Understanding of the Impacts of Hydrometeorological Hazards in South East Asia

Integration Proposals

Announcement of Opportunity

Issued on: w/c 15th April

Proposal deadline: 4pm on 26th June 2019

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Information about your application, including the personal information provided on the forms, will be processed and stored electronically by the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia Secretariat and representatives of Understanding of the Impacts of Hydrometeorological Hazards in South East Asia Funders (UKRI).

Your application and personal information will be stored by the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia programme for management purposes but will not be shared with other organisations outside the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia partnership. We will use details provided in the application for correspondence about the call and may also use this information for future analyses of the performance of the programme.

By submitting your application to the Understanding of the Impacts of Hydrometeorological hazards in South East Asia Programme you have indicated your acceptance of these data protection terms and conditions.

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1. Summary

This Integration call of the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia (Hydrometeorological Hazards) programme aims to deliver added value and impact by supporting the integration and synthesis of the outputs from the individual Hydrometeorological Hazards projects. Only the UK Principal Investigators and Co-Investigators of the current projects of the five bilateral programmes under the Hydrometeorological Hazards programme are eligible to apply to this call, but partners in South East Asia will be able to claim some costs. Proposals must bring together two or more projects of the Hydrometeorological Hazards programme and support collaborations within countries or across participating countries in South East Asia.

This call is supported by the UK through the Newton Fund which forms part of the UK governments Official Development Assistance (ODA) commitment. Up to £300k is available for this call, with a maximum budget of £40k (80% FEC) for individual projects. It is anticipated
that approximately eight projects will be funded, with the earliest anticipated start date in September 2019. This Integration call is funded by the UK Newton fund and can therefore only cover staff time of UK researchers. Limited costs, e.g. travel and subsistence costs for meeting attendance, can be funded for South East Asian partners. Funding will be added to the current grants, and must complete within the time frame of the main research grant.

2. Programme Background

Understanding of the Impacts of Hydrometeorological Hazards in South East Asia (Hydrometeorological Hazards) is a three-year research programme that aims to improve understanding of the impacts of hydrometeorological hazards such as floods, droughts, landslides and storm surges in South East Asia. The programme was launched in collaboration with the following countries and funding partners:

- Indonesia - The Ministry of Research, Technology & Higher Education of the Republic of Indonesia (Ristekdikti), NERC and the Economic & Social Research Council (ESRC)
- Philippines - The Department of Science & Technology's Philippine Council for Industry, Energy & Emerging Technology Research & Development (DOST-PCIEERD) and NERC
- Viet Nam - National Foundation for Science & Technology Development (NAFOSTED), NERC and ESRC
- Malaysia - Ministry of Education (MoE), NERC and ESRC
- Thailand - Thailand Research Fund (TRF), NERC and ESRC.

The focus of the programme is on identifying, characterising and predicting the environmental and social variables that influence the occurrence, impact, severity and duration of hydrometeorological hazards in South East Asia to enable increased preparedness and resilience to future events. It includes the following research challenges:

- Understanding the susceptibility of different catchments or coastal regions to hydrometeorological hazards
- Exploring how different environmental variables interact and combine to determine the risks from hydrometeorological hazards
- Understanding how governance and institutional arrangements contribute to the risks from hydrometeorological hazards
- Exploring whether changes in the way water resources are managed can mitigate the risks from hydrometeorological hazards

Projects in the Hydrometeorological Hazards programme work closely with end-users to ensure that the outputs can be used by government, local authorities, businesses and local communities to make decisions about the management and mitigation of hydrometeorological hazards. Further details on the original call can be found on the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia website. Eighteen projects were funded over the five bilateral research programmes, and the funded projects are listed in Annex A.

NERC funds for this programme have been received directly from the Department for Business, Energy & Industrial Strategy (BEIS) as part of the Newton Fund. The Fund forms part of the UK’s Official Development Assistance (ODA) commitment which is monitored by the Organisation for Economic Cooperation and Development (OECD). ODA funded activity focuses on outcomes that promote the long-term sustainable growth of Newton Fund partner countries and is administered with the promotion of the economic development and welfare of
partner countries as its main objective. Collaborations under the call will contribute to economic development and social welfare in (country), in line with the Newton Fund’s aims. All applications under this call must be compliant with these specifications.

3. Scope

3.1 Programme objectives

The aim of this Integration call is to deliver added value to the programme by supporting collaboration between projects of the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia programmes. Projects can focus on integration of projects within country or across the five Newton partner countries in South East Asia. The results and findings from at least two individual projects should be integrated to inform the development of more robust, accessible evidence and information for users. Outputs will directly improve risk assessment and support policy development in the management and mitigation of hydrometeorological hazards in South East Asia.

The Newton Fund requires that the funding be awarded in a manner that fits with ODA guidelines. All applications must therefore be compliant with these guidelines. Applicants must demonstrate how the main research outcomes will be specific to economic development and social welfare of the partner country, rather than merely creating the conditions where these might occur. Applicants should consider how their project will:

- address poverty and development issues;
- address the issue identified effectively and efficiently;
- use the strengths of the UK to address the issue;
- demonstrate that the research component is of an internationally excellent standard.

