







Understanding of the Impacts of Hydrometeorological Hazards in Viet Nam

Closing Date for Notification of Intent: 4 December 2017 - 16:00 GMT/23:00 ICT Closing Date for Full Proposals: 21 February 2018 - 16:00 GMT/23:00 ICT

1. Summary

Viet Nam's National Foundation for Science and Technology Development (NAFOSTED) and the UK's Natural Environment Research Council (NERC) and Economic and Social Research Council (ESRC) invite applications to the Understanding of the Impacts of Hydrometerorological Hazards in Viet Nam programme. The programme has a budget of £1.5m for the UK component and VND 17,600,000,000 for the Vietnamese component.

The aim of the programme is to improve understanding of the impacts of hydrometeorological hazards, such as floods, droughts, landslides and storm surges, in Viet Nam. The focus is on identifying, characterising and predicting the environmental and social variables that influence the occurrence, impact, severity and duration of hydrometeorological hazards in Viet Nam to enable increased preparedness and resilience to future events.

Applications are sought from teams comprising researchers from Viet Nam and the UK eligible to hold NAFOSTED and UK Research Council grants respectively. NAFOSTED will fund the Vietnamese component of the successful projects and UK researchers will receive funding from NERC. Applicants may request up to VND 3,500,000,000 from NAFOSTED (final funding amount is subject to evaluation of panel meeting and NAFOSTED's financial assessment) and up to £375k (at 80% FEC) from NERC. Projects can be maximum 36 months duration and are expected to start in October 2018.

A Notification of Intent to Submit should be submitted on the online form no later than 16:00 GMT/23:00 ICT on 4 December 2017. The notifications will not be assessed and will be used to plan the assessment process, however the eligibility of applicants for NERC, ESRC and NAFOSTED funding will be checked and ineligible applicants informed. It should be noted that submission of a Notification of Intent is a requirement of this call and full bids will only be accepted from those teams who submit a completed Notification of Intent to submit online form prior to the deadline. The lead UK and Vietnamese PI should not change following approval to submit a full bid.

The joint full application should be submitted to the UK's Joint Electronic Submission System (Je-S). The closing date for applications is 16:00 GMT/23:00 ICT on 21 February 2018. Applications not submitted before the deadline will not be received or considered.

2. Background

2.1 Scientific Background

Hydrometeorological hazards, including floods, droughts, landslides and storm surges, can pose a direct threat to lives and impact livelihoods by damaging and destroying transport links, power supplies, businesses and agricultural land. Climate change, population growth, land-use change and urbanisation are increasing the number of people in Viet Nam at risk from these hazards, for example in 2015-16 drought affected large parts of Viet Nam with more than 2 million people requiring humanitarian aid.

To increase resilience to hydrometeorological hazards better understanding of the likely impacts are needed to enable appropriate adaptation and mitigation measures, such as new flood defences or the restoration of natural defences like mangroves, to be developed and implemented. The aim of this programme is to support the research needed to improve environmental and social understanding of the impacts of hydrometeorological hazards, such as floods, droughts, landslides and storm surges, in Viet Nam.

2.2 Non-Scientific background

<u>NERC</u> is the UK's main public funder of environmental research, innovation and training. Its aim is to fund excellent, peer reviewed science that helps us understand and predict how our planet works and enables the responsible management of the environment.

<u>ESRC</u> is the UK's main funder of social and economic research, innovation and training. Its aim is to support independent, high quality research, which has an impact on business, the public sector and civil society.

NAFOSTED is one of the main funding agencies for research in Viet Nam, providing funding for scientific and technological projects in all disciplines. With the aim of improving the research capacity and enhancing the quality of scientific research in Viet Nam, NAFOSTED also supports numbers of scientific activities, encouraging international cooperation for Vietnamese scientists; through this contribute to national economic growth and competitiveness.

This programme is supported by the <u>Newton Fund in Viet Nam</u> an initiative established by the governments of the UK and Viet Nam. The Fund provides a framework for promoting increased research and innovation collaboration, developing long-term, sustainable partnerships and contributing to economic growth. As a requirement of funding, all applications under this call must demonstrate how they will contribute towards the delivery of the goals of the Newton Fund in Viet Nam.

