

## **ANNEX C1: Twinning Fiche**

**Project title:** Supporting Upper-Secondary (Grade 10, 11, 12) Technical Education Reforms in Cambodia

Beneficiary administration: Ministry of Education, Youth and Sport (MoEYS) of Cambodia

Twinning Reference: KH 23 NDICI OT 01 24

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EU funded project

TWINNING TOOL

## List of Abbreviations

ADB	Asian Development Bank
AFD	Agence Francaise de Developpment
ASEAN	Association of South East Asian Nations
BA	Beneficiary Administration
BC	Beneficiary Country
BS	Budget Support
CAMSEB	Cambodia Secondary Education Blueprint
CBI	Core Breakthrough Indicator
CPD	Continuous Professional Development
CQF	Cambodian Qualification Framework
ESP	Education Strategic Plan
EU(MS)	European Union
EUMS	European Union Member State
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GFT	Garment, Footwear, Travel goods
GTHS/s	General and Technical High School/s
LTA	Long Term Advisor
IO(s)	Induced Output(s)
MEF	Ministry of Economy and Finance
MOEYS	Ministry of Education, Youth and Sports
MoLVT	Ministry of Labour and Vocational Training
MS/s	Member State/s
NDICI	Neighbourhood, Development and International Cooperation Instrument
NIE	National Institute of Education
OECD	Organization for Economic Cooperation and Development
PFM	Public Financial Management
PISA	Programme for International Student Assessment
PL	Project Leader
PSC	Project Steering Committee
RTA	Resident Twinning Adviser
SDG	Sustainable Development Goal
STE	Short Term Expert
STE(A)M	Science, Technology, Engineering (Arts) and Math
(T)VET	(Technical and) Vocational Education and Training
VOD	Vocational Orientation Department
WB	World Bank
WBL	Work-Based Learning

### 1. Basic Information

1.1 Financing decision "Transforming Technical Education EU-Cambodia Partnership 2024-2027"

OPSYS number: ACT-61732 - direct management

- 1.2 Twinning Sector: Other (OT)
- 1.3 EU funded budget: EUR 2 500 000
- 1.4 Sustainable Development Goals (SDGs):
  - Main SDG: 4 Quality Education
  - Other significant SDGs:

SDG 5: Gender Equality
SDG 7: Affordable and clean energy
SDG 8: Decent work and economic growth
SDG 9: Industry, Innovation and Infrastructure
SDG 12: Responsible Consumption and Production
SDG13: Climate action
SDG 16: Promote just, peaceful and inclusive societies

### 2. Objectives

2.1 Overall Objective:

To support the transition of Cambodian upper-secondary technical education towards a 21<sup>st</sup> century and EU-inspired work-based learning (WBL) system.

2.2 Specific Objective:

To improve the quality of teaching and learning at upper-secondary (Grade 10, 11, 12) technical education by integrating Work-Based Learning (WBL), gender, digitalisation and climate change in curricula and teacher training within the proposed timeframe.

2.3 The elements targeted in strategic documents i.e. National Development Plan/Cooperation agreement/Association Agreement/Sector reform strategy and related Action Plans

Education and skills are capital to foster Cambodia competitiveness and maintain the trajectory of high growth of the past years. This is especially true as the country wants to become a knowledge-based economy. Its main drivers of growth and export (garment, footwear, travel goods (GFT) and agriculture/agro-processing) shall become more low carbon, climate-resilient and automated to stay competitive and sustain the creation of decent jobs in the country.

Despite increased allocations to education and almost universal access to primary school, Cambodian youth has not reached the desired skill level to enable the transformation of the country's economy. Almost 70% of youth do not enrol in upper-secondary education; only 12% continue into tertiary. Stubbornly low enrolments in STEM (Science, Technology, Engineering and Math), by girls especially, limit the country's competitiveness and potential for transformation.

The Government is well aware of the challenge and is committed to embark in reforms, especially as the new administration –which took up duty in August 2023- feels strong pressure

to improve service delivery and put the basis for a more sophisticated and durable economic growth.

The National Development Plan, called Pentagonal Strategy Phase I (August 2023) underlines the importance of human resources to build a new growth model based on skills, technology and innovation. "People", i.e. quality of human resources, is the first priority of the Government, with the long-term vision for Cambodian people to become "highly knowledgeable and with at least one skill in life". Enhancing the quality of education, sports, science and technology and technical skills training are the first two priorities of the "Human Capital Development" Pentagon (Pentagon 1), together with the promotion of digital education and the study of STEM<sup>1</sup>.

