DASA seeks Advanced Materials innovations to shape the future of defence

News story

DASA has launched a new Innovation Focus Area to find Advanced Materials innovations to support generation-after-next defence capabilities



- DASA has launched a new Innovation Focus Area (IFA) called Advanced Materials for Defence
- Funding provided by the Defence Science and Technology Laboratory's (Dstl) Advanced Materials Programme
- This IFA seeks Advanced Materials innovations across 2 challenge areas

The <u>Defence and Security Accelerator</u> (DASA) is pleased to launch a new Innovation Focus Area (IFA), <u>Advanced Materials for Defence</u>. Advanced Materials is identified in the <u>Defence Technology Framework</u> as a critical technology family to drive innovation across defence. This IFA aims to harness these strengths in the UK landscape to provide innovative solutions in Advanced Materials to support generation-after-next defence capabilities.

DASA seeks innovations across two challenge areas:

- Challenge 1: Intelligent materials and structures
- Challenge 2: Materials for enhanced thermal management

Key dates and funding

This Innovation Focus Area will run for at least <u>two funding cycles of the</u> Open Call.

DASA expects to fund several proposals between £100K - £300K.

Do you have a novel idea or concept? Read the full IFA document and submit a

proposal.

Advanced Materials for Defence challenge areas

This IFA has 2 challenge areas.

Challenge 1: Intelligent materials and structures

This challenge is focused on materials and structures that can either sense changes in their environment, actuate a change under extreme environmental conditions, or a combination of both. This challenge is also concerned with the lifting and ageing of deployable or morphing structures.

For this challenge area, DASA seeks innovations that consider operating environments such as:

- Complex weapons: Smart / functional structural materials
- Air: Materials to reduce maintenance requirements
- Space: Techniques for assessing the ageing and degradation of materials used in deployable systems
- Land: New technologies for material condition, self-diagnosis and repair, and novel multi-functional materials to support survivability through improved concealment
- Maritime: Develop technologies to support the rapid build, modification and deployment of naval vessels across different operating environments

In addition to the operating environments listed above, this IFA is also interested in understanding emerging innovations in functional, animate and metamaterials under the FAME project. The FAME project focusses on the development of vital enabling materials knowledge, concepts and technologies for later exploitation into systems. FAME is a cross-cutting project that encompasses all operating environments.

Challenge 2: Materials for enhanced thermal management

This challenge is focused on materials and structures that can withstand extremes of temperatures.

For this challenge area, DASA seeks innovations that consider operating environments such as:

- Complex weapons: Materials to enable increased endurance, range or operating temperatures
- Air: Materials to help reduce mass, volume and cost of thermal management systems and enhance other areas of performance
- Land: Materials to enhance the survivability and sustainment of platforms and users
- Maritime: Materials to improve the effectiveness of thermal management systems for on-board systems, allowing more heat transfer to take place in the same space

For a more detailed breakdown this IFA's challenge areas, <u>read the full IFA</u> document.

Submit a proposal

Do you have an Advanced Material innovation that will support generationafter-next defence capabilities?

Learn more and submit a proposal.

Share this page

Sharing will open the page in a new tab

Published 23 November 2022

UK and South Africa to work more closely on tackling pandemics and climate change

- UK and South Africa launch new agreement on health, building on close work on climate and other global challenges.
- Commitment made as South African President Ramaphosa, UK Health Secretary and HRH The Earl of Wessex visit the Crick Institute, the biggest biomedical research facility in Europe, and Kew Gardens.
- Additional UK funding will aid future pandemic preparedness across 18
 African countries.

British and South African researchers will save lives in the UK, South Africa and beyond — thanks to nine collaborative research projects announced today.

Institutions from across the UK and South Africa will undertake research into vital issues from health systems and financing to mental health and surgery.

The projects formed part of a new agreement to enhance the UK-South Africa health partnership, signed by the South African Health Minister and UK Health Secretary today at the Francis Crick Institute in London, during the President of South Africa's State Visit.

The new agreement also includes new UK funding to bolster South Africa's National Institute for Communicable Diseases and is supporting genomic sequencing to improve antimicrobial resistance surveillance on the African continent.

With UK support, more than 17,000 genomes have been sequenced to date in South Africa. The new support will enable detection of dangerous diseases faster across at least 18 African countries, building resilience into our health systems and protecting the world against future pandemics.

