HMGCC

HMGCC Co-Creation

Challenge: Use of AI in screening individuals of interest

Summary of the challenge

Can your organisation demonstrate how AI can assist with screening individuals of interest?

HMGCC Co-Creation is offering to fund organisations for this 12-week feasibility project to show how AI tools can assist with screening and support the national security mission.

Full funding is provided for time, materials, overheads and other indirect expenses. There is no determined total budget amount, as the strength of received proposals will be a factor. Multi-organisation consortia are encouraged to apply.

Key information

Budget per single organisation, up to	**£60,000**
Budget per consortium, up to	**£120,000**
Project duration	**12 weeks**
Competition opens	**Monday 18 March 2024**
Competition closes	**Thursday 9 May 2024**

Context of the challenge

The UK national security community exists to protect the safety and security of the UK. The Secret Intelligence Service (SIS), also known as MI6, has approached HMGCC Co-Creation with a requirement to streamline screening individuals of interest, potentially using automation and/or AI to develop further insights.

The gap

Screening requires multiple data sets, analysis and due diligence of decision making, with appropriate data handling, oversight and governance. This has worked incredibly successfully for many years, but can you help us shape the future with AI?

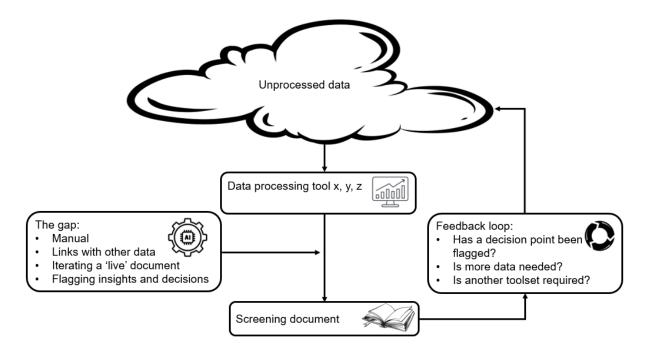A visualisation of the current process is shown in Figure 1.

Figure 1. Illustration of the high-level steps of screening.

Unprocessed data, is analysed by many different tools, depending on the type of data. It is often a manual process and can involve many different stakeholders. It is highly iterative if more data or analysis is required.

It is believed that by using recent and future developments in AI, this otherwise complex working process could be made simpler. Extra value could be added by linking with other historical data as well as flagging key insights and decision points as new data becomes available.

Example use case

Sam, an SIS employee has the task of screening 100 individuals of interest.

Currently this is a complex process involving the use of multiple tools to gain insight from unstructured data.

Sam repeats the process with different collections of information.

The next challenges for Sam are:

- Filtering insights that are relevant.
- Recognising patterns in behaviour and data.
- Iterating and then drawing insights when working with multiple data sets.
- Ensuring a connection with a parallel or a historic search has not been missed.
- Focussing resource on the most relevant information.

It is thought that by using AI, this process could be partially automated during Sam's research and similarities with other screenings spotted. Important insights, gaps in knowledge or key decisions could be flagged to a person.

Applications for this technology in alternative sectors may include recruitment agencies, the banking Know Your Customer (KYC) process and risk assessment in insurance.

Project scope

SIS is keen to access novel technology solutions, however it is recognised that new developments are unlikely to occur to any significant level over a 12-week period. SIS is looking to work with solution providers on mid-TRL products with the aim of long term collaborations. A 12-week project may include:

- Horizon scanning and detailing the art of the possible
- Demonstrating existing developments in a relevant environment, perhaps from parallel sectors such as insurance, banking and social media.
- Working with solution providers to examine how a tool could be pivoted for the SIS use case.

To help steer, t could have the following features:

- Natural language input
- Flag areas of interest or further investigation
- Audit log of decisions and flags
- Ability to automate case record updates as new information becomes available
- Must be used on premises without public cloud connectivity.

Dates

Competition opens	Monday 18 March 2024
Online briefing call date	Tuesday 9 April 2024
Online registration for briefing call	[Eventbrite registration](#)
Clarifying questions published	Tuesday 7 May 2024
Competition closes	Thursday 9 May 2024
Applicant notified	Friday 31 May 2024
Pitch day in London	Wednesday 19 June 2024
Target project kick-off	Aug 2024

Eligibility

This challenge is open to sole innovators, industry, academic and research organisations of all types and sizes. There is no requirement for security clearances.

Solution providers or direct collaboration from [countries listed by the UK government under trade sanctions and/or arms embargoes](#), are not eligible for HMGCC Co-Creation challenges.

How we evaluate

All proposals, regardless of the application route, will be assessed by the HMGCC Co-Creation team. Proposals will be scored 1–5 on the following criteria:

Scope	Does the proposal fit within the challenge scope, taking into consideration cost and benefit?
Innovation	Is the technical solution credible, will it create new knowledge and IP, or use existing IP?
Deliverables	Will the proposal deliver a full or partial solution, if a partial solution, are there collaborations identified?

Timescale	Will the proposal deliver a minimum viable product within the project duration?
Budget	Are the project finances within the competition scope?
Team	Is the organisation / delivery team credible in this technical area?

Invitation to present

Successful applicants will be invited to a pitch day, giving them a chance to meet the HMGCC Co-Creation team and pitch the proposal during a 20-minute presentation, followed by questions.