It is expected that through collaboration the projects should seek to increase the skills and knowledge base at the partners institutions in this area, improving their ability to undertake and disseminate research in order to maximise the countries impact on issues of poverty and economic growth.

Any UK benefits arising as a result of the project must be secondary, as the primary purpose of the project must be to support the economic development and welfare of partner countries.

UK researchers must demonstrate that the research is compliant with ODA requirements and therefore eligible to receive support from the Newton Fund. Applicants should address these points in the Case for Support.

3.2 Proposal requirements

Integration projects should build on two or more current projects under the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia programme.

Projects must address the programme’s aim to improve understanding of the impacts of hydrometeorological hazards and the proposed work must be oriented towards maximised impact for stakeholders in the management and mitigation of hydrometeorological hazards in South East Asia. To achieve this Integration projects should include a range of research and innovation activities.
Integration projects may entail overarching research and/or innovation activities, or combined analysis of research outputs from individual Understanding of the Impacts of Hydrometeorological Hazards in South East Asia projects, which would help ensure cohesive outcomes of the programme. This may include novel, innovative, risky ideas for merging the outcomes of the research through meta-analysis or the development of overarching models to the development of information and products for users.

Stakeholder engagement should be a key component of the Integration projects to ensure that the outputs of research support increased preparedness and resilience to hydrometeorological hazards, and hence contribute to societal well-being and economic growth in South East Asia.

4. Programme requirements

4.1 Programme funding

Up to £300k is available for this call, which aims to fund approximately eight Integration projects with a maximum size of £40k cost to NERC each. Funding will be added to the current UK grants. As the funding will be added to each of the grants involved in the project a breakdown of the costs requested by each institute is required, see section 5.1.2 Part B. Staff time of South East Asian partners cannot be funded in this call, however, limited costs, e.g. to cover travel and subsistence to join meetings, may be included for researchers from partner countries and will be covered via the UK grant.

It is important to highlight that the UK Research Organisation awarded the grant is responsible for the conduct and administration of the grant. It is accountable for the effective use of public funds, and must therefore ensure that all grant monies are subject to proper financial management processes. It is the Research Organisation’s responsibility to ensure that expenditure on collaborations in the UK and abroad is subject to robust controls to ensure value for money and propriety and that all costs should be fully vouched and maintained for possible inspection and checks by, or on behalf of, the funding organisations (UKRI).

Awards will be made under the standard NERC research grant terms and conditions.

4.2 Capital requests

Capital expenditure (items >£10k in the UK) is not permitted through the Newton Fund.

4.3 Implementation and delivery

It is expected that the Integration projects will vary in size and length depending on the nature of the work being undertaken. Projects will be able to select a start date that aligns with the progress of the current Understanding of the Impact of Hydrometeorological Hazards in South East Asia projects, however the earliest possible start date is in September 2019, and all Integration projects must complete within the time frame of the main research grant.

Funding for successful projects will be added to existing grants in the Understanding of the Impacts of Hydrometeorological Hazards in South East Asia programme in the 2019/20 and 2020/21 Financial Years.
4.4 Reporting requirements

The Integration activities should be included in the progress reports of the current Understanding of the Impacts of Hydrometeorological Hazards projects.

4.5 Awards and extension requests

Due to financial restraints of the Newton Fund Programme, grant extensions will only be considered under exceptional circumstances (in line with the Equality Act 2010) and will require NERC agreement on a case-by-case basis. The Research Organisation remains responsible for compliance with the terms of the Equality Act 2010, including any subsequent amendments introduced while work is in progress, and for ensuring that the expectations set out in the RCUK statement of expectations for equality and diversity are met. Therefore, the Integration projects must complete within the timeframe of the current Understanding of the Impacts of Hydrometeorological Hazards in South East Asia grant.

5. Application process

5.1 How to apply

As funding for Integration projects will be added to existing grants, the proposal does not have to be submitted to Je-S. Instead, the proposal should be submitted to Daniel Knight at newtonseasia@nerc.ukri.org by 16:00 on 26 June 2019.

The proposal must be completed in single-spaced typescript of minimum font size 11 point, Arial font; with margins of at least 2cm. References should also be at least 11 point font. Applicants referring to websites should note that they may not be used in the proposal assessment.

The format of the proposal should include the following:

1. A Case for Support of up to 2 sides A4, clearly stating which existing grants in the Hydrometeorological Hazards programme are involved, and consisting of a description of the proposed work, which should include:
   - Objectives and anticipated outputs, demonstrating how the outputs will contribute to the delivery of the programme objectives
   - Outline of the proposed work and how it addresses user needs
   - Summary of the impact of the proposed work and how it will contribute to better preparedness and resilience to hydrometeorological hazards
   - Evidence that the project meets the ODA compliance criteria.

2. A Justification of Resources, including:
   - PART A - A common Justification of Resources of up to 1 side of A4 for all Research Organisations involved, for all resources sought: Directly Incurred Costs, Investigator effort, use of pool staff resources, any access to shared facilities and equipment.
   - PART B - The Additional Funding Stream proforma form (Annex B, Excel file) should be completed for each research organisation receiving funding to provide a breakdown of the costs so that the additional funding streams can be added to the grants.
As per normal NERC rules, NERC will not provide additional funding to cover fluctuations in exchange rates.