The partnership will prioritise building vaccine manufacturing in Africa so that vaccines can be developed and reach those who need them faster, including the most vulnerable. This in turn will mean the world will be better prepared for future pandemics.

The UK and South Africa are also working together to protect global health systems from the increasing threat of climate change.

UK Foreign Secretary James Cleverly said:

It is vital for countries across the world to work together to tackle global challenges like climate change and pandemic preparedness. This will benefit us all.

The UK and South Africa have shown global leadership in joining together to protect people by preventing the spread of dangerous diseases, and by working to halt climate change — including through the ground-breaking Just Energy Transition Partnership, to help countries move away from using fossil fuels.

Health and Social Care Secretary Steve Barclay said:

Strengthening the partnership between the UK and South Africa is not only crucial in improving health and patient outcomes in both countries but it is also vital to add to the global resilience of our health systems.

Through this partnership we will reinforce our shared commitment to ensuring the world is better prepared for future pandemics through joint research and building capability for disease surveillance including antimicrobial resistance.

It was excellent to meet President Ramaphosa at the Francis Crick Institute, where staff showcased the best of innovative research technology the UK has to offer. I look forward to building on this important relationship with South Africa in the months ahead, to drive more effective global health systems, promote clinical and regulatory excellence and above all protect patient safety.

UK Secretary of State for the Department for Environment, Food & Rural Affairs (DEFRA), Thérèse Coffey, and His Royal Highness the Earl of Wessex also accompanied President Ramaphosa to Kew's Royal Botanical Gardens, where a partnership with South African institutions is helping to preserve biodiversity and address climate change.

A long-term partnership between Kew and South Africa National Biodiversity Institute (SANBI), a key player in South Africa's sustainable development, is ensuring the long-term survival of South Africa's exceptionally rich plant diversity. The President and the Minister were able to see the flourishing fauna, such as the King Protea and heard from Kew's experts on biodiversity.

UK Secretary of State for the Environment Thérèse Coffey said:

This visit highlights the fantastic biodiversity of South Africa and our longstanding scientific collaboration to protect nature. Both countries are working together to tackle the twin challenges of climate change and biodiversity loss.

At the upcoming UN Convention on Biological Diversity meeting in Montreal, we aim to make this year the Paris moment for nature — to end species extinction, increase protections and support a sustainable future for our planet.

Recognising South Africa's status as one of the world's most nature diverse countries, Ministers discussed the importance of the upcoming negotiations for a post-2020 global biodiversity framework at the UN Convention on Biological Diversity meeting in Montreal. The negotiations are an opportunity for the globe to agree a Paris moment for nature, to halt and reverse biodiversity loss by 2030 and to significantly increase the mobilisation of resources to tackle nature loss.

Notes to Editors:

• Pictures from the Kew Gardens and Crick Institute visits will be shared shortly to accompany this release.

Health Partnership:

- The updated strategic health partnership was signed by the Health Ministers of the UK and South Africa during the visit to the Crick Institute. It will drive more effective health systems globally, by:
 - Increasing shared knowledge and expertise, including by drawing on experience from the NHS in England.
 - Improving capacity through training and development.
- The Department of Health and Social Care (DHSC), through the National Institute of Health Research (NIHR), has supported nine research projects led by South African and UK institutions, from 1 August 2022 onwards.
- These projects focus on a diverse range of themes (health systems, non-communicable diseases including mental health, as well as surgery, palliative care, and HIV), UK funding has been provided to six distinct South African research institutions across five cities (Cape Town, Durban, Pretoria, Stellenbosch, and Johannesburg).
- To date the UK's Fleming Fund has invested in the partnership with the National Institute of Communicable Diseases in South Africa to support

Whole Genome Sequencing for antimicrobial resistance surveillance across Africa, which has provided state-of-the art lab equipment, training and analytical support.

- The UK and South African commitment to ending preventable deaths comes following the welcome appointment of President Ramaphosa as Chair of the Global Leaders Network which is advocating for women's, adolescents' and children's health.
- The Francis Crick Institute is the biggest biomedical research facility under a single roof in Europe with researchers from over 70 countries including South Africa.
- Focuses of the Institute include research into TB-HIV co-infection. The Crick African Network includes research on malaria.

