







Understanding of the Impacts of Hydrometeorological Hazards in Indonesia

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

1. Summary

Indonesia's Ministry of Research, Technology and Higher Education of the Republic of Indonesia (Ristekdikti) and the UK's Natural Environment Research Council (NERC) and Economic & Social Research Council (ESRC) invite applications to the Understanding of the Impacts of Hydrometeorological Hazards in Indonesia programme. The programme has a budget of up to £1.5m for the UK component and a budget of up to IDR 2,400,000,000 for the Indonesian 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 Indonesia. 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 Indonesia to enable increased preparedness and resilience to future events.

Applications are sought from teams comprising researchers from Indonesia and the UK eligible to hold Ristekdikti and UK Research Council grants respectively. Ristekdikti will fund the Indonesian component of the successful projects and UK researchers will receive funding from NERC. Projects can be maximum 36 months duration. Applicants may request up to £ 375k (at 80% FEC) from NERC. Ristekdikti will provide the Indonesian applicants with awards ranging between IDR 200,000,000/ year/ project (IDR 600,000,000/ project of 36 month duration) and IDR 675,000,000/ year/ project (IDR 2,025,000,000/ project of 36 month duration) depending on the subject under which a proposal falls.

A Notification of Intent to Submit should be submitted on the online form no later than 16:00 GMT/23:00 JKT 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 Ristekdikti funding will be checked and in ineligible applicants informed. Applicants should note that the 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 Indonesian PI should not change following approval to submit a full bid.

A joint 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 JKT 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 Indonesia at risk from these hazards, for example flooding in Jakarta in January 2013 killed 47 people and more than 20,000 had to be evacuated.

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 Indonesia.

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.

<u>Ristekdikti</u> is the main government institution in Indonesia overseeing policy of research and innovation. It holds national research calls schemes on various topics with a focus on applied research. This particular call is paired up with the Kerjasama Luar Negeri (KLN) and Insentif Riset Sistem Inovasi Nasional (INSINAS) calls.

This programme is supported by the <u>Newton Fund in Indonesia</u>, an initiative established by the governments of the UK and Indonesia. 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 Newton Fund objective of developing long-term, sustainable partnerships that promote societal welfare and economic growth in Indonesia.

In the UK the Newton 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 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 Indonesia.

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 hydrometerological hazards by:
 - Exploring how hydrological, sedimentary, geomorphological and subsurface processes control the movement of water during periods of extreme weather; and
 - 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 are managed can mitigate the risks from hydrometeorological hazards

Projects will be expected to work closely with end-users 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 may be based in any part of Indonesia and can cover one or a range of hydrometeorological hazards as appropriate. Projects should address at least two of the research challenges listed above and proposals that include research on the impact of hydrometeorological hazards in urban or peri-urban areas 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 in Indonesia can use to increase preparedness and resilience to hydrometeorological hazards.

3.2 Proposal requirements

Proposals should be from joint Indonesian-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 Indonesia, 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 Indonesia.

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 welcome 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 proposal submission on behalf of the NERC, ESRC and Ristekdikti partnership.

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

Up to £1.5m (80% FEC) is available from the UK for this call and at least IDR 2,400,000,000 for the Indonesian component. The maximum duration of the projects is 36 months. Applicants can request up to £375k (80% FEC) for the UK component of a project, and funding from Ristekdikti for the Indonesian component of awards ranging between IDR 200,000,000/ year/ project (IDR 600,000,000/ project of 36 month duration) and IDR 675,000,000/ year/ project (IDR 2,025,000,000/ project of 36 month duration) depending on the subject under which a proposal falls. Applicants are advised to confirm the funding limits with Ristekdikti before applying.

Indonesian applicants should refer to the new <u>output-based research funding regulation</u> which stipulates the maximum amount of grant based on the field of research.

The funds available through this call are intended to support focused, coordinated and collaborative research between Indonesia and the UK that address the scope of the call as outlined above. These grants should promote inter-institutional collaborations, both between and within Indonesia 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 Indonesia and they will act as focal points for contact with the funding agency in their respective countries (refer to section 5 below for 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 Indonesia.

Applicants should demonstrate how the main research outcomes will be specific to enabling the sustainable development in Indonesia 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 Indonesia 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 the UK funder purposes and 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 NERC 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 Indonesian researchers

Indonesian applicants should hold at least a doctorate degree and be employed by an university or organisation eligible to receive funding from Ristekdikti.

