

Guidelines for applicants

Asi@Connect

Targeted Call for Proposals

NOTICE

When processing your proposal, any personal data (e.g. names, addresses and CVs) will be processed¹ solely for the performance management and monitoring of the call for proposal and the contract by the data controller.

Disclaimer

This document's contents are the sole responsibility of TEIN*CC and can under no circumstances be regarded as reflecting the position of the European Union.

¹ In order to avoid asking for the same information more than once, information already available to TEIN*CC may be used where possible.

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INTRODUCTION

1.1 Asi@Connect project & TEIN*CC

Asi@Connect marks the 4th phase of the European Union (EU) funding to the Trans-Eurasia Information Network (TEIN) initiative, which was launched as an Asia-Europe Meeting (ASEM) initiative in 2001; it successfully established a regional research and education internet network (TEIN) and progressively expanded its geographical footprint over the years.

Asi@Connect provides dedicated high-capacity internet connectivity for research and education communities across Asia-Pacific; operating at speeds of up to 100 Gbps, it currently interconnects universities and research centers in 24 countries/economies across the region. It also connects to the 50 million European researchers and academics served by the GÉANT network and supports collaborative programs in areas such as Earth observation, disaster warning, climate research, food security, delivery of e-science, e-health, and e-learning. Projects also aim to encourage societal benefits by operating diverse areas such as gender equality and women's empowerment, pandemic prevention, etc. During this latest phase, greater emphasis has been placed on delivering the project with the increased involvement of additional partners within the Asia-Pacific R&E community. As a result, 88 sub-granted projects were awarded via previous five (5) times of Call for Proposals to promote collaboration.

TEIN*CC was established in 2011 as a not-for-profit organization in Seoul, Republic of Korea. It has been expressly set up to run the TEIN program (TEIN4 at that time) under the endorsement from the ASEM leaders (ASEM8 Chair's Statement, 2010). It is supported by the Korean Government – the Ministry of Science and ICT (MSIT) which has committed to fund partly operational costs of the TEIN4 and its successor, Asi@Connect. TEIN*CC has full responsibility for the successful management and operation of Asi@Connect. More information on Asi@Connect, TEIN and TEIN*CC can be found at: <https://www.tein.asia/>.

1.2 Objective of the call

The expected results of Asi@Connect include a well-functioning, resilient and high capacity, Internet connectivity network, an increase in the number of higher education institutions connected to Asi@Connect, a growth in volume of traffic over the network, an increase in the number of network enabled research and education collaborations, and more people with access to the Internet in general and remote areas in particular. To achieve the above, this Targeted Call for proposals is designed to reflect NREN Needs Assessment results in 2021 by focusing on Asi@Connect beneficiary countries' needs. To meet those demands, this Targeted Call for Proposals is broken into two categories

- Category 1: To provide high demand services under the umbrella of Asi@Connect for beneficiary countries to enhance their sustainability beyond Asi@Connect Project period.
- Category 2: To address specific needs from several countries to raise their capability.

1.3 Areas of Interests and provision of financial allocation

This Call for Proposals will be 100% funded by Asi@Connect, however, contributions in kind are welcomed and will be recognised in the evaluation process but any such arrangement should be explicitly documented and detailed in the budget analysis within the proposal.

In case of proposals engaging private sector(s) – encompassing profit business or international research company/organization/entity - as a Public-Private-Partnership (PPP) approach, the following further conditions should be met.

- Private sector should ensure only the reasonable cost recovery but not aim to create a profit, and cash or in-kind contribution is recommended.
- Private sector should work with a partner NREN or its member of organizations for this proposal – i.e., it cannot be the sole Leading Applicant/Principal Investigator.
- Private sector should further demonstrate a good knowledge/track record of working with the R&E community.

Detailed information on the Categories and areas you can choose is as below.