Climate Partnership:

- The UK has provided over £250 million towards international climate finance in South Africa over the last decade.
- South Africa is the world's 13th largest CO2 emitter.
- At COP26 in Glasgow the UK, France, Germany, the US and EU (the IPG) announced an ambitious long-term Just Energy Transition Partnership with South Africa that aims to support the decarbonisation of South Africa's economy. A 'Just' approach underpins the plan, aiming to ensure those most directly affected are not left behind.
- Ministers from both countries were able to discuss the ground-breaking Just Energy Transition Partnership, with an <u>Investment Plan</u> set out at COP27. It set out the financial requirements over the next 5 years to begin South Africa's 20-year energy transition. The IPG is mobilising an initial \$8.5bn to catalyse the first phase of the programme.
- South Africa is the third most biodiverse country in the world, home to a third of all succulent plant species, 10% of the world's overall plant species, one-sixth of the world's marine species along its vast coastline, as well as 7% of birds, 5% of mammals, and 4% of reptiles. Much of South Africa's biodiversity is at present greatly endangered, with poaching and illegal trade driving some species to extinction.
- Kew's seed banking collaboration with SANBI is now in its third decade, starting in 1996.

UK Government statement on Supreme Court ruling on draft independence referendum bill

Press release

Alister Jack said that the UK Government was committed to working with the

Scottish Government on the issues that matter most to people in Scotland.



The UK Supreme Court has today determined that the draft Scottish Independence Referendum Bill is outside the powers of the Scottish Parliament.

The Secretary of State for Scotland, Alister Jack, said that the UK Government was committed to working with the Scotlish Government on the issues that matter most to people in Scotland.

Alister Jack said:

We note and respect the unanimous ruling from the Supreme Court today.

People in Scotland want both their governments to be concentrating all attention and resources on the issues that matter most to them. That's why we are focussed on issues like restoring economic stability, getting people the help they need with their energy bills, and supporting our NHS.

Today alone, 11.6 million UK pensioners — around one million in Scotland — are starting to receive up to £600 to help with their energy bills this winter.

As the Prime Minister has made clear, we will continue to work constructively with the Scottish Government in tackling all the challenges we share and face.

Notes to editors:

- For further information contact the Scotland Office on 07920 155186 / pressoffice@ukgovscotland.gov.uk
- 2. Today's <u>Supreme Court judgment</u> in relation to the reference to Supreme Court by the Lord Advocate under paragraph 34 of schedule 6 to the Scotland Act 1998.
- 3. The UK Government's written submissions to the Court.
- 4. The UK Government set out its arguments at the <u>hearing on Tuesday 11 and Wednesday 12 October 2022</u>.

South Africa: statement on gender equality

World news story

The UK and South Africa share a strong commitment to upholding women's rights and gender equality at home and overseas.



Our respective national laws and policy enshrine equality, ensuring that no matter your gender identity or sexual orientation every individual has a right to equal opportunity and a life free from violence and discrimination. Both the UK and South Africa were consistently strong voices in efforts to secure a Global Goal on Gender equality, including objectives to address violence against women and girls and improve sexual and reproductive health and rights.

Our shared commitment to addressing gender-based violence is highlighted this very month through South Africa's Presidential Summit on Gender Based Violence (GBV) and Femicide, hosted by President Ramaphosa at the beginning of November in Pretoria and the Prevention of Sexual Violence in Conflict conference, hosted by the UK at the end of this month during the global 16 Days of Activism to End Violence Against Women. The UK is also pleased to be continuing its partnership with South Africa's Gender Based Violence and Femicide Response Fund.

While much progress has been made since the international community agreed the Global Goals, including Gender Goal 5, it is clear that significant challenges remain until we realise our shared ambition. The COVID-19 pandemic shone a shocking spotlight on the scourge of intimate partner violence around the world, including in the UK and South Africa.

In recent years we have witnessed movements seeking to undermine the right of a woman to make decisions about her body. We will not stand by and watch any rollback of women's rights. This is why, alongside our ongoing work to improve gender equality at home, the UK and South Africa commit to working together to uphold women's rights internationally.

We will strengthen our partnership and use our position in global fora to galvanise progress toward Gender Goal 5, uphold women's rights and create a more equal society for all.

Sharing will open the page in a new tab

Published 23 November 2022

UK finalises landmark data decision with South Korea to help unlock millions in economic growth

- Organisations will be able to transfer personal data securely to the Republic of Korea without restrictions by the end of the year following legislation
- UK decision will help generate an estimated £14.8 million in annual business savings and increased exports
- Milestone formalises first data adequacy decision since UK left the

European Union and goes beyond scope of previous EU deal — boosting investment.