Regarding the link to the Sector Reform Strategy, the Twinning will be financed under the Multiannual Indicative Programme (MIP) 2021-2027 of the European Union's (EU) cooperation with the Kingdom of Cambodia within the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe). The Twinning will be the main complementary measure of a EUR 49 M Global Gateway (GG) Flagship Project/Financing decision titled "Transforming Technical Education EU-Cambodia Partnership 2024-2027", which also encompasses EUR 40M in Budget Support (BS) to finance education reforms in Cambodia, in support to further European investments on green agribusiness and industrial value chains<sup>2</sup>. The Twinning has the ambition to be prominently profiled as what the Global Gateway can concretely bring to countries which partner with Europe.

The Twinning will contribute to the following Induced Outputs (IO) of the Flagship Project:

- IO 1.2 Improved curriculum of technical education ("dual training system") with a focus on low carbon, climate-adapted techniques, hand in hand with digitalisation
- IO 1.3 Improved teacher training in technical education
- IO 1.4 Increased gender equality in access to STEM majors in higher education with a focus on climate change adaptation and mitigation measures

Specifically, the Twinning is expected to support the Ministry of Education, Youth and Sport (MoEYS) in achieving policy reforms in the following areas of work:

- 1. Improved curriculum of the secondary technical education with a focus on low carbon, climate-adapted techniques, hand-in-hand with digitalisation
- 2. Improved teacher training in technical education
- 3. Increased gender equality in opportunities for access to STEM majors in higher education with a focus on climate change adaptation and mitigation measures

The above three areas of work have been pre-agreed at the highest level between the EU and the Cambodian Government (Ministry of Education, Youth and Sport, as well as the Ministry of Economy and Finance (MEF), Ministers' level) as three of the six areas to be supported by the EU Budget Support to the education sector<sup>3</sup>.

In addition, within the Budget Support, annual targets to be achieved over three years on the three areas of work- allowing the disbursement of the variable tranche payments from the EU to Cambodia- have also been agreed at the highest level between the two countries. As described at point 3.5, the Mandatory Results of the Twinning are closely related to the variable tranche targets.

<sup>&</sup>lt;sup>1</sup> STEAM (including "A" for Art) is sometimes used in Cambodian documents, together with the more widely used STEM acronym.

<sup>&</sup>lt;sup>2</sup> Team Europe Initiatives 1 and 2, i.e. investments by the European Commission, EU Member States, European Financing Institutions and private sector. <sup>3</sup> The other three areas of work are not relevant for the Twinning.

### 3. Description

#### 3.1 Background and justification

Area of competence, mandate and organisational structure of the Beneficiary administration: MoEYS is, by default, the leading Ministry for all levels of education. General and Technical High Schools (GTHSs) under the MoEYS target pupils who are 15-18 y.o., i.e. attending the last three grades of upper secondary (high) school, (10, 11, 12). These schools are under the overall authority of the Vocational Education Department (VOD) of the central MoEYS, but function with some autonomy. They provide a qualification at Level 2 of the Cambodian Qualification Framework (CQF) for students who complete Grade 10<sup>4</sup>, CQF Level 3 for students who complete Grade 11<sup>5</sup> and COF 4 for students who graduate Grade 12<sup>6</sup>. Those represent middle-level technician qualifications, equivalent to the ones obtained after one, two or three years respectively in a VET institution. Instead of passing the baccalaureate exam which is offered to the Grade 12 students of the academic paths (so-called "general education"), students of GTHSs present a project work for their final exam, which is nevertheless equivalent to the baccalaureate and gives them full access to university. The MoEYS organisational chart and the CQF are enclosed in annex. MoEYS shares the competency of technical education with the Ministry of Labour and Vocational Training (MoLVT) which leads the agenda on the VET institutions. VET institutions under MoLVT mostly target an older population, over 18, which has already dropped-out from school. Additional VETs are under the authority of other ministries, such as Tourism and mostly provide short-term trainings<sup>7</sup>. The National Cambodian Qualification Framework (CQF<sup>8</sup>) is co-led by the MoLVT and the MoEYS.

Strengths and weaknesses: The EU is a key partner of Cambodia in the education sector, thanks to over two decades of partnership in support of the sector policies. Several of the reforms pushed with donors' money have now become institutionalised, with great ownership by the Ministry. That said, the system still does not produce the quality education that it is supposed to, as per the PISA-D 2018 and PISA 2022 reports. In addition learning losses were exacerbated after the very long COVID school closures in 2020-22. Rote learning is still the main teaching modality. Class size is large (40+). As studying is not compulsory after 15 y.o. and the Cambodian main sectors of economic growth (garment industry, construction sector) are lowskilled and labour-intensive, many pupils, boys especially, drop out of the system early as they do not see an advantage in continuing their studies up to the Grade 12. Education is nevertheless very valued in the Cambodian culture, which devotes a lot of respect for teachers. Thanks to the overall sustained growth of the economy, the demand for quality upper secondary and tertiary education is and will grow. Families are willing to invest in their children's studies, provided they see a direct return in career and earning options of their off-springs. Uppersecondary technical education may represent a good option for families and students to be able to both learn a skills that can be useful in the immediate future and also be able to continue in tertiary studies, including on a part-time basis, to get a university qualification.