Indonesian applicants based at a university should apply for the KLN scheme. Other types of Indonesian applicants should apply for the Insinas scheme. Applicants should comply with detailed eligibility criteria for Ristekdikti KLN or Insinas grant scheme as detailed on the Ristekdikti online system.

4.3 Studentships

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

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.

Indonesian researchers should submit reporting in the required format as detailed on the Ristekdikti online system

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

4.5 Capital requests

The purchase of capital (items over £10k) are not permitted by UK applicants through the Newton Fund. Similarly, for Indonesian applicants the purchase of capital through the KLN or Insinas schemes is not permitted.

4.6 Awards and extension requests

Due to differences in the budgets of NERC and Ristekdikti the start dates of the UK and Indonesian components will be slightly staggered. The UK components of the successful grants will be funded for up to 3 years and should start in October 2018 and conclude no later than 31 December 2021 to align with the Newton Fund timescales. Ristekdikti will start disbursement of the Indonesian component of the grant in Feb/ Mar 2019.

Due to financial restraints of the Newton Fund Programme, grant extensions to the UK component of the project 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 JKT 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 Ristekdikti 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 Ristekdikti 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 Ristekdikti. **The lead PI from the UK and Indonesia 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 JKT 21 February 2018.

This programme will support collaborative projects between the UK and Indonesia and each project should submit a single collaborative proposal that sets out the research to be carried out by both the UK and Indonesian partners. All applications must include UK and Indonesian 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 Indonesian 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 Indonesian 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 Indonesian budget requested.

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

- Letters of Support for each named Indonesian 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 Indonesian collaborators (maximum 2 pages per person) should be combined into one document as attachment type 'Non-UK Components'.
- Completed Indonesian budget form as attachment type 'Non-UK Components' which summarises details of the Indonesian applicants and their requested costs (see Indonesian Costs below).

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 countries they are applying to work with in the title section of the Je-S form, i.e. the title should begin with [Indonesia].

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 JKT on the closing date, 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's 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 NERC Research Grants Handbook.

The costs of the UK institutions should be submitted in to the Je-S system and will be met from the UK funds. Indonesian costs will be paid by Ristekdikti and should be submitted on the pro-forma provided <u>and</u> recorded in the KLN and INSINAS scheme. **Indonesian** applicants should also submit their application to Ristekdikti online system.

Applications submitted to KLN and INSINAS scheme should specify that this is part of the Newton Fund NERC Resilience Call for further review process alignment with RCUK. Please state this in the PDF file you are submitting to Ristekdikti's system: PI Name_Institution Name_KLN_NERC Hydrometeorological.pdf or PI Name_Institution Name_INSINAS_NERC Hydrometeorological.pdf

5.2.1 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 Indonesian 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, Ristekdikti 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 Indonesia'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) Indonesian costs: justification of these resources and details of the Indonesian Investigators should be submitted in a specific format and entered into Je-S as attachment type 'Non-UK Component'. The format should follow the specific guidance for KLN or Insinas.
- 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 Indonesian 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 Indonesian 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 Indonesia directly benefit from this proposal?
 - 2. How is your proposal directly and primarily relevant to the development challenges of Indonesia?
 - 3. How do you expect that the outcome of your proposed activities will promote the economic development and welfare in Indonesia?

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

- a) A CV (up to 2 sides of A4) for each named PI, Co-I, research staff post and Visiting Researcher.
- b) Technical Assessment of the request for access to a NERC Facility. Pls wishing to use a <u>NERC facility</u> 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 <u>full list of the Facilities</u> 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 Indonesian collaborators to ensure that the PI response is a coordinated response agreed by the UK and Indonesian 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 Ristekdikti 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
10-11October 2017	Networking workshop – launch the call
4 December 2017	Notification of intent to submit deadline
21 February 2018	Full bid closing date
February to July 2018	Peer review assessment
Early July 2018	Principal Investigator response to reviews*
Late 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 668 935

Email: newtonseasia@nerc.ac.uk

Ristekdikti

Gedung D Lantai 4, Pintu I Senayan Jl. Jenderal Sudirman Jakarta Selatan Jakarta 10270

Tel: (021) 57946100 Ext. 0447,0448

Fax: (021) 5731846

E-mail: simlitabmas@ristekdikti.go.id