(Category 1) Provision of high demand services for Asi@Connect beneficiary countries	
Areas of Interest	<p>This Category is in response to services requested from multiple Asi@Connect beneficiary countries* as in NREN Needs Assessment. <i>* Least Developed Countries and Territories, Lower Middle Income Countries and Territories and Upper Middle Income Countries and Territories in Appendix A</i></p> <p>To meet the needs for these services, this Category is to provide high demand services to Asi@Connect beneficiary countries. This Category requests proposals for the following services: Video Conference (including recording function), Learning Management System, Voice over Internet Protocol, and File Sender to Asi@Connect beneficiary countries.</p> <p>The task of the work includes but is not limited to:</p> <ul style="list-style-type: none"> - Provide Service of Video Conference (including recording function), Learning Management System, Voice over Internet Protocol, and File Sender to Asi@Connect beneficiary countries — Propose at least one out of four services → Propose one or more services. (Revised to add further clarification) - The service(s) offered should already be fully deployed, at least in the Proposers' home country, and by responding to this Call the proposer is offering to extend the existing production service(s) to users in other Asi@Connect beneficiary countries. The service platforms may be commercial service or open-source or research field service. The Proposer needs to demonstrate the existing service(s) and their operational platforms are capable of supporting users in multiple countries and to specify in the Proposal any customisations that this will require, together with costs and timescales for delivering them - Preference for the service should operate across TEIN network, while commercial Internet would be the second option - Provide training sessions for users and produce a user manual for better usability - Regular communication with users to establish the services - Provide customer service after the project period, at least three years, such as technical support, and communication with users, etc.

	<ul style="list-style-type: none"> - Primary language for the service will be English and additional local language options would be requested in case some countries want to add local languages into each service - Require professional service management experience with relevant competence and technical knowledge - Provide 24-hour customer service, seven days a week to respond to urgent requests and maintenance for users - Ensure the stability and security from the external threats - Should not incur any service charges for the services from users except for the contracted cost <p><i>* In the middle of the evaluation process, there could be a presentation/interview session to further understand the applicant's proposal</i></p>
Budget Allocated	<p>Applicants can apply for up to 200,000 Euro per proposal.</p> <p>→ Applicants can apply for up to 200,000 Euro, even if multiple services are offered (revised to add further clarification)</p>
Activities completion deadline	From October 2022 to July 2023

(Category 2) Capacity Development of Country	
Areas of Integrys	<p>This Category aims to enhance the countries' capacity to manage their national R&E networks and in promoting international R&E collaborations. Specifically, this Category focuses on results of NREN Needs Assessment in 2021 and endeavours to address their specific needs. For this Targeted Call for Proposals, several countries submitted their needs where development is required to be made (See: Appendix B). Therefore, the applicant should submit a proposal targeting only one country, according to their requirements and description, rather than encompassing multiple countries in the proposal.</p> <p><i>* Future Call for Proposal will expand participating countries to address specific needs of each country.</i></p>
Budget Allocated	Applicants can apply for up to 50,000 Euro per proposal.
Activities completion deadline	From October 2022 to July 2023

RULES FOR THIS CALL FOR PROPOSALS

The following sections set out general guidelines, the eligibility, and application procedures.

1.4 General guidelines

- Where a proposal includes the purchase of equipment or the procurement of a service, etc., it is required for the applicant to discuss this with TEIN*CC during the contracting process.
- The scope of each proposal submitted should align with the appropriate categories mention above.
- Considering this Call for Proposals' presumable timeline, the proposed activities should not

start before **1 October 2022**, and its maximum duration will be until **31 July 2023 (10 Months)**.

- The outcomes for a proposal should be achievable within the proposal period.
- Any outputs/outcomes will be made available to the public and to the wider research and education community.
- TEIN*CC can request applicants to provide more details and modify any part of the proposal (including the requested budget) at any time during the selection process.
- The final amount to be funded and the implementation period are subject to evaluation and availability of budget.
- Availability of co-funding by other agencies or organizations is not a pre-requisite but is encouraged. Donations or commitment (e.g., in-kind contribution) from the applicant is encouraged and will be considered during the evaluation. Any complementary funding must be declared in the budget section of the proposal.
- A proposal can be carried out by one group, institution/organization, or collaboratively with others, such as a consortium. Applicants are encouraged to collaborate with the experts of developed countries or other European organizations or institutions. Strong evidence such as a **letter of endorsement** or **intent** with no formality from those co-applicants or affiliates are required to be submitted.
- **Official endorsement letter** by each country NREN is required to prove applicant's eligibility.
- **As for Category 1, each country NREN can submit only one proposal** either from NREN itself or universities, other higher education/research institution, and third party who are endorsed by each country NREN.
- **Indirect costs** (overhead) and contingency funding cannot be supported by the Asi@Connect project.
- In case a contract is not signed between TEIN*CC and the awardee within the presumed timeline (i.e. **3 months** after notification is received), TEIN*CC has the right to withdraw from the contract.

1.5 Eligibility Criteria

1.5.1 Location of activities

The location of proposed activities for this Call for Proposals is limited to the following ones (i.e. partner countries/economies of the Asi@Connect project):

Afghanistan, Australia, Bangladesh, Bhutan, Cambodia, China, Chinese Taipei, Hong Kong, India, Indonesia, Japan, Korea, Laos, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Vietnam.

