

A. Mini Competition Terms of Reference

Partner and Location	BK-Holdings Hanoi University of Science and Technology and Microsoft Vietnam
Dates of Activity	November 2018 and March 2019
Type of service	Delivering training for STEM ambassadors and Speaking at Dissemination workshop
Background and Context	<p>Gaps in STEM education for girls in Vietnam</p> <ul style="list-style-type: none"> • Of more than a thousand Vietnamese patent applications, fewer than 9 percent were from women. At the same time, there's a glass ceiling for women to gain professorships. Even though half of all university faculties employ women, only 11 percent gain professorships, with those in the STEM fields considerably lower. • Limited chance for female academics to excel beyond the initial level in form of scholarship. • Lack of initiatives to encourage more girls to study STEM subjects at school level • No career orientation advisory on future of work at school level <p>The British Council is delivering a project entitled “Promote school girls’ interest and participation in science and innovation through STEM education and digital skills” from October 2018 to March 2019. The project aims at providing opportunities to allow more girls from secondary and high schools in Vietnam to explore their potential and empowered to pursue STEM subjects as a career of choice at higher level of education, addressing Vietnam’s gap in STEM human resources to respond to IR 4.0 challenges through UK STEM ambassador network approach.</p> <p>The Ambassador network will include STEM students, early career researchers and teachers. The ambassadors will be equipped with essential skills and knowledge of the system, process and roles so that they will be able to work with teachers and schools students on cascading learning.</p> <p>Responsibilities of the STEM Ambassadors will include</p> <ul style="list-style-type: none"> • Deliver a 3-day cascading training to at least local school students (30 participants/ training) • Mentor and coach for at least 2 STEM groups of school students per school to develop projects solving local problems and to submit projects to School Lab competition (**). <p>The project objectives will be achieved through the following outputs:</p> <ol style="list-style-type: none"> 1. Setting up a STEM Ambassador Network to create a forum/platform for young female researchers and STEM students that make a contribution to increase girls’ interest into STEM career at five locations: Hanoi, Danang, Hue, Ho Chi Minh City and Mekong region including 15 pilot schools under the British Council STEM project funded by the Newton Fund in 2016-2017 (*)

	<ol style="list-style-type: none"> 2. Girls work on STEM projects that focus on solving local issues addressing Sustainable Development Goals 3. Involving relevant stakeholders such as Ministry of Science and Technology (MOST), Ministry of Education and Training (MOET), departments of education and training to think forward of STEM programme at schools using contextualised UK model 4. Promoting UK reputation in science and innovation as well as a trusted development partner <p><i>(*) The British Council STEM project funded by the Newton Fund in 2016-2017:</i></p> <p><i>Between 14 and 21 May 2016, the British Council conducted a scoping visit to evaluate the teaching of science and other supporting activities in northern schools and universities. Two UK experts examined the schools' facilities and equipment such as laboratories, documents and materials, observed science lessons, interviewed students and science teachers and talked to the local STEM coordinators. After this trip, they issued a report on landscape and potential of STEM education in Vietnam.</i></p> <p><i>For more information on the project, please visit the page: www.britishcouncil.vn/en/programmes/education/science-innovation/newton-programme-vietnam/stem</i></p> <p><i>(**) School Lab competition: School Lab aims to help students understand and appreciate the exciting challenges of science, develop critical and creative thinking skills, as well as gaining the confidence and skills required to present and demonstrate their understanding of scientific concepts.</i></p>
<p>Description of services</p>	<ul style="list-style-type: none"> • Development of training materials for STEM Ambassadors network through a scoping visit prior to the boot camp training • Delivery training camp for learning various types of skills through a boot camp activity • Development of a STEM Ambassador Handbook • Provision of continuous support to STEM ambassadors during the project timeline • Monitoring and Evaluation framework to assess the performance of STEM ambassadors and practical work with schools • Development of M&E tools for future use • Presentation of evaluation report and recommendations at project dissemination workshop

Expected outcomes/outputs of activity

Output 1: A STEM boot camp to train up to 100 STEM students, early career researchers, teachers and school leaders (70% female) from 5 locations in Vietnam for 3 days in Hanoi in October, 2018. This aims to equip the STEM ambassadors with essential skills to be able to work with school students and STEM teachers, translate ambassadors' work into suitable lessons through social leadership skills, digital skills and science communication skills. School leaders will be trained for 1 day on STEM leadership to provide support to the project implementation.

