

GLOBAL UNCERTAINTIES SECURITY FOR ALL IN A CHANGING WORLD



Global Uncertainties – Security for All in a Changing World

John Wand
Programme Leader

The Research Councils

Department of Business, Innovation and Skills

Research Councils UK

STFC

Science & Technology
Facilities Council

EPSRC

MRC

ESRC

NERC

BBSRC

AHRC

‘Excellence with Impact’



Responding to Global Challenges



ENERGY
EPSRC lead
BBSRC
ESRC
NERC
STFC



NANOSCIENCE THROUGH ENGINEERING TO APPLICATION
EPSRC lead
BBSRC
ESRC
NERC
STFC
MRC



LIVING WITH ENVIRONMENTAL CHANGE
EPSRC
BBSRC
NERC lead
ESRC
STFC
MRC
AHRC



AGEING: LIFE LONG HEALTH & WELLBEING
EPSRC
BBSRC
ESRC
NERC
STFC
MRC lead
AHRC



DIGITAL ECONOMY
EPSRC lead
AHRC
ESRC
MRC



GLOBAL UNCERTAINTIES: security for all in a changing world
EPSRC NERC AHRC
BBSRC STFC
ESRC lead MRC



Global Food Security launched March 2010



What Can Research Councils Do?

- New Knowledge and Understanding (eg research grants, centres, KT)
- Capacity Building (eg PhDs, fellowships)
- Infrastructure (eg neutron sources, datasets)
- Access to the academic research base (eg networks, visiting fellowships)

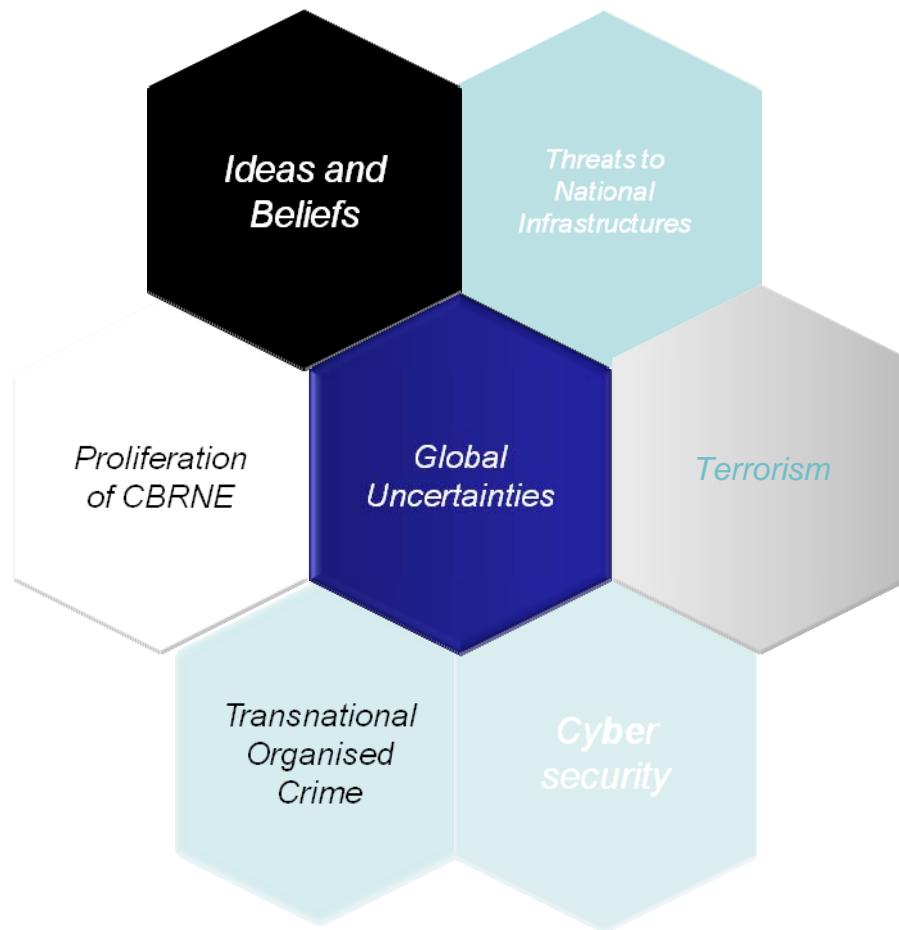
Global Uncertainties

- Security for all in a Changing World
- Research is key to better predict, detect, prevent and mitigate security threats to nations, organisations and individuals in today's changing and interconnected world
- Provides a single focus and contact point for Research Councils

Global Uncertainties - Governance

- Strategic Advisory Group
 - Chair - Sir Richard Mottram
 - Mix of senior figures from HEIs, govt depts, third sector, industry

Global Uncertainties- Core areas



Threats to Infrastructures

- Potential impacts; Council for Science and Technology
'The UK economy depends upon its infrastructure and Government recognises that without these essential services the UK could suffer serious consequences'
- £31M investments
- Related RCUK programmes in LWEC, Energy, Food Security and Connected Communities
- Infrastructural Resilience Sandpit (EPSRC/ESRC)
- Centre for Managing Natural and Environmental Risk (Cranfield, EPSRC/ESRC/NERC/DEFRA)
- MRC Centre (Outbreak Analysis & Modelling, Imperial)

Terrorism

- Potential Impact: CONTEST ‘to reduce the risk to the UK and its interests overseas from international terrorism, so that people can go about their lives freely and with confidence’
- £48M investments
- Detecting Terrorist Activity (EPSRC/ESRC)
- Doctoral Training Centre in Security Science (UCL, EPSRC)
- Multidimensional Integrated Intelligent Imaging (Sheffield, Basic Technology)

Cyber Security

- Potential Impact: Cyber Security Strategy ‘As the UK’s dependence on cyber space grows, so the security of cyber space becomes ever more critical to the health of the nation’
- £10M investments
- Centre for Secure Information Technologies (QUB, EPSRC/TSB)
- Information Infrastructure Protection (TSB/EPSRC/CPNI)

Where Next?

- What are the challenges where Research Councils can make a difference working in partnership with others?
- www.globaluncertainties.org.uk
- John.Wand@esrc.ac.uk