police, prosecutors and courts. RAND Europe researchers were asked by the Department for Health and Social Care and NHS England to conduct an independent evaluation of the L&D programme.
Looking at data on over 8,000 people who used L&D services in 2017, we found that L&D services:

- **Successfully engaged people** with a range of vulnerabilities
- **Intervened at crisis points**, with the use of healthcare services increasing prior to arrest and referral
- **Reduced the likelihood of a custodial sentence** by almost half compared to a control group

- **May have generated CJS savings** of between £13.1 million and £41.5 million through diversion from custody.

A significant innovation of this project was that the RAND team created a large-scale data set combining information from four separate healthcare sources and two criminal justice sources. These linked data provided insights on the impact of L&D on people’s contact with a range of different services – before and after their referral to L&D – which could not be reliably obtained by analysis of individual data sources. We also used the linked data to create a control group, allowing a more robust evaluation design. To our knowledge this is the first example of such an ambitious, cross-sector data linkage.

88% of people referred to L&D services had at least one vulnerability identified

71% of those referred had a mental health need

52% experienced drug or alcohol misuse
Transatlantic solidarity
Mapping a path towards European strategic autonomy in defence

The path towards greater EU strategic autonomy in defence has been bumpy, with efforts often focused on possible institutions and frameworks rather than resources, political support or outputs. Different options exist, each with distinct implications for the EU and its allies.

An internally funded cross-RAND team of European and US researchers used scenario methodology to explore three possible futures:

1. Developing a strong European pillar of NATO
2. Faltering EU defence integration and transatlantic fragmentation
3. Strong EU defence not reliant on NATO military capabilities and structures.

The study provides a unique contribution to the debate on what European strategic autonomy in defence might mean for relations between the EU, NATO and the US. It offers a transatlantic perspective on not only strategic and military aspects, but also crucial political factors.

Clearer communications and unambiguous US support were identified as key to a constructive approach to realise European strategic autonomy in defence.
For people with mental health difficulties, finding the right kind of work can be central to recovery. Individual Placement and Support (IPS) is an evidence-based model which supports people with serious mental illness into employment throughout their journey, from referral to IPS through to job seeking and after they start work.

NHS England and the Department for Work and Pensions (DWP) commissioned RAND Europe to evaluate the national IPS Grow initiative, which offers wide-ranging implementation support to local IPS services. We found positive results. Over the two-year evaluation period, support from IPS Grow helped speed up delivery and improve the consistency and quality of local IPS services.

Researchers made a number of recommendations to help increase future impact. At the national level, we recommend continued separate funding for IPS Grow; expanding IPS options; using ‘fidelity reviews’ to capture data and ensure quality delivery; and evaluating IPS Grow support over a longer period.

Lean on me
Growing employment opportunities for those with mental health needs
The Bernard van Leer Foundation is an independent body working globally to inform and inspire large-scale action to support the health and wellbeing of babies, toddlers and their carers.

In 2019, the Foundation commissioned RAND Europe to develop a set of case studies to systematically capture lessons on ‘what works’ in early childhood development at scale, including the critical conditions for achieving sustainable impact. Our researchers looked at important initiatives in diverse countries, including the Netherlands, Israel, Peru and Brazil. Each case study involved a careful review of documentation and interviews with multiple stakeholders to gain their experiences and reflections.

Two studies looked in particular at the role of civil society organisations in driving policy change:

**PERU**

**Campaigning to end physical and emotional violence against children.**

In 2015, an important law was passed prohibiting physical and psychological violence against children and adolescents in Peru. RAND Europe investigated the role played by two civil society children’s organisations, INFANT and ONNAS. The case study highlights five key factors that helped increase the impact of these organisations, including an emphasis on positive parenting strategies, having children and adolescents lead the campaigns, and forming alliances with politicians and public figures.

