



មូលនិធិដុនបូស្កូកម្ពុជា(សាខាក្រុងប៉ៃត)

Don Bosco Foundation of Cambodia (Krong Poipet Branch)

ភូមិមិត្តភាព សង្កាត់ប៉ៃត ក្រុងប៉ៃត ខេត្តបន្ទាយមានជ័យ

Mithapheap Village , Sangkat Poipet ,Poipet City, Banteay Meanchey Province

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Term of Reference (TOR) Programmable Logic Controllers (PLC) Training

1. Background:

The Don Bosco General and Technical High School Poipet provides quality technical training in basic skills such as ICT and electrical engineering. These training courses are universally in demand across industries and across sectors. The industrial sector in Cambodia has voiced that the need for skilled workers is greater than the number of students Don Bosco General and Technical High School Poipet provides.

The manufacturing processes are increasingly becoming more automatised and vocational schools, especially in rural areas, are not able to adapt their curriculum as quickly to the skills required by employers. Thus, equipping students with skills that allow them to understand and use programmable logic controllers (PLC) is an essential skill that prepares students and future employees for the job market. A PLC is an industrial digital computer which has been adapted for the control of manufacturing processes, such as assembly lines, robotic devices, or any activity that requires high reliability, ease of programming and process fault diagnosis.

Currently, the Don Bosco General and Technical High School Poipet is implementing a project on the *Promotion and Application of Programmable Logic Controllers*, which is funded Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The project focus is to update the Don Bosco classroom by purchasing three programmable logic controllers (including computers) and equipping Don Bosco teachers with the skills to update their curriculum and teach their students how to use programmable logic controllers (PLCs).

2. Objectives of the assignment:

This assignment aims to strengthen the capacities of Don Bosco teachers and provide them with the necessary skills to teach PLC courses. Furthermore, the objective is to:

- Develop and carry out a PLC training of trainers for four staff members. The modules should include the PLC level 1 course and the PLC level 2 advanced course.
- Develop a PLC level 1 and PLC level 2 curriculum that can be used by the trained teachers to conduct PLC training courses at the Don Bosco General and Technical High School Poipet.

3. Scope of works and expected outputs/deliverables:

The consultant shall develop the PLC curriculum for Don Bosco, and provide a training of trainers for Don Bosco teachers. This is expected to take up to 20 days between the 1st of February and the 31st of March, 2021. This assignment will take place at Don Bosco General and Technical High School Poipet, Banteay Meanchey Province.

Following outputs/deliverables shall be met:

- Meeting with Don Bosco and relevant stakeholders (some factories in economic zones) to discuss the content of the training material and the needs of the target group
- Based on this assessment, develop a dynamic and comprehensive training of trainers curriculum based on the PLC level 1 course and a PLC level 2 advance course.
- Develop curriculum based on the PLC level 1 course and a PLC level 2 advance course that can be used to conduct PLC training courses at Don Bosco.
- Provide all documentation and training materials as a PDF and MS-Word Document.
- Deliver training for four Don Bosco staff members

4. Qualification of the consultant(s)

The consultant or the team of consultants shall be sufficiently qualified to execute the tasks in a professional, competent, and timely manner. The consultant(s) shall have the following qualifications:

- A master degree in electrical, mechanical, or software engineering or any other relevant field of study
- Six years of teaching experience and professional work experience developing courses, training, or curricula
- In-depth knowledge on the topic of programmable logic controllers (PLC) and their use in different sectors/industries.
- Professional experience writing programmable logic controller (PLCs) manuals, training documents or similar publications
- Ability to freely communicate and write in English and Khmer

5. Reporting

The consultant shall provide a final report of a maximum of 5 pages (in English) and shall submit this to Fr. Yang Jung Sik, Director of Don Bosco Center Poipet, via ymarcosdb@gmail.com as a PDF and MS-Word Document.

6. Required Document for Submission

The consultant shall provide the following documents upon offering his/ her services:

- CV of the consultant shall include all relevant educational qualifications and work experience related to the content mentioned in this document (Terms of Reference)
- Provide contact details of at least two references. Note: references may be contacted without prior notice
- A proposal and proposed budget/quotation indicating the costs incurred (all fees and travel costs must be included in the financial offer)

7. Closing submission

Deadline for the submission of the quotation is the **18 January 2021**

9. Contact person within Don Bosco Poipet

Mr. Say That

Headmaster of Don Bosco General and Technical High School Poipet

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