

Joint Israel-UK Research in Cyber Security

Call type: Invitation for proposals

Closing date: 24 June 2014

Call available on Je-S: 16 June 2014

Related themes: Global uncertainties, ICT

Summary

Israel's National Cyber Bureau (INCB) and Ministry of Science, Technology and Space (MOST), and the UK's Cabinet Office (CO) and Engineering and Physical Sciences Research Council (EPSRC) (from here on 'the Agencies') wish to encourage joint research activities in cyber security.

Through a single, shared process which is managed by EPSRC on behalf of the Agencies, we expect to identify and support up to three collaborations, each of which involves leading academic researchers in both the partner countries. While funding for researchers in Israel and UK will ultimately be provided separately by their respective Governments, the key to success in the call will be the identification of a programme of work which is of high scientific quality and truly collaborative.

Proposals for new projects in any area relevant to cyber security, from new or established partnerships, are welcome. We intend to fund a balanced programme of research in which the individual projects can work together to maximise mutual benefit.

Collaborations will need to prepare a single, unified, proposal which describes a full programme of work in both countries. This will be submitted to EPSRC by the UK lead organisation on behalf of the research partners in both the UK and Israel. Projects should last between 25 and 30 months, to start in Spring 2015 and end no later than December 2017.

Background

Building on previous initiatives intended to foster stronger research links between Israel and the UK, the Agencies would like to strengthen collaboration between our nations' best cyber security researchers.

The challenges of cyber security are global and do not respect national boundaries. Solutions to the problems with which we are faced will need to be developed and implemented in a shared way to reflect this fact.

This call is open to proposals, in any area of research, which have real potential to enhance our understanding of cyber security and strengthen relationships between researchers in the UK and Israel. In particular we welcome projects which address shared challenges in:

- Smart authentication and identity management
- Governance and regulation of cyber security
- Privacy assurance and perceptions
- Mobile and Cloud security
- Human aspects of security or usable security
- Cyber-resilient systems

Structure of this call

The Agencies have agreed that project proposals will be written, submitted and assessed as a single, unified proposal to EPSRC, and that funding decisions will be made on that basis: one joint proposal, one common decision.

While the process of developing the content of the proposal will need to be shared between the partner researchers in Israel and the UK, responsibility for submitting the full application to EPSRC will rest with the UK lead, as only UK organisations can access the EPSRC's Je-S system.

Some of the guidance on preparing and submitting a proposal in this call document is applicable to the collaboration as a whole and some just to the UK lead partner. This document will make it clear where guidance is only relevant to the UK lead responsible for submitting the proposal to EPSRC. Copies of all the proposals received will be sent to MOST by EPSRC.

If overall project approval is given, funding for researchers in Israel will be provided by the INCB and MOST through a separate contract to be set up by MOST based on the contents of the proposal submitted to EPSRC (see section 'Guidance on writing application' below) and in accordance with MOST's rules and regulations concerning research contracts within bi-national programs. Funding for UK researchers will be provided by the Cabinet Office through EPSRC grants prepared according to the budgets given in the EPSRC proposal.

Eligibility

Eligibility of UK applicants is covered by the normal EPSRC requirements. For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding

Guide: <http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/>

As this call is a targeted funding opportunity provided by EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of organisations eligible to apply to EPSRC is provided at: <http://www.rcuk.ac.uk/funding/Eligibilityforrcs>

Israeli partners must be affiliated with an Academic Institution, meaning an accredited institution of higher learning in Israel, according to the Council for Higher Education Law, 1958, or a public research institute with experience in the relevant fields. For the purposes of this Call a "public research institute" means a research institute whose main activity is the advancement of cutting-edge scientific knowledge, which possesses appropriate infrastructure and equipment and which employs researchers who, inter alia, publish articles related to their research in leading scientific journals and who present their research at international symposia.

Funding available

The Agencies will make available enough funding to support up to three projects. Either both national elements of a joint project will be funded or none at all – there will be no funding for just one country's component of any project.

Proposals must request funding for a new programme of concurrent research activity in both Israel and the UK. Contributions to existing programmes of work funded from other sources, or projects which are resourced disproportionately in either country, are not allowed.

International collaborations require time to develop effectively and may gain momentum more slowly than those which have no geographical barriers to overcome. To reflect this, in this call the Agencies expect to support projects which involve less intense activity over a longer period. This will ease critical time pressures and help ensure that there is genuine long-lasting added value from the collaboration.