In the UK the Newton Fund forms part of the <u>UK's Official Development Assistance (ODA)</u> 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 a sub-set of countries on the OECD Development Assistance Committee list and is administered with the promotion of the economic development and welfare of developing countries as its main objective. As a result UK-based researchers will be required to input to specific ODA reporting requirements.

3 Programme Scope

3.1 Programme objectives

The aim of the programme is to improve understanding of the impacts of hydrometeorological hazards, such as floods, droughts, landslides and storm surges, in Viet Nam, particularly in the Central Highland and Mekong Delta regions.

The focus is on identifying, characterising and predicting the environmental and, if desired, social variables that influence the impact, severity and duration of hydrometeorological hazards and the research challenges that the programme will address could include, but are not limited to:

- Understanding the susceptibility of different catchments or coastal regions to hydrometeorological hazards by:
 - Exploring how hydrological, sedimentary, geomorphological and subsurface processes control the movement of water during periods of extreme weather;
 - Determining how different land-use, urbanisation and water resource management practices are mitigating or exacerbating hazard impacts; and
 - Developing models to improve understanding and prediction of the impacts of 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:
 - Determining how local, regional and national governance processes, and the interactions between them, influence the management of hydrometeorological hazards:
 - Exploring the impact of non-water related policies and regulatory regimes,
 e.g. energy or agriculture, on the management of hydrometeorological hazards; and
 - Studying the effectiveness of policy interventions and incentives, and barriers to uptake, e.g. willingness to pay, regulation, subsidies and enforcement.
- Exploring whether changes in the way water resources and/or coastal regions are managed can mitigate the risks from hydrometeorological hazards

Projects will also be expected to work closely with end-users both at the design stage and throughout the lifetime of the project 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.

Projects should be geographically focussed case studies that explore the range of hydrometerological hazards that affect a chosen study area, which should be in either the Central Highlands or Mekong Delta region to align with the priorities of the Vietnamese Government. Proposals that explore how to manage catchments to mitigate both flood and drought risk; what the risks from the combined impacts from surface, fluvial and coastal flooding are; and will provide better understanding of aquifers to enable sustainable levels of abstraction are encouraged.

The expected outputs of the programme include high impact journal papers, presentations at international conferences, and information and tools that policymakers and water managers can use to increase preparedness and resilience to hydrometeorological hazards.

3.2 Proposal requirements

Proposals should be from joint Vietnamese-UK research teams and should clearly justify how the proposed research aligns with the scope of this call and will contribute to the delivery of the programme goals. In particular, applicants should set out how the proposed research will deliver a better understanding of the impacts of hydrometeorological hazards in Viet Nam, and how they will work with users to ensure that the outputs of research support increased preparedness and resilience to floods and droughts, and hence contribute to societal well-being and economic growth in Viet Nam.

It is envisaged that proposed research will include fieldwork, process studies and model development and encompass a range of environmental research disciplines, such as hydrological processes, hydrogeology, sedimentary processes, geomorphology, and coastal processes.

Applicants are encouraged to include a social science element in their project, although this is not a requirement for this call. If including social research on the role of governance and institutional arrangements in determining the impact of hydrometeorological hazards, applicants should clearly explain why the research is novel and how it will be integrated into the project.

4 Programme requirements

NERC is managing the bid submission on behalf of the NERC, ESRC and NAFOSTED partnership.

Applications to the Understanding of the Impacts of Hydrometeorological Hazards in Viet Nam Programme must be from UK-Vietnamese partnerships – i.e. include at least one Viet Nam-based Principal Investigator and one UK-based Principal Investigator. Only proposals that involve scientific collaboration between the UK and Viet Nam will be considered. All proposals must have equal or proportionate participation from UK and Vietnamese researchers.