After the pitch day, a final funding decision will be made. For unsuccessful applicants, feedback will be given in a timely manner.

Clarifying questions

Clarifying questions or general requests for assistance can be submitted directly to cocreation@hmgcc.gov.uk prior to the cut-off date. These clarifying questions may be technical, procedural, or commercial in subject, or anything else where assistance is required. Please note that answered questions will be published to facilitate a fair and open competition.

Routes to apply

HMGCC Co-Creation is working with a diverse set of multiple community collaborators to broadcast and host its challenges. Please follow this link for the full list of community collaborators.

If possible, please submit applications via a community collaborator.

If the community collaborator does not host an application route, please send applications directly to cocreation@hmgcc.gov.uk, including the challenge title with a note of the community collaborator where this challenge was first viewed.

All information you provide to us as part of your proposal, whether submitted directly or via a collaborator platform, will be handled in confidence.

HMGCC
Co-Creation

How to apply

Applications must be no more than six pages or six slides in length. The page/slide limit excludes personnel CVs and organisational profiles.

There is no prescribed application format, however, please ensure your application includes the following:

Applicant details	Contact name, organisation details and registration number.
Scope	Describe how the project aligns to the challenge scope.
Innovation	Describe the innovation and technology intended to be delivered in the project, along with new IP that will be generated or existing IP that can be used.
Deliverables	Describe the project outcomes and their impacts.
Timescale	Detail how a minimum viable product will be achieved within the project duration.
Budget	Provide project finances against deliverables within the project duration.
Team	Key personnel CVs and expertise, organisational profile if applicable.

HMGCC Co-Creation terms and conditions

Proposals must be compliant with the HMGCC Co-Creation terms and conditions. By submitting your proposal you are confirming your organisation's unqualified acceptance of HMGCC Co-Creation terms and conditions.

Commercial contracts and funding of successful applications will be engaged via our commercial collaborator, Cranfield University.

HMGCC Co-Creation supporting information

HMGCC works with the national security community, UK government, academia, private sector partners and international allies to bring engineering ingenuity to the

national security mission, creating tools and technologies that drive us ahead and help to protect the nation.

HMGCC Co-Creation is a partnership between HMGCC and Dstl (Defence Science and Technology Laboratory), created to deliver a new, bold and innovative way of working with the wider UK science and technology community. We bring together the best in class across industry, academia, and government, to work collaboratively on national security engineering challenges and accelerate innovation.

HMGCC Co-Creation is part of the NSTIx Co-Creation network, which enables the UK government national security community to collaborate on science, technology and innovation activities and to deliver these in partnership with a more diverse set of contributors for greater shared impact and pace.

HMGCC Co-Creation aims to work collaboratively with the successful solution providers by utilising in-house delivery managers working Agile by default. This process will involve access to HMGCC Co-Creation's technical expertise and facilities to bring a product to market more effectively than traditional customer/supplier relationships.

FAQs

1. Who owns the intellectual property?

As per the HMGCC Co-Creation terms and conditions, project IP shall belong exclusively to the solution provider, granting the Authority a non-exclusive, royalty free licence.

2. Who are the end customers?

National security users include a wide range of different UK government departments which varies from challenge to challenge. This is a modest market and so we would encourage solution providers to consider dual use and commercial exploitation.

3. What funding is eligible?

This is not grant funding, so HMGCC Co-Creation funds all time, materials, overheads and indirect costs.

4. How many projects are funded for each challenge?

On average we fund two solution providers per challenge, but it does come down to the merit and strength of the received proposals.

5. Do you expect to get a full product by the end of the funding?

It changes from challenge to challenge, but it's unlikely. We typically see this initial funding as a feasibility or prototyping activity.

6. Is there the possibility for follow-on funding beyond project timescale?

Yes, if the solution delivered by the end of the project is judged by the HMGCC Co-Creation team as feasible, viable and desirable, then phase 2 funding will be made available.

7. Can we collaborate with other organisations to form a consortium?

Yes, in fact this is encouraged, and additional funding may be made available as per the outlined budget.

8. I can't attend the online briefing event, can I still access this?

Yes, on request it will be made available after it has been broadcasted. This will be made available via the HMGCC Co-Creation community collaborators.

9. Do we need security clearances to work with HMGCC Co-Creation?

Our preference is work to be conducted at OFFICIAL, we may however, request the project team undertake BPSS checks or equivalent.

10. We think we have already solved this challenge, can we still apply?

That would be welcomed. If your product fits our needs, then we would like to hear about it.

11. Can you explain the Technology Readiness Level (TRL)?

Please see the UKRI definition for further detail.

12. Can I source components from the list of restricted countries, e.g. electronic components?

Yes, that is acceptable under phase 1 - feasibility, as long as it doesn't break UK government trade restrictions and/or arms embargoes.

Further considerations

Solution providers should also consider their business development and supply chains are in-line with the National Security and Investment Act NPSA trusted research and secure innovation advice.

Advice and guidance on how to keep your organisation secure online can also be found through the National Cyber Security Centre.

Disclaimer: This information may be exempt from disclosure under the Freedom of Information Act 2000 and may be subject to exemption under other UK legislation law. Refer disclosure to the originating department.

HMGCC
Co-Creation