UK organisations will be able to share personal data securely with the Republic of Korea before the end of the year as the UK finalises legislation for its first independent adequacy decision.

Allowing businesses in both countries to share data without restrictions will make it easier for them to operate and grow. Once in force, the <u>legislation</u> is estimated to cut administrative and financial burdens for UK businesses by <u>fl1 million a year</u> and is expected to increase exports to South Korea by £3.8 million annually.

Personal data is information related to an individual, such as a name or email address, and data must be protected to a high standard to ensure it's collected, shared and used in a trustworthy way.

After agreeing to a <u>data adequacy agreement in principle</u> in July 2022, the UK government has completed its full assessment of the Republic of Korea's personal data legislation. The government has concluded that the Republic of Korea has strong privacy laws in place which will protect data transfers to South Korea while upholding the rights and protections of UK citizens.

Before now, organisations needed to have costly and time-consuming contractual safeguards in place, such as standard data protection clauses and Binding Corporate Rules. The new freedoms will open up opportunities for many small and medium sized businesses who may have avoided international data transfers to Korea due to these burdens.

Removing barriers to data transfers will also boost research and innovation by making it easier for experts to collaborate on medical treatments and other vital research which could save lives in the UK. For example, secure international personal data transfers are essential for developing effective medical treatments like vaccines.

UK Data Minister Julia Lopez met with representatives of the Korean Personal Information Protection Commission today to mark the legislation being laid in Parliament, which is expected to come into force from the 19th December.

This is the UK's first decision to recognise <u>a priority country</u> adequate since leaving the European Union (EU).

The UK's adequacy decision is broader than the EU's deal with South Korea. The most significant difference between the two deals is that UK organisations will be able to share personal data related to credit information with the Republic of Korea to help identify customers and verify payments. The ability to share this type of data will help UK businesses with a presence in the Republic of Korea to boost credit, lending, investment and insurance operations in the Republic of Korea.

Data Minister Julia Lopez said:

- "Before the end of the year, businesses will be able to share data freely with the Republic of Korea safe in the knowledge it will be protected to the high privacy standards we expect in the UK.
- "Removing unnecessary burdens on businesses will help unleash innovation, drive growth and improve lives across both our countries."

Ko Haksoo Chairperson of the Korean Personal Information Protection Commission said:

- " It's a great pleasure for us to see the outcome of the UK's adequacy decision for the Republic of Korea today.
- " I look forward to strengthening our partnership in promoting the trustworthy use and exchange of data between Korea and the UK based on a high level of data protection."

□□The Republic of Korea is one of the fastest growing markets for the UK, with more than two-thirds of British services exports to the country dataenabled.

John Edwards, UK Information Commissioner, said:

- "We support the Government in undertaking adequacy assessments to enable personal data to flow freely to trusted partners around the world.
- "We provided advice to the Government during this assessment of the Republic of Korea, and we are satisfied with the Government's recognition of similar data protection rights and protection in Korean laws. This will bring certainty to UK businesses and reduce the burden of compliance, while ensuring people's data is handled responsibly."

Ends

Notes to Editors:

- Please see here the <u>Statutory Instrument (legislation</u>) that will give effect to the UK's adequacy decision for the Republic of Korea, is expected to come into effect on the 19th December.
- Please see here the <u>Explanatory Memorandum</u> sets out the purpose of the Statutory Instrument.
- Please see here the Impact Assessment which sets out the objectives of the costs, benefits and risks.
- In August 2021, the UK <u>announced</u> the Republic of Korea as a priority country for data adequacy assessments alongside the United States, Australia, Singapore, the Dubai International Finance Centre and Colombia. The government continues to make excellent progress in its

assessment of these other priority countries.

- Data enabled services exports to these destinations are already worth more than £80 billion. The ability to unlock more growth and allow us to share crucial information, such as life-saving research and cutting-edge technology innovation across our borders.
- DCMS sectors, like tech, telecoms and the creative industries, contributed £211 billion to the economy last year and support more than four million jobs across the UK. And they are creating new jobs, with 250,000 more jobs now than in 2019, before the pandemic.
- Exports of services by the digital sector were worth £56 billion in 2020, which is around a fifth of the UK's total service exports.