1.5.2 Eligibility of applicants

Applicants should fulfill the following criteria for each Category to be eligible for financial support under this Call for Proposals:

1.5.2.1 Category 1

They should be either NREN²s or the universities and other higher education/research institutions that are the NREN's members OR third party (e.g., private sector) expressly endorsed by the relevant NREN.

By preference, they should be from those countries listed in APPENDIX A or from Europe. However, they may be from other regions where specialist capabilities are required.

As for Category 1, each country NREN can **submit only one proposal** either from NREN itself or universities, other higher education/research institutions, and a third party who is endorsed by NREN. (i.e., each country NREN cannot submit multiple proposals)

1.5.2.2 Category 2

They should be either NRENs or the universities and other higher education/research institutions that are the NREN's members OR third party (e.g., private sector) expressly endorsed by the relevant NREN.

By preference, they should be from those countries listed in APPENDIX A or from Europe. However, they may be from other regions where specialist capabilities are required.

For Category 2, each proposer should **submit an endorsement letter from each country NREN**, certifying its institution's eligibility.

Throughout the Asi@Connect project period, the maximum amount of financial support per each applicant that has legal status to enter into contracts is **limited to 250,000 Euro**. In other words, a sum of transferred funds to awarded legal entity during Asi@Connect period cannot exceed 250,000 Euro. Therefore, the applicant needs to ensure that the accumulated amount of financial support – this can be checked beforehand via e-mail to: asiacconnect-call@teincc.org - of his/her legal entity does not go beyond the limit.

1.6 How to apply and the procedures to follow

The Asi@Connect project takes the stage to award proposals as below:

Lead applicant should strictly keep the format of the proposal form and fill in the paragraphs and pages in order.

Lead applicants must submit their proposals in English.

Please complete the proposal form carefully and as clearly as possible so that it can be assessed properly.

² Please refer to Appendix 1 for the list of NRENs of Asi@Connect.

Any major inconsistency in the proposal (e.g., if the amounts in the budget worksheets are inconsistent) may lead to the rejection of the proposal.

Clarifications will only be requested when information is unclear and prevents TEIN*CC from conducting an objective assessment.

Hand-written proposal will not be accepted.

Please note that only the proposal form and the published annexes which have to be filled in (budget, logical framework) will be transmitted to the evaluators (and assessors, if used). It is therefore of utmost importance that these documents contain ALL the relevant information concerning the proposal.

If necessary, additional annexes could be attached.

1.6.1 Where and how to send proposal

Proposal forms together as in Annex A must be submitted on the following email: asiainconnect-call@teincc.org

Proposal sent by any other means (e.g. by fax or by mail) or delivered to other addresses will not be considered under this Call for Proposals.

Upon submission of the proposal, the lead applicant will receive a confirmation of receipt via reply e-mail.

Please note that the proposal should be in line with template provided, and incomplete proposal may be rejected

1.6.2 Deadline for submission of proposal

The deadline for the submission of proposals is ~~10 August 2022~~ **Extension: 17 August 2022 at 23:59 (Korea Time and Date, KST)**. The lead applicants are strongly advised not to wait until the last day to submit their proposals, since heavy Internet traffic or a fault with the Internet connection (including electricity failure, etc.) could lead to difficulties in submission. The Contracting Authority cannot be held responsible for any delay due to such aforementioned difficulties.

Any proposal submitted after the deadline will be rejected.

EVALUATION AND SELECTION OF PROPOSALS

All proposals will be examined and evaluated against criteria published in the call as below by TEIN*CC and representatives of the Steering Committee, and with the possible assistance of external assessors. The final decision regarding i) activities to be carried out and ii) selection of proposal partners to implement the activities will be taken by TEIN*CC in consultation with the

Asi@Connect project's Governors Meeting and its Steering Committee.

If the examination of the proposal reveals that the proposed activities do not meet the eligibility criteria stated in Section 2.2, the proposal will be rejected on this sole basis.

