



Science and
Technology
Facilities Council

Building a Secure and Resilient World

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March 2023

Background

- **Transforming Tomorrow Together** - UK Research and Innovation (UKRI) aims to harness the full power of the UK's research and innovation system to tackle large-scale, complex challenges
- to do this, we have identified five strategic themes to encourage working across disciplines and leveraging new and existing investment and activity

Themes will enable us to:

- develop more coordinated and collaborative approaches across UKRI and with our many partners, utilising the breadth of our disciplinary and sector expertise to tackle major societal challenges
- develop funding opportunities for multidisciplinary programmes aligned to our strategic themes, seeking opportunities to coordinate and leverage additional investment with other public, private, third sector and international funders
- building strategic international partnerships and supporting UK leadership and participation in international research and innovation programmes to address challenges on a global scale



Background

Our five strategic themes are:

- Building a green future
- **Building a secure and resilient world**
- Creating opportunities, improving outcomes
- Securing better health, ageing and wellbeing
- Tackling infections

- Investments and activities taking place under these strategic themes complement existing UKRI and research council activities
- They will deploy expertise and capability from across UKRI and the broader research community to work towards a shared common goal



Funding

- £75m to each (5) theme
- £0m/£11m/£26m in the current Spending Review period (22/23-24/25)
- A planning assumption of £38m in the next SR period (assume 3 years)



Building and Secure and resilient world

This funding aims to strengthen social and economic resilience, and enhance national security across virtual and physical spaces, by improving awareness of risks and threats; preparedness, decision making and response; and allowing change to be understood as a force for good



Building and Secure and resilient world

We will:

- **provide a robust response to the complex challenges facing the UK** in defence, security and resilience in order to support economic growth, crisis preparedness and response, maintaining a responsible cyberpower status, be on the frontline of science diplomacy.
- **develop and deliver solution-based systemic approaches** to help protect key industries, services and ways of life and to foster a culture, supported by critical infrastructure and robust systems and technologies, which embraces a creative and innovative approach to contemporary problems in order to transform the system for better outcomes
- **help develop tailored approaches to security and resilience challenges through multidisciplinary research** with the focus on human-centred approaches and knowledge exchange collaborations across five sub-themes.



Sub-themes

Sub-Themes

Global order in a time of change

Enable UK to take a leading position in shaping an international order that is secure, resilient and just

Technologies for resilience security and defence

Advance the capacity of state defence and security, economy and society to reduce vulnerabilities, to respond to and recover from shocks through innovation and technological advancement

Resilient and Secure Supply Chains

Increase the resilience of supply chains (food, critical materials, manufacturing, complex systems) to a wide variety to potentially interacting shocks

Behavioural and Cultural Resilience

Reduce the impact of shocks on individuals and communities through adaptation and embracing change, deployment of resources for personal resilience that is fair and just

Strengthening Resilience in Natural and Built Environment

Mitigate impact of natural and anthropogenic hazards and risks on wider societal processes and operations in rural and urban contexts being responsive to particular requirements of place

Funded projects

- **Data and Analytics Facility for National Infrastructure (DAFNI) (STFC)**
- National Centre for Space Situational Awareness (NCSSA) (STFC)
- **Digital twins (EPSRC) – live on UKRI funding finder**
- Quantum Technologies for Position, Navigation and Timing (PNT) (EPSRC)
- **Supply Chains as Complex Systems (BBSRC) – due to be released soon – community webinar 15 June, proposal deadline July**
- **Strengthening resilience across the UK food supply chain (BBSRC) – as above**
- Area Observatories (Russia/Eurasia & China) (ESRC)
- Behavioural science and analytics for national security (ESRC)
- Mobilising Community Assets Against Public Health Disparities (AHRC)
- Solid Earth Hazards (NERC)
- Nature-based (NbS) Solutions for hazard mitigation (NERC)



BS&RW hub

In next few months: scoping study to help develop the 'building a secure and resilient world' theme by examining each of the sub-themes and their respective contributions to security and resilience.

Specifically, the study will aim to identify the current state of knowledge related to each sub-theme, identifying existing research strengths and knowledge gaps.

This will inform a call for a BS&RW Hub:

- wider horizon scanning and scoping helping identify gaps
- extend our networks
- build inter-disciplinary connections
- opportunities to bid for funding to host hub etc





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Thank you

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