#### 3.2 Ongoing reforms:

Cambodia has over 20 years of experience in education sector policies, several of which have been accompanied by EU budget support programmes.

<sup>4</sup> Technical and Vocational Certificate 1.

<sup>5</sup> Technical and Vocational Certificate 2.

<sup>6</sup> Technical and Vocational Certificate 3.

<sup>7</sup> The beneficiary of the Twinning will be the MoEYS, but interactions with the MoLVT are possible during the project.

<sup>&</sup>lt;sup>8</sup> In principle not targeted by the Twinning.

The <u>Education Law (2007)</u> provides the overall legal framework (foundation and regulation) of the education sector.

The <u>Education Strategic Plan</u> (*ESP*) 2019-2023<sup>9</sup> is the sector policy plan. Chapter 3.3 (Secondary and Technical Education sub-sector) underlines specific human resource development priorities, in particular: (i) on the promotion of technical education at upper secondary level; (ii) on skills education in accordance with the labour market; (iii) and on the development of comprehensive curricula and textbooks, as detailed below:

-Strategy 1.2: Expand partnerships with the private sector and enterprises for strengthening technical education; Expand partnerships between schools and the private sector on skills requirements<sup>10</sup>; Promote the implementation of apprenticeships and internships with relevant stakeholders.

-*Strategy 2.2:* Strengthen learning orientation towards careers and expand technical education; Expand general education high schools and technical education; Develop new skills at general education high schools and in technical education to meet market demands; Update and implement the Master Plan for Technical Education at upper secondary schools.

*-Strategy 2.3:* Promote the effective implementation of the curriculum framework; Develop guidelines on the implementation of the new curriculum.

In addition to the ESP, the <u>Cambodia Secondary Education Blueprint (CAMSEB) 2030</u>, details most specifically the following priorities on technical education:

**Priority 3**: Align curriculum, instruction, and assessment in all subjects, especially STEM with 21st century quality education

Priority 4: Integrate digital education in General Technical High Schools - GTHS

**Priority 7**: Diversify and strengthen Technical Secondary Education outcomes to meet local economic and labour market needs;

Priority 8: Improve secondary and post-secondary engagement.

These priorities are concretely described in an older document, the <u>Master Plan for Technical</u> <u>Education at Upper Secondary Level</u> (2015-2019), which aims at establishing General Technical High Schools (GTHSs) in each of the 25 Cambodian Provinces. By October 2023, 13 GTHSs have been established.

<u>Sector monitoring:</u> Eight Core Breakthrough Indicators (CBIs) with annual targets monitor the progress in the achievement of the ESP. There are no CBIs related to technical education and the M&E of this sub-sector is at its infancy. National reporting structures, i.e. EMIS, are operational, accessible and gender- disaggregated. Cambodia participated in regional and global learning assessments, including the full PISA by the OECD in 2022. Data collection structures feed into the Annual Education Congress Report which is published every April.

<u>Policy dialogue and sector working groups:</u> Education sector governance bodies are well established. The Twinning project will indeed benefit from the on-going structured bilateral policy dialogue between the EU, the MoEYS and the Ministry of Economy and Finance (MEF) under the framework of the BS programme: quarterly technical reviews and high-level (Minister/EU Ambassador and representatives of the EU Member States) once a year. These

<sup>&</sup>lt;sup>9</sup> A new ESP, covering 2024-2028 is under formulation, based on the Mid-Term Review of the 2019-2023 ESP. The new ESP will be shared with the incumbent as soon as it is finalized.

<sup>&</sup>lt;sup>10</sup> The Mid Term Review of the ESP 2021/2022 further details those aspects: provide student internships, as well as trainers, from the private sector, to teach technical skills in schools. The private sector should also be encouraged to provide input to the training curricula, to better align the offer to the demands from the sector.

will be organised in close coordination (back-to-back) with the Twinning Project Steering Committee meetings to reap the benefits of the presence of the Twinning Project Leader (PL) counterpart.