1.7 Evaluation of the proposal

A selection will be awarded to the highest scored applicant with the following evaluation criteria

The proposal will be evaluated on its quality, including the proposed budget and capacity of the applicants and affiliated entity(ies). They will be evaluated using the evaluation criteria in the evaluation grid below, however not limited to them, subject to the contents of the Proposals:

Category 1: Evaluation criteria

Evaluation Criteria	Score
<p>Capacity of applicants (e.g., demonstrates the capacity to manage funds, conduct proposal activities and document their outcomes effectively, within the specified budget and time limits)</p> <p>Proposals should provide supporting information to show the experience of their team to manage the project, including previous relevant project experiences.</p>	20
<p>Cost factors, realistic budget and timeframe</p> <p>Proposals should demonstrate costs have been considered carefully, are realistic and necessary. Information about additional funding provided by or sourced by the applicant should be included.</p>	20
<p>Alignment with Category purpose and scope</p> <p>The proposal should explain its relevance and value to the Category as described in the Guidelines. In case the proposer is offering to extend the existing production service(s), at least fully deployed in his/her home country, to users in other Asi@Connect beneficiary countries, the following should be clearly demonstrated.</p> <ul style="list-style-type: none"> • Detailed information about how the Proposer is already deploying the proposed services • the existing service(s) and their operational platforms are capable of supporting users in multiple countries; and what, if anything further is required to extend them to other countries; in case any customisations will require to achieve this, the proposer should specify them in the Proposal along with costs and timescales for delivering them. • whether the service platform is commercial service or open-source 	15

Evaluation Criteria	Score
or research field service.	
Good concept with clear objectives and well-structured methodology A proposal, including clear objectives and well-structured methodology, should explain such as why and how it requires.	10
Clear benefit for the TEIN community Proposals should explain their societal benefits for the Asi@Connect and the wider-TEIN community, which will be factors to utilize/promote the development/deployment of the TEIN network and its applications as well as provision of benefits to many economically developing countries, especially in the pandemic and post-pandemic era.	10
Potential for growth/further development Proposals should explain what plans or opportunities they provide for the sustainability or growth/further development after the Proposal is successfully completed.	10
Regional Results/Outcomes/Impacts based on the objectives of the Asi@Connect project Proposals should provide information to allow the scale of its benefits or impact to be well understood.	10
Visibility & PRs, etc. Proposals should set out plans for how the proposal and its outcomes can contribute to greater visibility for the Asi@Connect project.	5

Category 2: Evaluation criteria

Evaluation Criteria	Score
Alignment with Category purpose and scope The proposal should explain its relevance and value to the Category as described in the Guidelines.	15
Good concept with clear objectives and well-structured methodology A proposal, including clear objectives and well-structured methodology, should explain such as why and how it requires.	15
Clear benefit for the TEIN community Proposals should explain their societal benefits for the country in Category2	15

Evaluation Criteria	Score
and the wider-TEIN community, which will be factors to utilize/promote the development/deployment of the TEIN network and its applications as well as provision of benefits to many economically developing countries, especially in the pandemic and post-pandemic era.	
<p>Capacity of applicants (e.g., demonstrates the capacity to manage funds, conduct proposal activities and document their outcomes effectively, within the specified budget and time limits)</p> <p>Proposals should provide supporting information to show the experience of their team to manage the project, including previous relevant project experiences.</p>	15
<p>Cost factors, realistic budget and timeframe</p> <p>Proposals should demonstrate costs have been considered carefully, are realistic and necessary. Information about additional funding provided by or sourced by the applicant should be included.</p>	15
<p>Potential for growth/further development</p> <p>Proposals should explain what plans or opportunities they provide for the sustainability or growth/further development after the Proposal is successfully completed.</p>	10
<p>Regional Results/Outcomes/Impacts based on the objectives of the Asi@Connect project</p> <p>Proposals should provide information to allow the scale of its benefits or impact to be well understood.</p>	10
<p>Visibility & PRs, etc.</p> <p>Proposals should set out plans for how the proposal and its outcomes can contribute to greater visibility for the Asi@Connect project.</p>	5

After the evaluation, a table will be drawn up listing the proposals ranked according to their score. The highest scoring proposals will be provisionally selected until the available budget for this Call for Proposals is reached. In addition, a reserve list will be drawn up following the same criteria. This list will be used if more funds become available during the validity period of the reserve list.

1.8 Indicative timetable

	DATE(Korean date)	TIME(Korean time)
1. Start of invitation of proposal	7 July 2022	-
2. Deadline for submission of proposal	~10 August 2022 Extension: ~ 17 August 2022	23:59

3. Evaluation of the proposal	~ 12 September 2022	
4. Notification of award	~ 16 September 2022	
5. Contract signature	~ 30 September 2022	
6. Implement project	1 October 2022 ~ 31 July 2023	

* The Evaluation and Notification of award are subject to change depending on the progress.

All questions and answers as well as other important notices to applicants during the course of the evaluation procedure will be published on the website of Asi@Connect: <http://www.tein.asia> Therefore, it is advisable to consult the above-mentioned website regularly to be informed of the questions and answers published.