**BRAZIL**

**Advocating for a Legal Framework to extend children’s rights.** This study analyses events and debates leading to the adoption in 2016 of a Legal Framework for early childhood development in Brazil. It focuses on advocacy efforts of the National Network of Early Childhood (RNPI) while recognising the roles played by government, individuals and other civil organisations. The study highlights factors that facilitated adoption, such as a favourable political climate, knowledgeable leaders and effective network-building. It also describes the continuing work of RNPI and the Brazilian judiciary to ensure the Legal Framework is implemented effectively.
Before the COVID-19 pandemic, Canada lagged behind many international peers in its use of telemedicine. Now, due to the rapid digital transformation sparked by the pandemic, many patient-doctor consultations in Canada are conducted virtually. RAND Europe researchers examined the potential impact of longer-term telemedicine use in Canada. We found it could deliver a variety of benefits for patients and society, and generate savings of up to CA$6 billion annually, through:

- **Improved outcomes.** We found that in some settings, such as the management of chronic conditions, telemedicine yields comparable or better health outcomes for patients.

- **Saving valuable time.** We quantified the economic value of time saved by telemedicine use through four scenarios in which uptake of teleconsultations increased by 5, 10, 25 or
50 per cent. Increasing uptake by 50 per cent could generate economic benefits of CA$5 billion per year for the Canadian economy.

- **A more efficient healthcare system.**
  The evidence suggests that teleconsultations could lead to fewer missed appointments and unnecessary trips to emergency departments for minor issues. Reducing these by 50 per cent would save the healthcare system CA$147 million per year.

- **Expanding access.**
  Teleconsultations could help reach Canadians in communities where medical care is harder to access and improve their wellbeing, worth up to CA$611 million per year.

However, we found a mix of technical, socio-economic and regulatory barriers could hinder the wider uptake of telemedicine in Canada.

Concerted, long-term effort will be needed to address these barriers, including: implementing a nationally harmonised electronic patient record system; improving digital skills among patients and clinicians; modifying physician payment mechanisms so virtual care and in-person care are compensated on a par; and developing national standards for patient health information access, which is crucial for effective care coordination across different providers.
The future of the Research Excellence Framework

By Camilla d’Angelo, Susan Guthrie and Catriona Manville

Since the late 1980s, the UK has conducted a regular quality exercise assessing research in higher education institutions (HEIs). The results guide the allocation of so-called quality-related, or core, funding, to HEIs. With around £2 billion of funding per year resting on the outcomes, these assessments, and the institutional and academic interpretation of them, can act as a major driver of behaviour in the academic sector, for better or worse.

The exercise diversified in 2014, with the introduction of the Research Excellence Framework (REF), which looks at research impact as well as quality. In 2020, Research England, on behalf of the four UK funding bodies, commissioned a RAND Europe study to record in real time (while researchers and HEIs completed their REF 2021 submissions) the attitudes of the UK’s research community towards the REF.
The REF assessment exercise is a driver of researcher behaviour – so why not use it to improve research culture?

Our study showed that on average academics have negative attitudes towards the REF. However, perceptions are also very mixed: much depends on personal experiences and context. These high-level negative views are somewhat in line with previous findings. Academics have been vocal about the REF in the past, with some considering it a costly and burdensome exercise. A review in 2016 suggested several changes to streamline the REF process to reduce the perceived burden.

We found that the REF influences researchers and the research community across many areas in different ways. For example, most researchers believe that the REF has increased open research, the public relevance of research, and the quantity of research. Conversely, many researchers also believe that the REF has decreased the authenticity and novelty of research. This view of the wider impact on the community is interesting to compare with the views of most researchers that, at an individual level, the REF has not influenced their own research. This highlights a disconnect between the perceived impact on others and the real influence individuals perceive on themselves.

Read the full blog for our findings on REF 2021 rule changes and how the REF could be improved to drive a more inclusive research culture.

About this study: This study, building on a pilot from 2017, addressed a significant evidence gap as there is little systematic and nuanced knowledge about how academics across the sector view the REF and how it has shaped their own and wider research in their field. In collaboration with the University of Sheffield and Cardiff University, the team conducted two online surveys of 3,080 researchers: a national survey across the UK and a longitudinal survey at four UK HEIs. Through surveys, interviews and focus groups, we gained valuable insight into views across disciplines, career stages and types of institutions.

Camilla D’Angelo is a senior analyst at RAND Europe working on science and technology policy. Her research interests include new and emerging science and technology and their wider societal impacts.
Tackling societal challenges in Norway

The COVID-19 pandemic has provided a stark reminder that all countries – and their research and innovation (R&I) systems – need to be better prepared for the future. The Research Council of Norway (RCN) asked RAND Europe and partners DAMVAD Analytics to help identify a core set of targeted, impact-driven actions to tackle a series of pressing societal challenges, along with key underpinning structural measures to build R&I resilience in Norway.