### 3.3 Linked activities:

The Twinning will be the <u>main complementary measure</u> of a **EUR 49 M Flagship Initiative** titled "Transforming Technical Education EU-Cambodia Partnership 2024-2027, which also encompasses EUR 40M in Budget Support (BS) to finance education reforms in Cambodia, in support to further European investments on green agribusiness and industrial value chains<sup>11</sup>. More details are provided under 2.3.

The main -in addition to EU- donors and lenders to the sector are: the Asian Development Bank (ADB) mostly on TVET with the MoLVT and upper secondary education, the World Bank (WB) at pre-primary, primary, lower secondary (lifeskills), tertiary and TVET with MoLVT, Switzerland on TVET with MoLVT. Among the EUMS, the Czech Republic and France/AFD support education, with programmes on technical education (CZ), multilingual/university reform (FR), loans on TVET (AFD); GIZ, via its private sector development programme, provide some support to TVET schools.

3.4 List of applicable Union acquis/standards/norms:

The European Education Area (EEA) 2025 states that education is essential to the vitality of the European society and economy. The green and digital transition hold a special place in the EEA2025, as well as gender. To deliver on the transformative ambition of education, it is recommended to boost skills for the green economy, as well as increase the number of professional who work towards a climate-neutral and resource-efficient economy. Digital literacy is a must. In terms of geopolitical dimension, cooperation in education (implemented by instruments such as the Twinning) is an indisputable instrument of soft power, which is essential for the achievement of the Sustainable Development Goals as well as the Union's priorities.

The <u>Next Generation EU</u> is a European Union (EU)  $\in$ 750 billion financial instrument created to help repair the immediate economic and social damage in the wake of the COVID-19 pandemic. It is at the heart of the EU response to the COVID crisis and aims to support economic recovery and build a greener, more digital and more resilient future, articulated around the priorities of: green, digital, healthy, strong and equal societies.

The <u>European Framework for Quality and Effective Apprenticeships</u> recommends that Member States, in accordance with national legislation and in close cooperation with stakeholders, ensure that apprenticeship schemes are responsive to labour market needs and provide benefits to both learners and employers, by building on the criteria for quality and effective apprenticeships. The Framework sets us a list of criteria for learning and working conditions, for framework conditions, implementation of national level, support services, awareness raising, funding and follow-up to implement apprenticeships.

The <u>Osnabruck declaration</u> on vocational education and training as an enabler of recovery and just transitions to digital and green economies is a key document as it constitutes an agreement on a new set of policy actions in VET for the period of 2021-2025 to complement and

<sup>&</sup>lt;sup>11</sup> Team Europe Initiatives 1 and 2, i.e. investments by the European Commission, EU Member States and European Financing Institutions.

operationalize the vision and strategic objectives formulated in the Council Recommendation on vocational education and training for sustainable competitiveness, social fairness and resilience<sup>12</sup>.

#### 3.5 Components and results per component

The mandatory results of the Twinning are structured around three components:

## **Component 1 - An upgraded, EU-inspired, Cambodia-adapted Work-Based Learning** (WBL) system for the upper secondary (Grade 10, 11, 12) technical education

The proposed upgraded WBL system must be directly applicable in General and Technical High Schools (GTHSs), within the timeframe of the Budget Support programme, i.e. 3 years. It shall also clearly detail all necessary regulations and provisions needed, for the short (e.g. insurance of pupils, requirements for companies offering WBL...) and longer term, as well as identify possible further areas of Twinning with the EU in the years to come.

The current system is nearly exclusively structured on teaching delivered at the school level. GTHSs offer (some of) the 10 available majors<sup>13</sup> with the following indicative schedule: 24 hours of the selected technical skill and 12 hours of academic curriculum. Exposure to the work environment is limited to one-off one month semi-mandatory internship, mostly done in the last two years of study. Not all the schools are able to ensure that their students complete the internship. This is due also to miscommunication with the receiving companies on their responsibilities towards the students and misconceptions/concerns that receiving underage persons (i.e. the students) in their premises may bring the company under the spotlight of the inspectors of the MoLVT to check the respect of the health and safety standards of workers between 15 to 18 y.o.

In order to present relevant best practices within the EU to MoEYS officials, **study visits** could be organised. Number of participants, timing of the study visits and its specific content will be proposed by the selected MS/s, but, for this component, we envisage to send at least 24 officials from Cambodia to Europe for 8 to 10 days. Cascade trainings could be organised for further dissemination, including for the private sector supervisors.

The proposal of the most relevant example/s to visit will indeed be based on the Cambodia current context, reviewed by the EUMS based on best-practices in Europe. The situation should be reviewed critically and recommendations/proposals for the study visit and model/s to follow will be based on what is concretely achievable within the timeframe of the Twinning and the Budget Support Programme, i.e. 3 years, including the time-frame by which each target shall be achieved by the Government of Cambodia.