Up to £1.5m (80% FEC) is available from the UK for this call and up to VND 17,600,000,000 for the Vietnamese component. Applicants can request up to £375k (80% FEC) for the UK component of a project, and up to VND 3,500,000,000 for the Vietnamese component (final funding amount is subject to evaluation of panel meeting and NAFOSTED's financial assessment). Projects can have a maximum duration of 36 months.

The funds available through this call are intended to support focused, coordinated and collaborative research between Viet Nam and the UK that address the scope of the call as outlined above. These grants should promote inter-institutional collaborations, both between and within Viet Nam and the UK, and are also expected to enhance opportunities for interdisciplinary collaboration. Partnerships should be genuine and reciprocal, and working together must add value to that which could be achieved by individual partners working on their own. Proposals must demonstrate that research activities will either achieve more than the partners would have achieved if tackling an issue by working alone, or achieve outcomes at less cost or faster than if working alone.

For each grant application a lead Principal Investigator should be nominated from both the UK and Viet Nam and they will act as focal points for contact with the funding agency in their respective countries (refer to Section 5 below for details of the Application Process).

4.1 Newton Fund requirements

All applications should clearly outline how the proposed research will address the objectives of the Newton Fund by supporting the development of long-term, sustainable partnerships that promote societal welfare and economic growth in Viet Nam.

Applicants should demonstrate how the main research outcomes will be specific to enabling the sustainable development in Viet Nam through supporting increased resilience to hydrometeorological hazards. Applicants should consider how their project will:

 address the need for better understanding of the impact of hydrometeorological hazards and support increased preparedness and resilience to future events;

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

Applicants should address these points in both the Je-S summary and then more fully, in the Case for Support (see section 5 for more details). UK researchers will be required to demonstrate that the research is compliant with ODA requirements by submitting an ODA statement clearly explaining how their project is compliant and therefore eligible to receive support from the Newton Fund; further details are in section 5 below. The ODA statement is for UK funder purposes only, it is an assurance check that the project meets the ODA compliance requirements.

4.2 Eligibility

It is recommended that applicants contact the relevant funding agency before submission to confirm they are eligible to apply to the call as proposals with ineligible applicants will be rejected without peer review.

4.2.1 UK researchers

For UK researchers' normal individual eligibility applies and is in Section C of the <u>NERC</u> research grant and fellowships handbook. NERC research grants may be held at approved UK Higher Education Institutions (HEIs) approved Research Council Institutes (RCIs) and approved Independent Research Organisations (IROs). The Research Councils have agreed that to help remove potential barriers to interdisciplinary research, all RCIs are eligible for grant funding from all Research Councils. Full details of approved RCIs and IROs can be found on the RCUK website.

This programme is one of five Newton-funded programmes on Understanding the Impacts of Hydrometeorological Hazards in Southeast Asia that are running in parallel. UK Investigators may be involved in no more than two proposals in total submitted to these programmes and only one of these may be as the lead Principal Investigator.

4.2.2 Vietnamese researchers

The Viet Nam Principal Investigator (PI), Research Organization (RO) and Research Members must be eligible to apply according to NAFOSTED's regulation for basic research or applied research funding programs, specifically:

- 1. The Viet Nam PI must be a PhD holder or have academic title equivalent to professor/associate professor, working in a S&T organization or being supported by a prestigious S&T organization, and have appropriate research results published in prestigious international journals within 5 years from the date of application. The PI also must have enough time for conducting the research project being applied (being in Viet Nam at least two thirds of the project time).
- 2. Key members of the research team must be a PhD holder or have academic title equivalent to professor/associate professor, and have appropriate research results published in prestigious national or international journals within 5 years from the date of application. If a key member hold Master's degree, he/she must have 01 article published in a prestigious international journal within 5 years from the date of application.
- 3. PhD students participating in the project must have research thesis appropriate to the project being applied.
- 4. The RO must have been registered as a scientific and technological organization with appropriate operating functions to the research project being applied, and must guarantee to fulfil an RO's responsibilities as required by NAFOSTED's regulations for basic research funding program

Please note that Vietnamese research team members can participate in maximum two (02) projects funded by NAFOSTED at any one time, of which being PI in maximum one (01) project. Proposals in which the PI exceeds this allowance will be deemed ineligible.