We used a multidisciplinary mixed-methods approach to engage with a range of stakeholders (including the public) and to analyse the key trends, barriers, enablers and policy challenges across RCN’s five core strategic areas. Through future scenario explorations and workshops, the team identified 20 concrete, priority R&I missions and associated focus areas – ambitious, challenge-based yet timebound policy actions that cannot be solved by a single project but will need a portfolio of interacting initiatives across several disciplines and involving many stakeholders.

Our work helped shape RCN’s input to the revision of the Long-Term Plan for Research and Higher Education 2019–2028, which sets out the Norwegian government’s ambitions, objectives and priorities in these areas. A summary of our findings and proposals was also presented to the relevant Norwegian minister.

In addition, the team identified 10 structural measures to develop a more resilient R&I environment in Norway, including better access to and sharing of data; incorporating innovation skills in the education system; promoting interdisciplinarity, collaborations and partnerships; promoting fewer but stronger national industry clusters; and increasing use of regulatory sandboxes that promote innovation.

RESEARCH COUNCIL OF NORWAY’S FIVE STRATEGIC AREAS

- Green transition
- Oceans
- Technology and digitalisation
- Health and welfare
- Cohesion and globalisation
## PRIORITY MISSIONS WITHIN AND ACROSS THE STRATEGIC AREAS

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<th>Missions which apply to the national context</th>
<th>Missions which apply to the global context</th>
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<tr>
<td>Make Norway's (largest) cities climate neutral</td>
<td>Establish a resilient and sustainable blue economy in Norway</td>
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<td>Actively address the impacts of non-communicable diseases in Norway</td>
<td>Position Norway as a global leader in combating marine pollution and establish a Norwegian ocean ecosystem free of marine pollution</td>
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<td>Substantially reduce the prevalence and impact of mental illness in Norway</td>
<td>Enhance Norway's world-leading capabilities and expertise in future maritime technologies</td>
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<td>Establish Norway as a global knowledge leader in personalised medicine and healthcare</td>
<td>Significantly reduce Norway's transport-related emissions</td>
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<td>Accelerate people-centred, data driven strategies to digitally transform and improve Norway's health and care system</td>
<td>Protect, value and restore Norwegian biodiversity and reduce its degradation and loss</td>
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<td>Improve the quality of life and health of an ageing society in Norway</td>
<td>Establish Norway as a knowledge leader in global change processes, development and international relations</td>
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<td>Accelerate the transition to a sustainable circular economy in Norway</td>
<td>Actively contribute to healthy, safe and sustainable food systems</td>
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<td>Preserve and secure a resilient and robust democracy for future Norwegian generations that is characterised by high levels of trust and transparency</td>
<td>Play a leading role in Norway and internationally to substantially increase the use of renewable energy in a sustainable and long-lasting manner and accelerate R&amp;I in this area</td>
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<td>Play a leading role in tackling antimicrobial resistance (in Norway and globally) and actively share expertise</td>
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### Missions which apply to the national and global contexts

- Contribute to Norway’s digital transformation by creating a diverse, digitally and soft-skilled workforce
- Actively enable digital transformation at all levels of government in Norway
- Ensure decent work for all people in Norway
The UK government has set out an overarching vision to become a ‘meaningful player in space’ in its first ever National Space Strategy, published in 2021.

The Ministry of Defence (MOD) asked RAND Europe to clarify the challenges, opportunities and complexities of this fast-moving and uncertain domain, and to articulate the UK military’s ‘unique value proposition’ in space, as it prepares to implement a new Defence Space Strategy.

RAND researchers examined the key factors shaping decision making in space and the capabilities of selected other nations. Navigating upcoming choices in this unfamiliar territory will mean recognising that:

- **Space is both similar to and distinct from other domains.** Space is a unique enabler of activity in other domains (land, sea, air, cyber and electromagnetic), underpinning most
defence operations as well as critical national infrastructure and the civilian economy. It is also a ‘dual-use’ arena for both civilian and military actors, and has unique physical characteristics which affect strategy making.