<sup>&</sup>lt;sup>12</sup> The Declaration states: "We, the Ministers in charge of vocational education and training (VET) reaffirm our commitment, as discussed in our joint meeting with the European social partners and the European Commission in Osnabruck on 16 and 17 September 2020, to contribute to the post-COVID recovery and to further develop the European Education and Training Area through future-oriented and innovative education and training systems in order to support the digital and green transition and improve employability and competitiveness and thus stimulate economic growth. All objectives and actions will be implemented with due respect to the subsidiarity principle and in accordance with national VET circumstances. We stress that a strong partnership with social partners is vital for achieving the objectives and deliverables set out in the Osnabruck Declaration. We value the support shown by European-level VET providers' associations and learners' organisations by issuing their position papers in line with the Osnabruck Declaration."

<sup>13</sup> The available majors are: electronics, electricity, mechanics, food processing, and computer science (IT), agronomy, animal husbandry, accounting, tourism, digital media design.

#### • Mandatory Result 1.1<sup>14</sup>: Adopted Technical Education Master Plan towards Work-Based Learning

A consultative process should be established involving all stakeholders, including the private sector mobilised via <u>EuroCham</u>. As a first step, to allow for efficient consultations, an analytical review of the secondary technical education set-up in Cambodia should be drafted, within the framework of the new Education Strategic Plan 2024-2028, the CAMSEB and the legislative environment. The review should also encompass an analysis of the previous Master Plan, to identify what has not been achieved. This should be followed by concrete, EU-inspired proposals on how to update the current model towards a real WBL within the Cambodian context (and identify need for further legislation revision, if needs be). The Twinning should also advise, based on experiences and policy dialogue on European examples, on concrete measures and lessons learnt on increasing the number of girls who chose the technical stream in secondary education.

Against the background of the previous document, a new Master Plan should be updated and adopted by MoEYS Cambodia<sup>15</sup>. The Master Plan should be reviewed with the intention to focus on climate-change adaptation, mitigation and digital skills to revamp Cambodian economic growth model towards a more sustainable path, in line with European investments and interests in the country. Students in GTHSs follow both an academic and a technical curriculum. Due to the current context, it seems unlikely that WBL will encompass also the academic content. It is more reasonable to believe that the WBL will be limited to 1-2/week or offered in alternating blocks from the academic part. Notwithstanding, we do not wish to pre-empt or be prescriptive in order to leave more liberty in the proposal.

# • Mandatory Result 1.2<sup>16</sup>: Implementation of a fast-tracking pilot for the undergraduate programme for students from GTHSs supported

As agreed under the BS programme, the MoEYS shall adopt<sup>17</sup> guidelines to allow graduated (post Grade 12) students from GTHSs who enrol into university in the same major of study<sup>18</sup> to benefit from the exemption of attending the foundation (first) year of university, therefore progressing faster to their tertiary degree. The Twinning should support the process by providing critical review to the guidelines in 2024 by working closely with the two universities where the fast-track will happen and which host technical schools in their campus. The Twinning should make sure that the selected skills/majors' curricula at technical education and tertiary level are linked. The Twinning should also support the fast-tracking piloting (to start in 2026), for stock-taking and improvement of the guidelines.

The Government of Cambodia is very committed to implement the fast-track of GTHSs graduates into technical/STEM universities, with a double objective. The first one is to increase, fast, the number of STEM bachelors in the country. The second objective is to

<sup>14</sup> Closely linked to Target 2.2.4 (*The Technical Education Master Plan is updated and approved by Q4 2025*) of the BS matrix, which –as all the targets- will unblock a conditional tranche payment from the EU to the Government of Cambodia.

<sup>15</sup> The timeline (by Quarter 4 2025) refers to the final deadline Cambodia has committed to achieve this target in order to benefit from a conditional tranche payment from the EU to the national budget under the overall BS programme, but the MS is free to propose an earlier deadline for achievement.

<sup>&</sup>lt;sup>16</sup> Closely linked to Target 4.1 (*The guidelines on fast-tracking undergraduate programmes for technical high schools graduates are adopted by MoEYS by Q4 2024*) and Target 4.3.3 (*The fast-track undergraduate programme for technical education students is piloted at two higher education institutions in academic year 2026/2027*) under the BS matrix.

<sup>&</sup>lt;sup>17</sup> Expected by end of 2024, according to the agreed BS Matrix.