**UK and non-UK organisational budget is indicated below:**

**UK Organisational Budgets:**
- UK organisations will receive 80% of the full economic cost of the project, as per standard Research Council funding rules. UK universities are required to calculate the FEC using the "TRAC" (Transparent Approach to Costing) methodology.
- Other eligible UK organisations use an equivalent methodology, which has been validated by the Research Councils.
- Overseas travel and expenses costs incurred by members of UK institutions will be paid at 80% and must be included as costs related to that UK institution.
- Costs for non UK organisations (e.g. travel and subsistence costs) will be supported at 100% of the Directly Incurred costs.

3. **Data Management Plan**
Separate data management plans are not required for the Integration projects, but project teams will be expected to update their existing data management plans to include data generated by the Integration and Impact work where applicable.

5.2 **Eligibility**

This is a closed call. UK Principal Investigators and Co-Investigators of the current Understanding of the Impacts of Hydrometeorological Hazards in South East Asia projects are invited to lead the development of an Integration project that addresses the aims set out in this specification. As this is a closed call there is no cap on the number of proposals individual researchers can be involved in.

Normal individual eligibility applies and is in Section C of the [NERC research grant and fellowships handbook](#). Research Organisation eligibility rules are in Section C of the handbook.

6. **Assessment Process**

Proposals will be assessed by an internal UKRI panel.

The assessment criteria to be used will be as follows:

- Excellence of proposed work
- Fit to Scheme, including:
  - Strength of the integration of existing projects
  - Evidence how the proposed work will add value to and have impact on end-users of the programme
  - Relevance to programme objectives and principles
7. Timetable

- Announcement published:  w/c 15th April 2019
- Deadline for submission of proposals:  26th June 2019
- Proposal assessment:  4th July 2019
- Earliest start date for projects:  Sept 2019

Integration projects must be completed within the timeframe of the existing Understanding of the Impacts of Hydrometeorological Hazards in South East Asia grants.

8. Contact

For all enquiries, please contact the SHEAR programme secretariat: Daniel Knight newtonseasia@nerc.ukri.org.
Understanding of the Impacts of Hydrometeorological Hazards in South East Asia – funded projects

The information below details the title and lead PI of the existing projects.

Indonesia

- **Mitigating hydrometeorological hazard impacts through transboundary river management in the Ciliwong River basin** – Professor Richard Haigh, University of Huddersfield
- **Indonesia: Java Flood One** – Professor Simon Mathias, Durham University
- **Extreme rainfall and its effects on flood risk in Indonesia** – Professor Chris Kilsby, Newcastle University

Malaysia

- **Integrated Modelling of Landslides due to Hydrometeorological Impacts in Langat Basin, Peninsular Malaysia (iModelLandslides)** – Dr Ashraf Osman, Durham University
- **Understanding and managing the risk of water related diseases under hydrometeorological extremes** – Dr Wouter Buytaert, Imperial College London
- **IMpacts of PRecipitation from Extreme StormS - Malaysia (IMPRESS - Malaysia)** – Professor James Haywood, University of Exeter
- **Flood Impacts across Scales- informing models of flood exposure and vulnerability via an integrated multi-scale approach** – Mr Nicholas Reynard, NERC Centre for Ecology and Hydrology

Philippines

- **Catchment susceptibility to hydrometeorological events: sediment flux and geomorphic change as drivers of flood risk in the Philippines** – Dr Richard Williams, University of Glasgow
- **Quantitative Lahar Impact and Loss Assessment under changing Land Use and Climate Scenarios** – Dr Jeremy Phillips, University of Bristol
- **Philippines Groundwater Outlook (PhiGO)** – Dr Andrew Barkwith, NERC British Geological Survey
- **SCaRP: Simulating Catastrophic Rainfall-triggered landslides and related sedimentation in the Philippines** – Dr Georgina Bennett, University of East Anglia

Thailand

- **Thai Coast: Coastal Vulnerability, Resilience and Adaptation in Thailand** – Professor Cherith Moses, University of Sussex
- **Strengthening Thailand's Agricultural drought Resilience** – Mr Jamie Hannaford, NERC Centre for Ecology and Hydrology
- **ENRICH: ENhancing ResliienCe to future Hydro-meteorological extremes in the Mun river basin in Northeast of Thailand** – Professor Slobodan Djordjevic, University of Exeter
Viet Nam

- **Valuing the benefits of blue/green infrastructure for flood resilience, natural capital and urban development in Viet Nam** – Dr Tobias Borger, University of Stirling
- **Comp-Flood: Compound flooding in coastal Viet Nam** – Dr Ivan Haigh, University of Southampton
- **VIET NAM: Slow Onset Hazard Interactions with Enhanced Drought and Flood Extremes in an At-Risk Mega-Delta** – Professor Steven Darby, University of Southampton
- **An Interdisciplinary Approach to Understanding Past, Present and Future Flood Risk in Viet Nam** – Dr Jeffrey Neal, University of Bristol