- **The UK is strong in some areas and weak in others.** While the UK has strengths in certain niches, such as satellite communications, other capabilities are more limited compared to international peers.

- **A range of options exists for developing new capability.** The UK’s lack of legacy systems in some areas of space capability presents both challenges and the opportunity to do things differently when growing future capability. Possible approaches each come with their own benefits, costs and risks.

To help the MOD navigate these trade-offs, RAND developed a decision tool to guide thinking on when and where to ‘own’ sovereign capability, ‘collaborate’ with government or industry partners, or just ‘access’ commercial services.

With every space-faring nation facing similar decisions, the UK has opportunities to work closely with allies, partners and industry to identify potential paths and pitfalls.
Widespread and rapid digitalisation is boosting demand for digital skills – but employers are struggling to fill digital roles. This digital skills ‘gap’ has been accentuated by the COVID-19 pandemic, with whole industries and companies shifting work online, speeding up digitalisation by an estimated three to four years. The use of digital technology is no longer optional for most companies.

In a study commissioned by Salesforce, RAND Europe examined the factors shaping the digital skills gap to understand whether and why it is widening, and what actions are needed to close it. We found that the digital skills landscape is complex and fast-changing, including:

- **Emerging technologies** accelerating demand for new digital skills.
- **Agile skill adaptation** required by workers needing a range of new skills to do their jobs.

**Closing the gap**

*Global demand for digital skills is outpacing supply*
Growing demand for ‘soft’ skills to help workers adapt to changing work environments.

Digital and social inequalities affecting opportunities to build digital skills.

Traditional education modes alone may not be keeping up with employers’ skills needs.

The study highlights the costs of digital skills shortfalls and the urgent need to build skills globally to keep pace with technological innovation and help navigate changing work environments. Continuing skills shortages not only affect product development, delivery and innovation, but also customer experience and satisfaction.

There is debate over how to define the digital skills gap, with some suggesting it is more of a skills mismatch. Employers wishing to build resilient and inclusive workforces should consider using skill-based hiring practices and developing a common skills framework to match talent with skills demand. Beyond recruitment, employers should invest in upskilling and reskilling existing employees – for example, by offering digitally inclusive training initiatives. By investing in lifelong learning, employers can become more competitive by attracting and nurturing the best talent.
Societal resilience is the ability of society to rebound from the shock of a crisis. 2021 saw nations forced to respond to a slew of crises on top of a global pandemic, from natural disasters like floods and wildfires to cyberattacks. With both physical and digital threats expected to increase, many governments are reviewing their ability to respond to such shocks.

RAND Europe researchers led a Global Strategic Partnership (GSP) study to identify possible lessons from the approaches of five other nations: Australia, Colombia, Israel, Russia and Sweden. A Societal Resilience Index developed by GSP partner Aleph Insights enabled countries to be compared across a range of variables.

Bouncing back

*How UK Defence can improve societal resilience*
Based on the analysis, the team developed a framework that defines three phases of societal resilience: Prepare, Respond and Recover. As societal resilience is an ongoing, cyclical process, the phases may overlap or run concurrently within and across crises. For example, the MOD might Prepare to tackle potential cyberattacks whilst continuing to Respond to floods.

The study makes five proposals to help UK Defence improve the way it thinks and acts on societal resilience, and how it can contribute to wider UK efforts in this area:

- **Improve civil–military coordination and integration**, including more clearly defined roles and responsibilities.
- **Build more effective long-term relationships** between Defence and national, regional and local-level organisations to support societal resilience planning.
- **Enhance communication** at all levels to strengthen trust and understanding between military, other government departments, civilian agencies and the public.
- **Exercise routinely in different configurations** with partners at local, national and multinational levels.
- **Explore mechanisms of rapid mass and cross-sector mobilisation**.

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**THE THREE PHASES OF SOCIETAL RESILIENCE**

**Prepare**: All activities undertaken prior to a crisis to ensure risks, threats and vulnerabilities are identified and assessed, and the necessary resources and relationships put in place for an effective response. Includes the subtasks **Foresee, Build** and **Educate**.

**Respond**: All activities that take place once a crisis has occurred to effectively mitigate the immediate effects. Key priorities might include situational awareness, communications and engaging necessary resources. Includes the subtasks **Understand, Inform** and **Mobilise**.