Questions may be sent by e-mail no later than 10 days before deadline for the submission to the address(es) below, indicating clearly the reference of the Call for Proposals. TEIN*CC has no obligation to provide clarifications to questions received after this date.

E-mail address: asiacconnect-call@teincc.org

LIST OF ANNEXES

1.9 Documents to be completed

The following documents must be submitted as part of proposal application.

- Annex A – **Application***
 - A.1 proposal template (Required)
 - A.2 budget template (Required)
 - A.3 Letter of endorsement or intent from co-applicants or affiliates (Required if co-applicant exists)
 - A.4 Letter of endorsement from applicant's country NREN, certifying applicant institution's eligibility (Required)

*Each file should be separated when submitted.

Further documentation may be required, and these may be communicated to provisionally selected applicants in due course.

APPENDIX A – List of NRENs

Least Developed Countries and Territories	
Afghanistan	Afghanistan Research and Education Network (AfgREN)
Bangladesh	University Grants Commission (UGC)/Bangladesh Research and Education Network (BdREN)
Bhutan	Department of Information Technology and Telecom (DIT&T)/ Druk Research and Education Network (DrukREN)
Cambodia	Institute of Technology of Cambodia (ITC)/Cambodia Research and Education Network (CamREN)
Laos	Lao Education and Research Network (LERNet)
Myanmar	Myanmar Research and Education Network (mmREN)
Nepal	Nepal Research and Education Network (NREN)
Lower Middle Income Countries and Territories	
India	National Knowledge Network (NKN)
Indonesia	Institut Teknologi Bandung (ITB)/Indonesian HighER Education NeTwork (INHERENT)
Mongolia	Mongolian Research and Education Network (ErdemNet)
Pakistan	Pakistan Education and Research Network (PERN)
Philippines	Advanced Science and Technology Institute (ASTI)/ Philippine Research, Education and Government Information Network (PREGINet)
Sri Lanka	Lanka Education and Research Network (LEARN)
Vietnam	National Agency for Science and Technology Information (NASATI)/ Vietnamese Research and Education Network (VinaREN)
Upper Middle Income Countries and Territories	
China	China Education and Research Network (CERNET), China Science and Technology Network (CSTNET)
Malaysia	Malaysian Research and Education Network (MyREN)
Thailand	Thailand Research Education Network Association (ThaiREN)
Developed Countries and Territories	
Australia	Australia's Academic and Research Network (AARNet)
Chinese Taipei	Taiwan Advanced Research and Education Network (TWAREN), Academia Sinica (ASOC)
Hong Kong	Hong Kong Academic and Research Network (HARNet)
Japan	National Institute of Information and Communications (NICT), National Institute of Informatics (NII), Ministry of Agriculture, Forestry and Fisheries Research Network (MAFFIN)
New Zealand	Research and Education Advanced Network NZ Ltd. (REANNZ)
Singapore	Singapore Advanced Research & Education Network (SingAREN)
South Korea	National Information Society Agency (NIA)/Korea advanced REsearch Network (KOREN), Korea Institute of Science and Technology Information (KISTI)/Korea Research Environment Open NETwork (KREONET)

APPENDIX B – List of requirements by country for Category2

(Category 2) Capacity Development of Country	
Bangladesh	<p>Topic: Developing Advanced Security Professionals in Bangladesh</p> <ol style="list-style-type: none"> 1) Desired objective <ul style="list-style-type: none"> - Create Cybersecurity Awareness - Create countrywide pool of Cybersecurity Professionals - Recommendation for Cybersecurity Policy for National Research and Education Sector - Create Certified Cybersecurity Professionals - Industry-Academy collaboration activity on Cybersecurity - Creating Industry Ready trainers on Cybersecurity - Earning Competency to provide Consultancy service to other NRENs - Preparing Industry Ready professionals for SOC with CERT / CSIRT around the country 2) Target: Students, IT Staff, Faculty of Institutes, Policy Makers, etc. 3) Major activities preferred: <ul style="list-style-type: none"> - Training <ol style="list-style-type: none"> i. EC-Council Certified Ethical Hacker (CEH) training Track ii. CompTIA Cyber Security Analyst (CySA+) training Track iii. Certified Information Systems Security Professional (CISSP) training Track iv. Certified Information Systems Auditor (CISA) training Track - Workshop <ol style="list-style-type: none"> i. CyberSAFE (Securing Assets for the end User) training Track - A forum or group will be formed to focus on Cybersecurity in the Research and Education Industry - Quarterly Virtual Meetings or Conferences for current situation and knowledge sharing to build awareness - Building Central Blog or Portal - Conduct a Local exam for selecting the candidate for Certification - Onsite test will be held at the end of the training. Participants need to pass the exam to attend the next training phase. 4) Venue: Onsite and Hybrid 5) Description: Different levels of training and workshops targeting internationally recognized certification programs will be conducted to develop the capacity of Cybersecurity professionals in Bangladesh.