4.3 Studentships

There are no UK associated studentships permitted as part of this call.

NAFOSTED allows studentships including graduate and post-graduate students.

4.4 Reporting requirements

As with all NERC grant holders, there will be a requirement to report through the RCUK reporting system; this is required annually and continues for up to five years post grant end.

As this is a Newton Fund programme there will be additional reporting requirements, which successful applicants will be required to assist with.

On Vietnamese side, NAFOSTED requires periodic reports annually and final report at the end of grant.

4.5 Capital requests

The purchase of capital (items over £10k in the UK) are not permitted by both UK and Vietnamese applicants through the Newton Fund..

4.6 Awards and extension requests

Successful grants will be funded for up to 36 months and should start in October 2018 and conclude no later than 31 December 2021 to align with the Newton Fund timescales.

Due to financial restraints of the Newton Fund Programme, grant extensions to the UK component 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.

5. Application process

5.1 Notification of Intent

A Notification of Intent to submit a proposal must be submitted for all potential applicants to the call via the online application form, by 16:00 GMT / 23:00 ICT 4 December 2017.

Only one Notification of Intent form needs to be submitted per project. The notification must follow the instructions provided on the online application form and include details on the research themes that the proposed research will address and the institutions, investigators and project partners that are expected to be involved. NERC, ESRC and NAFOSTED will use this information to plan the proposal assessment process. The notifications will not be assessed but eligibility of the applicants for Research Council and NAFOSTED funding will be checked. It should be noted that submission of the Notification of Intent is a requirement of this call and full bids will only be accepted from those teams who submit a completed Notification of Intent to submit online form prior to the deadline. The Notification of Intent online form is available from the Announcement of Opportunity page on the NERC website.

NERC will acknowledge receipt of all notifications and invite eligible applicants to submit a full proposal. NERC will also share the notifications with ESRC and NAFOSTED. **The lead PI from the UK and Viet Nam should not change following approval to submit to full bid.**

5.2 Full bid application process

The full bid closing date is 16:00 GMT / 23:00 ICT 21 February 2018.

This programme will support collaborative projects between the UK and Viet Nam and each project should submit a single collaborative proposal that sets out the research to be carried out by both the UK and Vietnamese partners. All applications must include UK and Vietnamese scientists. The UK applicant must submit the application through the Research Councils' Joint Electronic Submission system (Je-S).

The UK applicant should list the lead Vietnamese PI and collaborators as Project Partners on the Je-S form. Each individual organisation should be listed as a separate Project Partner. The approximate value of the Vietnamese collaborators and other contributions should be detailed in the project partner in-kind support section of the proposal form. Note the requirements below for providing full details of the NAFOSTED budget requested.

The following additional attachments must be provided on the lead proposal:

- Letters of Support for each named Vietnamese collaborator listed as a Project Partner. This is a Je-S requirement and the letter of support should be a dummy document attachment (see Letters of Support section below).
- CVs for each of the named Vietnamese collaborators (maximum 2 pages per person) should be combined into one document as attachment type 'Non-UK Components'.
- Completed NAFOSTED budget form as attachment type 'Non-UK Components' which summarises details of the Vietnamese applicants and their requested costs (see Vietnamese Costs below).
- Completed NAFOSTED expected result form as attachment type 'Non-UK Components'

Successful grants will have their UK costs paid through Je-S and their Vietnamese costs paid through NAFOSTED's system.

Applicants should select Proposal Type- 'Standard Proposal' and then select the scheme – 'Directed International' and the Call – 'Newton Hydrometeorological Hazards Feb 2018'.

Applicants are requested to identify which of the five calls they are applying to in the title section of the Je-S form, i.e. the title should begin with [Viet Nam]

Applicants should leave enough time for their application to pass through their organisation's Je-S submission route before this date. Applications not submitted before the deadline will not be received or considered. **Applicants must ensure that their application is received by NERC by 16:00 GMT/23:00 ICT on 21 February 2018**.