**Recover**: Occurs once the initial crisis has passed or been mitigated. Covers short-term tasks to ensure civilians are not in immediate danger and resources are returned, and longer-term actions to return society to a pre-crisis state and ensure personnel and equipment readiness. Includes the subtasks **Reset, Regenerate** and **Innovate**.
On the horizon

RESEARCH ON VETERANS AND THEIR FAMILIES

RAND Europe has been selected as the preferred bidder along with our partner, the King’s Centre for Military Health Research at King’s College London, to manage the Forces in Mind Trust Research Centre from 2022–2027. The Centre was established at Anglia Ruskin University in 2017 to drive research on veterans and their families to help them make a successful transition to civilian life. The ambition is to further develop FiMT’s flagship initiative into an internationally renowned centre of excellence.

PATHOGEN GENOMIC IN THE PANDEMIC

The ability to sequence and understand different variants of the SARS-CoV-2 virus and their impact is crucial to inform policy and public health decisions. Soon after the UK went into its first lockdown in March 2020, the COVID-19 Genomics UK Consortium (COG-UK) was launched. COG-UK is a collaboration of experts in pathogen genomics including academic institutions, public health agencies, the Wellcome Sanger Institute, NHS Trusts and Lighthouse Labs. RAND Europe is now evaluating how COG-UK delivered against its objectives, for example how it contributed to advancing scientific knowledge about SARS-CoV-2, informing public health decisions, and providing information that can be used to evaluate the effectiveness of vaccines and treatments.
REGULATING AI

Artificial intelligence (AI) is a strategically important technology with the potential to transform societies and economies. However, it also poses major challenges, and the European Commission recently published proposals for AI regulation. With trust in AI systems acknowledged as a prerequisite for broader uptake, RAND Europe is conducting a study for Microsoft to analyse evidence on voluntary, self-regulatory mechanisms for safe, ethical AI development, including labelling initiatives and codes of conduct. The aim is to stimulate further discussion among stakeholders as applications of AI continue to multiply across the globe.

READING PALS

Peer-Assisted Learning Strategies for Reading UK (PALS-UK) pairs pupils with different levels of reading skills to take it in turns to act as reader and coach in a set of structured activities. PALS was developed in the US, but rigorous evidence on the effectiveness of the UK version of PALS is lacking. The Education Endowment Foundation commissioned RAND Europe to evaluate the implementation of PALS-UK and its impact on the reading attainment of Year 5 pupils. The findings of a randomised controlled trial conducted in 89 schools in the Midlands and North East England will be published early in 2022.
The guidance RAND Europe receives from our Council of Advisors enriches our work and helps fulfil our mission. The wealth of knowledge and diverse experience of council members benefits our organisation and clients.

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EC DG Employment, Social Affairs and Inclusion
EC DG Health and Food Safety
EC DG Justice and Consumers
EC DG Migration and Home Affairs
EC DG Research and Innovation
EC DG Trade
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European Defence Agency (EDA)
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UK Ministry of Justice
UK National Audit Office
UK National Institute for Health Research
UK Research and Innovation
UK Space Agency
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Shared Intelligence
SiRM
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SYSTRA
TELUS
Veitch Lister Consulting
Velux Group
Vitality Health
WSP Group
Our expertise

Centres
We continue to build expertise in health services research along with the University of Cambridge through the Cambridge Centre for Health Services Research. Using methodologies and tools to narrow uncertainty about policymaking in the future continues to be the focus of our Centre for Futures and Foresight Studies. And we have established a new Centre for Defence Economics and Acquisition to support government decision making on the economic aspects of defence strategy and acquisition.

Policy domains
- Child & family policy
- Defence & security
- Drugs, policing & criminal justice
- Education
- Employment, social inclusion & migration
- Health & healthcare
- Infrastructure & transport
- New & emerging technologies
- Research & innovation systems
- Wellbeing in the workplace

Capabilities and methods
- Economic impact analysis
- Evidence assessment & synthesis
- Horizon scanning, futures & foresight studies
- Impact & process evaluation
- Policy design, monitoring & evaluation
- Randomised control trials
- Research systems analysis
- Serious gaming
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