		6) Detailed Scope of Works:				
Location	Training Track	Workshop Track	No of Participants	No of Batch	Duration/Batch (Days)	No of Certification Coupon
Dhaka	CEH		36	2	9	
	CySA+		20	1	9	
	CISSP		15	1	9	
		CyberSAFE	100	2	3	
	CISA		20	1	9	
Northern	CEH		15		9	
		CyberSAFE	50		3	
South-Western	CEH		14		9	
		CyberSAFE	50		3	
Chittagong	CEH		14		9	
		CyberSAFE	50		3	
Sylhet	CEH		7		9	
		CyberSAFE	50		3	
	CEH					10
	CySA+					5
	CISSP					2
	CISA					5
Bhutan	<p>Topic of the capacity building: Network Engineer Training and Workshop</p> <ol style="list-style-type: none"> 1) Target: DrukREN Engineers and Network Engineers of DrukREN Members 2) Estimated number of people participation: 150 3) Estimated period (days) of the program: 10 Months 4) Level of the program: Intermediate, Advanced/Expert 5) Venue: Face-to-face 6) Description: DITT/DrukREN has highlighted the requirement for capacity building for DrukREN/DITT to successfully transition into fully fledged NREN in the NREN Needs Assessment in 2021. A dedicated team shall be required to operate and manage DrukREN in the future. DrukREN has connected 150+ new members in the last 1 year. As a result, DrukREN engineers has to further build their skills to cater to the needs of DrukREN members in the country. Therefore, DrukREN/DITT would like to focus on “Technical Capacity Building for DrukREN (DITT) and its members” program for Bhutan. The program will play a key role in building capacity for DrukREN - not only to accelerate the smooth transition to fully-fledged NREN, but also to introduce new NREN services and to adopt innovations to meet the requirements of the research and education community in Bhutan. 					
Cambodia	<p>Topic: Advanced integrated solutions for indoor horticulture based on dashboard-remote monitoring and triggering</p> <ol style="list-style-type: none"> 1) Desired objective 					

	<ul style="list-style-type: none"> - Farmers/agricultural producers understand hands-on knowledge of indoor farming system that include modern technologies to control their production - Students/Researchers are well aware and practical on IoT adaptive system for modern indoor monitoring and triggering - Business actors get big pictures of IoT system functions for agricultural production, expansion of business toward agriculture-based IoT <p>2) Target: experts on IoT system, Indoor system management, and crop production, and students, farmers</p> <p>3) Level of the program</p> <ul style="list-style-type: none"> - Advanced/expert: provide hands-on skill/knowledge to students/researchers toward a higher level of modern IoT - Simplifier from the higher level to lower level: an adoptive system for farmers/agricultural producers in Cambodia <p>4) Method: Physical hands-on practice</p> <p>5) Description</p> <p>Cambodia seeks the project that introduces and verifies technical IoT into greenhouse-farm production to improve agricultural quantity and quality for premium market price. In addition, prototyped device that communicates wirelessly with a cloned web dashboard will be developed to collect ground information such as air temperature, air humidity, light intensity, CO₂, soil nutrients, soil temperature, soil humidity, soil pH, and soil EC. All this information is to be sent and collected wirelessly through a communication web dashboard, which is cloned from the existing web server. The web dashboard also functions as a data-logger center, where information stores and ultimately analyzes the future automated control system. Importantly, the web dashboard is crowdsourcing information and knowledge for researchers and agricultural farmers.</p> <p>The project would aim at</p> <ul style="list-style-type: none"> - enable technical skills on the IoT to effectively and efficiently control, monitor and trigger greenhouse-crop production based on a wide range of informative sensors, including air temperature sensor, air humidity sensor, light sensor, CO₂ sensor, soil nutrient sensor, soil temperature sensor, soil humidity, soil pH and soil EC - enhance and expand hands-on learning experiences of IoT for farmers, researchers and business actions through a capacity-building programme - develop a replicable model system to open access to the web dashboard.
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	<ul style="list-style-type: none"> i. an innovative standard greenhouse will be built and equipped with a set of environmental sensors such as air temperature sensor, air humidity sensor, light sensor, CO2 sensor, soil nutrient sensor, soil temperature sensor, soil humidity sensor, soil pH sensor, and soil EC sensor, ii. an advanced IoT bridging system, interconnecting with prototyped device, functioning for data collection, data storage and source distributor of knowledge, will be developed, - basic agricultural information of water requirement, soil condition, and weather conditions will be collected, analyzed and distributed to farmers, researchers and business actors through a training programme and workshop, - prototyped device will well function to mitigate agricultural operational loads, labor-saving, cost reduction for operation, water-saving, improve quality and quantity of products with premium market price and - agribusiness partners will scale up numerous prototyped devices
<p>Laos</p>	<p>Topic of the capacity building: NREN or Organization consulting and NREN Awareness program</p> <ul style="list-style-type: none"> 1) Target: Government officials and public 2) Major activities preferred: <ul style="list-style-type: none"> - Organizing series of meetings with different parties and different levels in order to get ideas and consensus for the proposal to the government - Consulting workshops and meetings with partners in providing insight inputs - Promoting LERNET activities and applications from the past to the present by organizing a dissemination workshop on LERNET achievement and development plan
<p>Nepal</p>	<p>Topic: Exploration of resources for research and education and sensitization about NREN* in Nepal</p> <ul style="list-style-type: none"> 1) Major activities preferred: <ul style="list-style-type: none"> - Desk research on activities and services offered by different National RENs across the world, such as access to e-science resources, virtual lab, supercomputer, electron microscopes, etc. - Explore potential research areas/domains which can be supported by high-speed research and education network in the context of Nepal. - Capacity Building of NREN team/members for how e-science resources and other services operates or supported by National RENs (if needed some physical visit can be done) - Develop sensitization materials and make necessary preparation for the demonstration of the use of high bandwidth research and education network.