The training will be co-delivered by UK STEM consultants and local consultants in collaboration with Microsoft and BK-Holdings, a spin-out company of Hanoi University of Science and Technology.

Topics of training by UK consultant(s) may include but are not limited to:

- Strategies for engaging with students
- The processes of running a STEM Ambassador network
- Practical hands-on investigations and experiments to facilitate the enriched learning
- Translating of Ambassadors' works into suitable lessons for different audiences
- Development of activities
- Skills required to deliver these and facilitate learning
- Specific topics relevant to girls/ women regarding opportunities in STEM

Consultant(s) is/are expecting to conduct a scoping visit prior to the boot camp to learn about local context and practice at schools.

Output 2: A Handbook developed by UK consultants for the STEM Ambassador Network to ensure sustainability of the Network

1. Mentor and coach for Vietnamese consultants and Ambassador network
2. Develop a handbook for STEM Ambassador network by UK consultants to ensure sustainability and expanding
3. Materials for Ambassadors to mentor and coach school students in order to engage more girls in studying STEM subjects

Output 3: A dissemination workshop involving relevant stakeholders such as MOST, MOET, departments of education and training to think forward of STEM programme at schools using contextualised UK model, and promoting UK as a trusted development partner with reputation in science and innovation.

<p>Deliverables and Timeframes</p>	<p>Timeline</p> <ul style="list-style-type: none"> • Release call for UK consultant(s): 2 October 2018 • Deadline for proposal from UK consultant(s): 1800 (UK time) Sunday 21 October 2018 • Result announcement & contract signing: 26 October 2018 • Scoping visit: 22–23 November 2018 • Training at Bootcamp: 24–26 November 2018 • Handbook development: 27 November 2018 • Dissemination workshop: early March 2019 <p>Venue</p> <p>All activities will be held at BK-Holdings Company, Hai Ba Trung District, Hanoi. There will be Internet provided. Any requirements of lab or outdoor use must be identified in the proposal.</p> <p>Translation</p> <ul style="list-style-type: none"> • Two consecutive interpreters will be arranged • The materials will be in English with likelihood of translation for future use but may not be translated for the training. <p>British Council Vietnam and partners can support</p> <ul style="list-style-type: none"> • Arrange meetings with stakeholders for scoping visit • Arrange lab visit for training participants (if needed)
<p>IPR considerations</p>	<p>British Council hereby grants to the Consultant(s) an irrevocable, royalty-free, non-exclusive, worldwide right and license to use the Project IPR and the British Council’s Background IPR in, and to the extent necessary for, the performance of the Services. The Consultant(s) hereby grants to the British Council an irrevocable, royalty-free, non-exclusive, worldwide right and license to use the Consultant’s Background IPR included in the Deliverables.</p>
<p>Reporting and Monitoring and Evaluation</p>	<p>On Monitoring: The consultant(s) shall submit a post-activity report to the British Council detailing the progress of each activity in reference to the agreed upon Schedule of Activities and Project timelines. The report shall contain a narrative on project’s progress, a summary of completed tasks, and a statement of funding and expenses.</p> <p>On Evaluation: Each activity under the Stem Ambassadors network shall be evaluated on (1) the objectives met, (2) efficiency of expenditures, (3) impact of the activity to the participants and to the community, (4) quality policy dialogue content and recommendations made by consultant(s) in the final report.</p>
<p>Contact person in British Council office where the service will be delivered</p>	<p>Nguyen Thu Giang Programme Manager (Science and Innovation) British Council Vietnam 20 Thuy Khue street, Tay Ho District, Hanoi, Vietnam E: giang.nguyen@britishcouncil.org.vn</p>

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Budget	<p>GBP500.00/working day * 5.5 days *2 pax (boot camp) + 2 days (workshop) * 1 pax = GBP6,500.00 (exclusive of VAT/PIT)</p> <p>Budgets should include the following:</p> <ul style="list-style-type: none">• 2 day scoping visit• 3 training days for Boot camp activity (2 consultants)• Speaking at the dissemination workshop (1 speaker)• Preparation for the training• Manual development and preparation• On-going support to STEM ambassadors during the project timeline• M&E• Report Write-up fee <p>It is the responsibility of suppliers to ensure the correct VAT treatment is applied.</p> <p>Logistics (travel and subsistence) will be arranged and paid by the British Council Vietnam and will not be part of the above budget:</p> <ul style="list-style-type: none">• Economy class flights, meals, travel and accommodation for at most two consultants in Vietnam• Economy class flight, meals, travel and accommodation for at most one speaker for the dissemination workshop