The total funding for this Call is up to £1200k, which is £600k in each partner country. Given the differing absolute costs of research in the UK and Israel, the Agencies cannot specify exact funding maxima for applications. We expect to see proposals requesting funding from the Agencies in each country of around £200k ± £10k. (In the UK £200k will be the 80% fEC amount actually awarded to the university; in Israel the equivalent of £200k is the maximum contract that MOST will issue.) In the event that less than three collaborations are supported the Agencies are entitled to reduce the total funding for this Call proportionately.

Funding for the approved projects depends on the availability of funds in the State Budget of both countries. The parties to this Call reserve the right to cancel this Call, even after projects have been approved, and/or not to fund a second year of work for scientific-professional, administrative, budgetary or policy reasons.

Funded Expenses

For this call it is expected that in general projects should request funding sufficient to support:

- up to about 18 person months of research effort in total. In the UK this may be a mixture of permanent academic time and research staff working specifically on this project as per the usual RCUK rules. In Israel this may only be for stipend or salary for PhD students, post-doctoral fellows, technicians and/or laboratory workers (i.e. a temporary position up to 2 or 3 years) retained specifically for the purpose of the project.
- consumables
- small scale equipment
- travel costs and in-country living expenses between the UK and Israel, in accordance with the relevant MOST and RCUK rules and regulations.
- reasonable periods of co-located working in the form of exchanges of research staff between the collaborating institutions
- adequate dissemination to a range of audiences in both countries

All of this to take place over a period of between 25 and 30 months.

Given the potential complexity introduced by the international dimension of this work we do not expect that more than one research organisation from each country will be involved in a single application. Multiple separate applications to the call from the same organisation or individual, with the same or different partners, are however allowed.

How to apply

Submitting application

The UK lead applicant is responsible for final submission of the proposal using the UK Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Standard Proposal'
- Scheme 'Standard'
- On the Project Details page you should select the 'Joint Israel-UK Research in Cyber Security' call.

This call will not be visible in Je-S until 16 June 2014. You will not be able to create a new application until that date.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission

process between submitting your proposal to them and the call closing date. EPSRC must receive your application by 16:00 on 24 June 2014.

Costs sought by the research partners in Israel and the UK must conform to the rules applying in their respective home country.

For UK applicants, guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<http://www.epsrc.ac.uk/funding/howtoapply/>) which should be consulted when preparing all proposals.

For applicants in Israel, guidance on the types of support that may be sought is available from MOST on its website (<http://www.most.gov.il>)

Guidance on writing application

Responsibility for producing the content of the combined application is shared by all the researchers involved in the collaboration, in both Israel and the UK.

While the proposal as a whole will need to present to reviewers a unified, cohesive summary of a combined research programme, the completed Je-S form (which sets out the request for funding for the UK component of the project to EPSRC) and other application documents submitted to EPSRC will need to conform to the normal EPSRC requirements.

As a minimum the application will need to include the following documents:

- 1) A completed 'Proposal form'

As it will be used to create a grant offer letter for successful UK applicants **this form must only include the costs requested by the UK partners**. Costs ultimately sought for the components of the project which will be carried out in Israel should be detailed in a separate document (see below.)

All travel and subsistence costs incurred by UK partners must be included in this form, including those associated with extended research visits by UK researchers to Israel. If desired, partners from Israel participating in staff exchanges may be included as 'Visiting Researchers' on this form and their associated travel and subsistence costs may be requested. EPSRC will not meet Visiting Researchers' salary costs.

Where there are costs associated with shared activities (for example a final project dissemination event) these may either be included in the request from just one partner or divided and shared by both. In any case it is expected that the overall resource requirements should be reasonably balanced between the partner countries.

Please note that the total costs requested in support of the research component hosted in Israel should be included on the Je-S proposal form as a 'Project Partner' contribution from the MOST.

2) A 'Case for support'

Written in English, **this document should seamlessly describe the complete programme of research in both countries.** It will be the main source of evidence used to evaluate the project proposal and so must contain all the information that the reviewers will require to do so effectively.