<sup>&</sup>lt;sup>18</sup> E.g.: a student completing Grade 12 in a GTHS with the electricity major, should be able to skip the first (foundation) year of, for instance, a bachelor in electrical engineering.

encourage more 15 y.o students to enrol at GTHS, instead of dropping out from the academic *lycee*, which does not respond to their inclinations and capabilities<sup>19</sup>.

The Twinning, under this activity, should also advise, based on experiences and policy dialogue on European examples, on concrete measures and lessons learnt on increasing the number of women and girls who select a STEM subject at university<sup>20</sup>.

# • Mandatory Result 1.3<sup>21</sup>: Piloting of the proposed Work-Based Learning (WBL) in 5 GTHSs supported and assessed

Following completion of mandatory results 1.1, and 2.1, 2.2, 2.3, 3.1 and 3.2 (on-going) under components 2 and 3<sup>22</sup>, the new work-based learning (WBL) methods will best tested in 5 GTHSs. As described under component 3, teachers and principals from the selected GTHSs (at least 50 teachers people) and the selected teacher training institution/s will benefit from an internship (ideally of one month minimum) in the selected EUMS in preparation of the piloting for a duration to be proposed by the EUMS/s. Cascade trainings should be organised, including for the private sectors supervisors, in preparation for the piloting.

Due to the project timeline, only the first year of piloting can be accompanied by the Twinning. The Twinning is expected nevertheless to provide recommendations on how to keep monitoring the piloting and assess if it is successful and/or measures to take, including recommendations for scaling-up and for future Twinnings and projects with the EU.

# **Component 2 - Improved curriculum of the secondary technical education with a focus on low carbon, climate-adapted techniques, hand in hand with digitalisation**

The core of component 2 is to zoom-in into the student curriculum in the 5 pre-selected majors<sup>23</sup>.

Deliverables produced under this component will be performed in close consultation with the private sectors (perspective future employers) and their representatives (e.g. EuroCham), schools, teachers, tertiary institutions, MoEYS at different levels, and possibly students. A consultative process will be established as well as specific activities foreseen to prepare the private sectors to this process, based on lessons-learnt and best-practices from the EU. In addition to WBL, the curriculum update will also focus on climate-change adaptation, mitigation and digital skills to revamp Cambodian economic growth model towards a more sustainable path, in line with European investments and interests in the country.

In order to familiarise the different stakeholders with best practices within EU Member States –including on green and digital skills- study visits could be organised during the Twinning Project. Number of participants, timing of the study visits and its specific content will be proposed by the selected MS/s, but for this component we envisage to send in total at least 24 officials from Cambodia to Europe for 8 to 10 days. Cascade trainings could be organised for further dissemination including to the private sector supervisors.

<sup>&</sup>lt;sup>19</sup> Rote learning and frontal lessons are the norm in Cambodian schools, with no space for interactive and student-driven learning. It is culturally inappropriate to contradict the teacher and most lessons are based on theory. Having 33 consonants, 23 vowels, and 12 independent vowels, mastering correct spelling and fluent reading is a cumbersome task to achieve even for native speakers.

<sup>&</sup>lt;sup>20</sup> Linked to Target 4.2.1 (*The higher education students' scholarship guidelines are developed and approved by Q2 2025, with an emphasis on increasing the number of women and girls studying STEM majors*) of the BS matrix.

<sup>&</sup>lt;sup>21</sup> Closely linked to Target 2.3 (*WBL Training Systems applied and piloting ongoing in five* (5) *targeted General and Technical High Schools* (*GTHS*) by Q4 2026) of the BS matrix.

 $<sup>^{22}</sup>$  It is consequently assumed that the Master Plan is approved (Mandatory result 1.1), training needs assessed (2.1), guidelines, framework, syllabi updated (2.2), students have received the revised textbook (2.3); as well teacher training has been reviewed (3.1) and schools teachers and school principals should in principle have already benefitted from the internship in the EU, while the teacher training piloting (3.2) is ongoing.

<sup>&</sup>lt;sup>23</sup> Electronics, electricity, mechanics, food processing, and computer science (IT).

# • Mandatory Result 2.1<sup>24</sup>: Training needs for five majors with a special focus on "green and digitalization" formulated

Achieving a thorough assessment of training needs will involve a systematic examination of the current state of skills, knowledge, and competencies of the students within the system as well as expectations of the European private sector and other investment by Team Europe in the country. The needs assessment should be carried out in parallel with the decision of the WBL model to be selected, and shall precede, logically, curriculum and textbooks revision.