	<ul style="list-style-type: none"> - Conduct sensitization workshop along with the demonstration of the use of high-speed research and education network to Nepal's research and education sector. <ol style="list-style-type: none"> 2) Target: Students, teachers, researchers, and government officials of related line agencies, such as MoEST, MoCIT, NTA, DIT etc. 3) Estimated timeline of the program: 10 Months 4) Venue: Offline 5) Description of the requirement: NREN has recently prepared a feasibility study for national expansion and currently preparing resources for the implementation of the report. Out of all the findings, one of the findings from the study was the need for more Awareness Workshops focused to academia. Although NREN conducted a few awareness sessions during the feasibility study, these were not adequate, and also the study team noted that the real demonstration of high bandwidth research and education network uses will have more significant impact to the Nepal's scientific communities. This project aims to explore resources for research and education sector of Nepal, use such resources/information to develop sensitization materials and conduct sensitization workshops and interactions at all the 12 universities and related line ministries and departments of the government of Nepal. The project will explore various global cases of research and education network uses which will serve as a sensitization content and also help to develop new activities and services for NREN. <p>Note: * Nepal Research and Education Network</p>
<p>Mongolia</p>	<p>Topic: NREN Knowledge Transfer Workshop (aligned with mnNOG event)</p> <ol style="list-style-type: none"> 1) Major activities preferred: <ul style="list-style-type: none"> - There will be an effort to raise awareness of ErdemNet and NREN activities in the local press, mailing lists and other forum - There will be a single multi-day NREN Awareness raising event (Planning on October aligned with mnNOG3(nog.mn) event) - When the event is over, a report will be written up with a roadmap for R&E activities in Mongolia with input from the local government, ISP and R&E communities as well as international NREN experts 2) Target: Government, Ministry of Digital Development and Communications (new Ministry), R&E and ISP community 3) Method: Offline (Face-to-Face in-person event) 4) Description:

	<p>A. Overview</p> <p>mnNOG (Network Operations Group) brings together the ISPs of Mongolia to discuss issues of shared interest. ErdemNET seeks the parallel project that would bring together the local NREN community to mix with this community and develop a roadmap for future and advanced services.</p> <p>B. Objective</p> <p>In 2016, ErdemNet lost its ISP licence allowing it to only provide peered R&E connectivity in the wider community. Therefore, this event would be to bring NREN experts, government, and ISPs together along with university and school customers to detail what is needed from an NREN and what opportunities are available and how best can ErdemNet deliver on those. If it is determined that commodity internet is a requirement for future ErdemNet funding and growth, then a plan to re-establish the ISP licence for this purpose should be a priority.</p> <p>C. Purpose</p> <p>Purpose of this project is to raise awareness of ErdemNet and develop a roadmap that is complementary to the existing infrastructure (government + ISP) communities that can support a range of services to ensure the stability of funding to ErdemNet and its growth as an NREN.</p> <p>D. Expected outcome</p> <p>The expected outcome of this project is that government, university, school, and ISPs will have a higher appreciation of the opportunities available via an NREN and that ErdemNet can fulfil this role if it has the confidence and support of the community. A list of the next 3 steps that ErdemNet should take in 2023 will be developed.</p>
<p>Vietnam</p>	<p>Topic: Increasing visibility and capacity of VinaREN</p> <p>1) Major activities preferred:</p> <p>1.1. Developing a new VinaREN website as an online learning platform for capacity building of its member organizations and users</p> <ul style="list-style-type: none"> - Developing free and open online training courses (MOOCs, self-study tutorials, webinars,...) and open educational resources in network management and security, research writing and communication,... <p>1.2. Developing VinaREN promotional materials (brochure, flyer, posters, banners...)</p> <p>1.3. Organizing hybrid consultation workshops and awareness raising events on</p>

VinaREN activities and community		
2) Target:		
<ul style="list-style-type: none"> - System/Network administrators and engineers at VinaREN member organizations, research & higher education institutions, information centers & libraries - Early and mid-career researchers at research and higher education institutions - Government officials 		
3) Timeline of the program: 1 October 2022 ~31 July 2023 (10 months)		
Time	Tasks	Deliverables
Oct – Dec 2022	1. Draft and conduct surveys on VinaREN visibility and activities 2. Host consultation workshops on developing VinaREN online learning platform 3. Contract content developers (website, online learning management system, MOOCs,...) and consultants	1. Survey results and analysis 2. Presentation files; workshop proceedings/ reports 3. Developers and consultants contracted
Jan – May 2023	1. Development of website/online learning platform, pilot MOOCs, self-study tutorials, webinars, open educational resources	1. Online learning platform using open source (ex. Moodle) LMS; MOOCs
Jun – Jul 2023	1. Draft and conduct surveys on VinaREN website test run 2. Organize workshop launching VinaREN new online learning platform/website 3. Draft and finalize project completion report	1. Survey results and analysis 2. Presentation files; workshop proceedings/reports 3. Completion report with lessons learnt and policy recommendations
5) Venue: Hybrid		
6) Description:		
6.1. Overview		
<p>VinaREN is built, maintained, and developed by the National Agency for Science and Technology Information. VinaREN was officially launched nationwide in 2008. Since then, VinaREN has continuously developed and expanded, thereby, affirming its role as the National Research and Training Network of Vietnam.</p> <p>VinaREN has 3 NOCs including: VNNOC located at the National Agency for Science</p>		

<p>and Technology Information, NOC-DN and NOC-HCM located at NetNam's Data Centers in Da Nang City and Ho Chi Minh City, respectively.</p> <p>Currently, VinaREN maintains connections for 80-member organizations, including research and higher education institutions, science and technology information centers of 63 provinces and cities across the country.</p> <p>In response to COVID-19 pandemic and the growing demand for online training of VinaREN community in network management and security, research writing and communication, as well as to increase its visibility and capacity, NASATI plans to establish VinaREN website as an online learning platform, together with developing promotional materials and organizing hybrid consultation workshops and awareness raising events on VinaREN activities and community.</p> <p>Among these activities, online learning is considered our top priority as 1) it offers flexibility: participants can sign up to take the course and do the coursework at any time that suits their schedule; 2) it creates bridges connecting researchers between locations, many of whom may not otherwise have come to know each other, thus encouraging further collaboration and networking; 3) it helps reducing cost, time and travel associated with face-to-face training course for both organizers and participants. For online learning courses to be delivered successfully, we seek the project in both consultation and technical aspects, i.e. setting up an online learning platform, developing course materials, if available.</p> <p>6.2. Objectives</p> <ul style="list-style-type: none">- To raise awareness and capacity of VinaREN- To develop activities encouraging further engagement of present and new member organizations in VinaREN. <p>6.3. Desired expectation</p> <p>a) Outputs</p> <ul style="list-style-type: none">- Online learning platform (website)- Pilot online training courses (MOOCs, self-study tutorials, webinars,...) in network management, research writing and communication- Workshops- Promotional materials (brochure, flyer, posters, banners...)- Reports <p>b) Outcomes</p> <ul style="list-style-type: none">- Knowledge and awareness increased- Cost, time, and travel associated with face-to-face workshops reduced- Policy recommendations on facilitating online learning for VinaREN capacity building established
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