All attachments, with the exception of letters of support and services/facilities/equipment quotes, submitted through the Je-S system must be completed in single-spaced typescript of minimum font size 11 point (Arial or other sans serif typeface of equivalent size to Arial 11), with margins of at least 2cm. Please note that Arial narrow, Calibri and Times New Roman are not allowable font types and any proposal which has used either of these font types within their submission will be rejected. References and footnotes should also be at least 11 point font and should be in the same font type as the rest of the document. Headers and footers should not be used for references or information relating to the scientific case. Applicants referring to websites should note that referees may choose not to use them.

Applicants should ensure that their proposal conforms to all eligibility and submission rules, otherwise their proposal may be rejected without peer review. More details on NERC's submission rules can be found in the NERC research grant and fellowships handbook and in the submission rules on the NERC website.

Please note that on submission to council ALL non PDF documents are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

Additionally where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc.), the document should be converted to PDF prior to attaching it to the proposal.

Full Guidance on the application process, including details of UK eligible costs, is available in the <u>NERC Research Grants Handbook</u>.

The costs of the UK institutions should be submitted in to the Je-S system and will be met from the UK funds, and those for the Vietnamese partner institutions will be met by NAFOSTED and should be submitted on the pro-forma provided.

Proposal components

<u>In addition to the standard Je-S pro forma, the **lead** component of each proposal should include the following documents in Je-S:</u>

a) A joint Case for Support, which is comprised of three parts:

Part 1 – A common Previous Track Record incorporating ALL UK and Vietnamese Research Organisations involved (up to 3 sides A4). The Track Record should provide a summary of the results and conclusions of recent work in the technological/scientific area that is covered by the research proposal; including reference to RCUK, NAFOSTED and other relevant funded work. Details of any relevant past collaborative work with other beneficiaries should also be given; in particular please indicate where your previous work has contributed to the UK or Viet Nam's competitiveness or to improving the quality of life. An outline of the specific expertise available for the research at the host organisation and that of any associated organisations and beneficiaries should also be included.

Part 2 – A common Description of the Proposed Research. (up to 8 sides A4 including all necessary tables, figures and references) and should include:

- underlying rationale and scientific issues to be addressed,
- describe why the work is strategically important,
- how users are participating in projects, how they will be engaged and how the outputs and outcomes address their requirements,
- how the application addresses the scope of this particular call,
- the key research objectives and hypotheses, and
- · how these will be achieved.

Part 3 - A common **Management Plan** (up to **1 side A4**). To include management structures and plans, participant responsibilities and scheduling chart. Note the management plan should factor in the need to allocate resources to cross-project coordination and integration.

- b) UK costs: a common Justification of Resources; (up to 2 sides A4). This should be for all UK Research Organisations involved, for all Directly Incurred Costs, Investigator effort, use of pool staff resources, any access to shared facilities and equipment. Capital requests (i.e. individual items over £10k) are not permitted through the Newton Fund. For further information of what to include in the Justification of Resources, see section E in the NERC Research Grants Handbook.
- c) Vietnamese costs: justification of these resources and details of the Viet Nam Investigators should be submitted on the separate form provided and entered into JeS as attachment type 'Non-UK Component'. The form is available to download from Announcement of Opportunity page on the NERC website.
- d) A common Pathways to Impact; (up to 2 sides A4), detailing:
 - those who may benefit or make use of the research;
 - how they might benefit and/or make use of the research;
 - methods for disseminating data/knowledge/skills in the most effective and appropriate manner.

Full details of the requirements for <u>Pathways to Impact</u>, and a suggested template, can be found on the NERC website. The costs of knowledge exchange activities in the plan should be fully integrated into the proposal costings and justified in the Justification of Resources section.