Needs assessment should focus on identifying the gap between the current state and desired outcomes or competencies, within the double finality of technical education: immediate employability as medium-level technician after completion of Grade 12 and/or continuing study at tertiary level (immediately and/or later in the career and/or at a part-time basis while working). Needs assessment and skills profile should go hand-in-hand with an identification of concrete employment opportunities created by European investments on green agribusiness and related industrial value chain developments as a starting point. The results of the needs assessment should be included in occupational standards, which shall be translated into educational standards to be included in the qualifications, to be used for the curriculum update.

Stakeholder consultations involving educators, industry experts, students, and policy makers should be conducted to identify relevant technical skills and knowledge areas that are in demand, with a strong focus on European companies as well as companies in Cambodia which aim at exporting to premium markets with high environmental and quality standards, such as the EU. This should be ideally complemented by a labor market analysis to align training with current and future workforce demands. Surveys, focus group discussions, and one-to-one interviews might be utilized to gather data, and existing curricula might be reviewed to identify areas of enhancement or modification. Extended collaboration with the EU Delegation, EuroCham and other European actors is envisaged.

Needs assessment will focus on the green and digital skills. For instance, the electricity major needs assessment (and then curriculum) will focus on programming, installation or reparation of renewable energy systems, energy efficiency and energy auditing studies. Digitalization refers, for instance, to the IT skills such as robotics programming in the field of electronics and mechanics.

# • Mandatory Result 2.2<sup>25</sup>: Improved technical education curriculum framework, course syllabi and training guidelines

Once the WBL model has been selected and the needs assessed, the update of the guidelines, syllabi and curriculum framework may start.

The training guidelines are short instructions for the teachers and principals on how to implement technical education in GTHSs and at technical teacher training institution's levels. The curriculum framework prescribes more in detail the learning objectives, study hours, lessons plans and present the overall content of the training including how to assess the student. The course syllabi are divided by specific subject, therefore the Twinning should look at updating the 5 syllabi. All the revision should be done keeping the possible fast-tracking at university in mind. Due to the current situation, we do not reckon the WBL to encompass also the academic content of the curriculum, as companies' supervisors may not be able to support

<sup>&</sup>lt;sup>24</sup>Closely linked to Target 2.2.1 (*Training needs for the following majors: electricity, electronics, mechanics, food processing and computer sciences are assessed with a special focus on "green and digitalization" by Q2 2025*) of the Budget Support matrix.

<sup>&</sup>lt;sup>25</sup> Closely linked to Target 2.2.2 (*The technical education training guidelines and curriculum framework and course syllabi25 are updated in collaboration with the private sector and academia, according to the WBL Training System, with a special focus on green and digitalization by Q4 2025*) of the Budget Support matrix.

this. Therefore, it is crucial that the training guidelines, the curriculum framework and the course syllabi provide an explicit linkage between theory (academic content) and the experience during the WBL.

# • Mandatory Result 2.3<sup>26</sup>: Five technical education students' textbooks developed/revised

Once the WBL model has been selected, training needs assessed and curriculum updated, the development of five textbooks may start. This would require a concerted effort from EU and Cambodian subject matter experts, instructional designers, educators and private sector whenever possible. Beginning with a clear understanding of the updated curricula and the option of fast-tracking in mind, the team should work to create textbooks that are not only content-rich and in alignment with the curricula but especially are also pedagogically sound and student-friendly, especially for students who do not have a strong reading stamina. In the Cambodian context, where teachers have limited qualifications and individuals tend to conform to established and trusted patterns, textbooks are crucial as teachers rely –much more than in the European context- on them to prepare their lessons. The textbooks should facilitate the acquisition of both theoretical knowledge and practical skills, possibly through the inclusion of real-world case studies, practical exercises, and projects-based learning. Collaboration with industry experts shall offer insights into practical applications of theoretical knowledge to the theory and ensure the relevance of content. It's crucial that the textbooks are tested for comprehensibility and usability before and during the piloting. The textbooks will be produced in both English (for reference at ASEAN level) and Khmer. The considerations regarding green and digital of the previous results apply.

#### **Component 3 - Improved teacher training in technical education**

This component concerns the systematic organization and provision of initial (Pre-Service, or PreSet) training and Continuous Professional Development (CPD) (In-Service, or InSet) of technical education teachers and principals selected for the piloting. The main counterparts for this component will be the National Institute of Education (NIE) in charge of providing Pre-Service training of technical education teachers focusing on teaching methodologies as well as the VoD of the MoEYS. The InSet technical teacher training institution/s will be confirmed by MoEYS. It is important that the integration of WBL, project-based learning, the "green" and "digital" dimensions within the upgraded system, as well as new teaching techniques such as videos and App are taken into consideration. The crucial role of teachers in the delivery of the WBL, as well as the role of the private sector, shall be clearly spelt-out. As the majority of technical education teachers are male, in this component the EUMS should also provide guidance and recommendations on how to increase the number of female teachers.