Limited to nine pages in total (no annexes/appendices allowed) it should contain two sections:

- i) a two page summary of the applicants and their track records in research
- ii) a further seven pages which describe the research project in detail. An additional page, above the normal six allowed under EPSRC rules, is allowed within this limit to accommodate a more detailed explanation of the collaboration itself. For example: any previous joint work, the added value from the collaboration, details of how it will be managed etc.

For the benefit of the reviewers we advise you to summarise the full costs of the project somewhere in the 'Case for support' and to explain why the costs in the complete Je-S form do not match them.

3) A diagrammatic 'Workplan'

As for a normal EPSRC application, and to summarise the entire project

4) An 'Impact plan'

As for a normal EPSRC application, and to summarise the entire project

5) A 'Justification of resources'

As for a normal EPSRC application, and to summarise the entire project including the resources in Israel

6) An 'Additional document' which clearly identifies the total costs sought from INCB/MOST for the components of the project which will be carried out in Israel. This should be in the form of the standard MOST template for budget details and description. This document should contain sufficient detail for MOST to prepare a contract to the successful organisation without further information.

Depending on the content of the proposal, other documents may need to be added as a result of the usual EPSRC requirements (which might include CVs for named researchers or letters of support from Project Partners as detailed on the EPSRC website and in the Funding Guide) or additional requirements from Israel (for example, in contrast to EPSRC MOST asks for CVs for academic staff who in the UK would be described as the Principal Investigators.) These should not include letters from the academic organisations applying for funding as it is already assumed that they support the collaboration. No other documentation will be accepted.

If the attachments are uploaded as Word documents, please be aware that once the application has been submitted to the Council, all the attachments will be converted and held as an Adobe Acrobat file (PDF). Also please note, that whilst we support a wide range, **we do not support all MS Word font types**. Therefore if an unsupported font type is used a different font type may be substituted which may result in changes to the layout of the document. For this reason we recommend that the documents are converted to PDF files before uploading.

For advice on writing proposals see:

<http://www.epsrc.ac.uk/funding/howtoapply/preparing/>

Assessment

Assessment process

In order to facilitate the process, it has been agreed that EPSRC will manage the process of the current Call on behalf of the Agencies.

Following basic checks on receipt by EPSRC, each proposal will be sent out to anonymous reviewers for comments. As is usual with EPSRC proposals, we require suggestions for three reviewers from the applicants themselves, and we guarantee that we will request a review from at least one of these. The remaining reviewers will be identified by the Agencies in Israel and the UK jointly.

All proposals considered by the Agencies, on the basis of the reviewers' comments received, to be of sufficient quality to progress to the next stage will be further assessed by an expert panel. Proposals not meeting a minimum standard may be rejected before the expert panel stage.

Applicants will be invited to respond to their reviewers' comments before the panel meeting, and the panel will see this response. As is generally the case for this call, while the responsibility for producing a response is shared across the collaboration as a whole, the UK lead is ultimately responsible for submitting the document to EPSRC.

The panel membership will be decided jointly by the Agencies. The panel will use the evidence contained in the reviewers' reports, the collaboration's response to these comments, and their own judgement of the balance of the proposals received to prioritise them and make a final funding recommendation to the Agencies.

Assessment criteria

Proposals will be assessed in light of the following criteria:

- Scientific quality and excellence
- Importance (NB reviewers will be directed to disregard specific references to the UK and EPSRC when completing this section on the reviewers' form, and instead to take a more general view of the stated benefits of the research)
- Impact
- Applicant
- Resources and management
- Collaboration (to be carried out under the 'Proposal assessment' heading)

Further advice on the interpretation of each of these criteria can be found at: <http://www.epsrc.ac.uk/newsevents/pubs/standard-calls-reviewer-helptext/>.

Moving forward

Researchers in the UK: a grant offer based on the resources requested in the completed Je-S form will be prepared for successful applicants in the UK. This offer and the subsequent grant will be governed by the standard RCUK terms and conditions.

Researchers in Israel: MOST will prepare a contract for the research based on the figures contained in the additional document submitted with the proposal. This proposal will be added as an integrated annex to the contract, which will be prepared in accordance with the rules and regulations of MOST regarding bi-national research projects.

We expect that work will start in Israel and the UK promptly and as near to simultaneously as possible, and that the research activities in each country will be of similar duration. UK applicants please note that if work in Israel needs to start before work in the UK, the Je-S application should make that clear in the text while indicating the UK start date on the proposal form as this date will be used to prepare the grant offer letter.