- e) A common Outline Data Management Plan (up to 1 side A4). This section includes information about how the project will manage data produced and identify data sets of long term value that should be made available to the relevant data centre for archiving and reuse at the end of the grant. Further guidance regarding NERC's Data Policy is available.
- f) Letters of Support from named Project Partners to confirm that support and facilities will be made available for associated collaborations and co-funding (up to 2 sides A4 each letter). The Je-S system will require a letter of support for the Vietnamese named collaborators listed as Project Partners. A 'dummy letter of support' should be submitted and indicated that that this is the letter of support for the Vietnamese named collaborator.
- **g) ODA statement** (up to **1 side A4).** This should describe how the proposed project meets the ODA requirements by answering:
 - 1. How will Viet Nam directly benefit from this proposal?
 - 2. How is your proposal directly and primarily relevant to the development challenges of Viet Nam?
 - 3. How do you expect that the outcome of your proposed activities will promote the economic development and welfare in Viet Nam?
- h) Expected Result: NAFOSTED requires:
 - a. For multidisciplinary project: at least 02 publications published on prestigious international scientific journals and at least 01 publication published on prestigious national scientific journals as research result.
 - For other project: following regulation on expected research results in <u>Circular 37/2014/TT-BKHCN</u> dated on 12 December 2014 governing the administration of basic research funding program of National Foundation for Science and Technology Development.

Information on expected result should be submitted on the separate form provided on the Announcement of Opportunity webpage and entered into Je-S as attachment type 'Non-UK Component'. The Expected Result form, links to list of accepted scientific journals and other related documents are available to download from Announcement of Opportunity page on the NERC website.

Each **component** application (including the lead) will additionally require the following attachments:

- i) A CV (up to 2 sides of A4) for each named PI, Co-I, research staff post and Visiting Researcher.
- j) Technical Assessment of the request for access to a NERC Facility. Pls wishing to use a NERC facility will need to submit a mandatory 'technical assessment' with their proposal (excluding HPC). Given the time restrictions on spend under calls supported by the Newton Fund, we are unable to accept NERC shiptime or aircraft requests as part of this call. All other NERC Services and Facilities must be fully costed within the limits of the proposal, and agreement that they can be undertaken within the timeframe of the spend must be provided by the facility. For NERC, this means a quote for the work which the facility will provide. A full list of the Facilities requiring this quote can be found on the NERC website.

6. Assessment Process

The Full Proposals will be internationally peer-reviewed and final funding recommendations made by a Moderating Panel, consisting of members of the UK and Southeast Asian science communities and other independent experts. Applicants will be given the opportunity to provide a written response to peer review comments, which will be made available to the panel along with the reviewer comments.

The PI response notification will be sent to the UK lead applicant via the Je-S system and it is the expectation that the UK PI shares this request with the Vietnamese collaborators to ensure that the PI response is a coordinated response agreed by the UK and Vietnamese PIs. This will then need to be submitted by the UK applicant on behalf of the whole project via the Je-S system.

The final funding decision will be made by NERC, ESRC and NAFOSTED based on the recommendations of the Moderating Panel. The Funders are aiming to achieve a balanced portfolio of projects across the programme that best address the overarching aims of the programme.

The assessment criteria to be used for the full proposal will be as follows:

- Research Excellence
- Fit to Scheme

Feedback will be provided to all applicants following the assessment of proposals.

7. Timetable

Date	Activity
10-11 October 2017	Networking workshop – launch the call
4 December 2017	Notification of intent to submit deadline
21 February 2018	Full bid closing date
February to June	Peer review assessment
2018	
week commencing 4	Principal Investigator response to reviews*
June 2018	
11 – 12 July 2018	Moderating panel meeting
August 2018	Funding decisions confirmed
September 2018	Awards announced
October 2018	Grants start

^{*}Applicants should be prepared to respond to reviewers comments in this time frame.

8. Contact

The call is being administered by NERC in the UK on behalf of all funders. Initial enquiries should be made to:

NERC – Daniel Knight
 Tel: +44 (0) 7928 668935

Email: newtonseasia@nerc.ac.uk

NAFOSTED

Tel: 844 – 39367750 (ext. 503) Email: <u>vanht@most.gov.vn</u>