Projects should start in Spring 2015 at the latest.

Guidance

Guidance for reviewers

Reviewers will be sent the following additional guidance for use when assessing proposals:

This proposal has been received by the UK's Engineering and Physical Sciences Research Council in response to a call run jointly with the

UK Cabinet Office and Israel's National Cyber Bureau and MOST. Given the international nature of the work, when assessing the research against the 'Importance' criterion please disregard all mention of the UK and EPSRC and instead focus on more general benefit offered to society, industry and economy in both countries. In the 'Proposal assessment' section, please comment specifically on the viability and potential added value of the collaboration between Israel and the UK.

Information about the EPSRC peer review process and guidance for reviewers can be found at: <http://www.epsrc.ac.uk/funding/assessmentprocess/review/>

Additional grant conditions

No specific conditions will be added to grants issued in the UK.

In Israel:

1. Upon approval of a particular project, a contract will be signed, between MOST and the affiliated institution of the lead researcher in Israel.
2. With regard to Israeli research teams: An application for the continuation of research funding for the second-and, where needed, the third - year must be submitted by the affiliated institution of Israeli lead researcher to MOST on the appropriate forms at least two months prior to the end of the first year of the project together with the annual scientific report.

In principle, the project period is 25-30 months. However funding must be approved on an annual basis, with the funding for the second year to be approved in accordance with the provisions of the research contract. The parties to this Call reserve the right not to fund a second year of work for scientific-professional, administrative, budgetary or policy reasons.

3. **Payments**
Payments will be made by MOST to the affiliated institution of each Principal Investigator, in keeping with the provisions of the contracts referred to above, according to MOST's regulations and practices.
4. **Reports**
Reporting requirements for each national research team are set out in the research contract between each team's affiliated institution

and the relevant Agency to this Call. These include a final scientific and financial report covering the work carried out during the entire two-year project period, which must be submitted within 45 days of the conclusion of the project as well as interim scientific reports in accordance with the contract's requirements.

The Principal Investigators will submit a joint summary of the final report to MOST and the EPSRC in English.

Note: The Israeli lead researcher must submit a scientific report to the Ministry of Science, Technology and Space two months prior to the end of the first year of the research contract, together with the application for continuation of research funding

SPECIAL PROVISIONS REGARDING THE ISRAELI APPLICANT

All procedures and activities under this Call or the projects approved hereunder, including the eligibility of institutions via which applications must be filed, are subject to the standard MOST Procedures Regarding International Collaborative Scientific Projects and Scholarships Funded by MOST and to the MOST Standard Contract for Scientific Projects (both documents referred to hereinafter as "the standard terms").

Applicants are required to familiarize themselves with the standard terms before filing an application under this Call; filing an application constitutes a declaration that the applicant has done so and agrees to be bound by the provisions thereof.

In the event of any inconsistency between the terms of this Call and the standard terms, the terms of this Call shall prevail

Key dates

Date	Activity
Beginning April 2014	Call issued
16 June 2014	Call live in Je-S
24 June 2014	Call closes
June-September 2014	Proposals assessed by reviewers

Date	Activity
October 2014	Applicants respond to reviews; Agencies decide which proposals, if any, should not be sent to panel
October-November 2014	Panel meets; funding recommendations made
December 2014	Preparation of offers to successful applicants
Spring 2015	Projects start

Contacts

Any queries regarding the submission of proposals through Je-S should be directed to the UK Je-S helpdesk:

JeSHelp@rcuk.ac.uk, tel. 01793 444164

UK lead applicants with enquiries about technical areas of the call, the assessment process or the format of proposals should contact:

Alex Hulkes (alex.hulkes@epsrc.ac.uk), tel. 01793 444116

Please contact your university research office for help and advice on writing your proposal and allow enough time before the closing date for your organisation's submission process.

Partners in Israel with enquiries about technical areas, eligibility of costs or the process for award should contact:

Tal Steinherz, INCB (talst@pmo.gov.il), tel. 03-7450810

Avi Anati, MOST (avi@most.gov.il), tel: 02-5411170

Change log

Name	Date	Version	Change
Alex Hulkes	14/4/14	1	N/A
Alex Hulkes	20/5/14	2	Call live in Je-S on 16 June