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Study visits could be organised. Number of participants, timing of the study visit and its specific content will be proposed by the selected MS/s, but for this component we envisage to send in total at least 24 officials from Cambodia to Europe for 8 to 10 days. In addition, under the specific component of teacher training, we envisage to send at least 50 teachers (including principals) to do an internship in Europe for 4 weeks. Ideally also private sector supervisors should participate in the study tours and internships to better understand their role, for example in the selection of candidate for the WBL, their

<sup>&</sup>lt;sup>26</sup> Closely linked to Target 2.2.3 (*Five technical education students' textbooks26 are developed/revised in collaboration with the private sector* and academia, according to the approved WBL Training System curriculum and syllabus with a special focus on green and digitalization by Q4 2025) of the Budget Support matrix.

supervisory/teaching role and to strategize how to support the transition from learning to employment. Cascade trainings will be organised, including to the private sector supervisors.

# • Mandatory Result 3.1<sup>27</sup>: Improved PreSet and InSet technical education teachers' training and course syllabi on 5 majors

Both PreSet and InSet technical teachers' curriculum and course syllabi of the five pre-selected majors should be updated. The EUMS should propose the most appropriate kinds of PreSet and InSet training programmes and materials, following a gap assessment of the current situation against best European examples. We do not reckon that the WBL will encompass also the academic content of the curriculum, as companies' supervisors may not be able to support this. Therefore, it is crucial that the PreSet and InSet teacher training materials make concrete the linkage between theory (the academic content) and the experience during WBL. The materials should be developed under the overall authority of the VoD and with involvement of the private sector and academia. They should directly mirror the materials prepared for students under Component 2. Both English and the Khmer versions shall be drafted.

# • Mandatory Result 3.2<sup>28</sup>: Piloting of the updated PreSet and InSet teachers' curriculum and courses syllabi in teacher training institutions supported

The training programmes and training materials developed for Pre-Set and In-Set teachers' curriculum and course syllabi should be applied in the approved technical education teacher training institutions with support and approval of the VOD. A MoEYS "Prakas"<sup>29</sup> will designate the teachers training institution/s where the piloting will take place. The Twinning should technically accompany, support and advise this process. The Twinning is also expected to provide recommendations to the MoEYS on how to monitor the piloting and assess if it is successful and/or measures to take in the medium and long term.

In addition, as described above, ideally at least 50 teachers and principals from the selected five schools and the selected teacher training institutions shall benefit from an internships of 28 days in the selected EUMS/consortium in preparation of the piloting for a duration to be proposed by the EUMS/s. Cascade trainings will be organised for further dissemination including to private sector supervisors.

### 3.6 Means/input from the EU Member State Partner Administration(s):

The project will be implemented in the form of a Twinning contract between the EC and the EU MS with the partner country as the final beneficiary. The implementation of the project requires one Project Leader (PL) with responsibility for the overall coordination of project activities and one Resident Twinning Adviser (RTA) to manage implementation of project activities, Component Leaders (CL) and pool of short-term experts (STEs) within the limits of the budget. It is essential that the project team has sufficiently broad expertise to cover all areas included in the project description.

<sup>27</sup> Closely linked to Target 3.2 (*The Pre- and In-Service technical education teachers' training and courses syllabi on five majors are updated in collaboration with the private sector and academia according to the WBL Training System with a special focus on green and digitalization by Q4 2025*) in the Budget Support matrix.

<sup>28</sup> Closely linked to Target 3.3 (*The updated technical education Pre- and In-Service technical teachers' curriculum and courses syllabi (5 majors) are applied in the approved technical education teacher training institution/s, with the support of the Vocational Orientation Department (VOD) of the Ministry and possible involvement of the private sector and academia by Q4 2026)* in the Budget Support matrix.<sup>29</sup> "Prakas" are formal documents issued by the Cambodian Ministries. They are essentially regulatory frameworks, decrees, orders, or

instructions used to implement laws and policies. Therefore "Prakas" officially detail the practical measures necessary to enforce the laws passed by a governing body.

Proposals submitted by MS shall be concise and focused on the strategy and methodology, indicating timetable underpinning this, suggesting the administrative model, the quality of the expertise to be mobilised and clearly showing the administrative structure and capacity of the Member State entities. Proposals shall be detailed enough to respond adequately to the Twinning Fiche, but are not expected to contain a fully elaborated project. They shall contain enough detail about the strategy and methodology and indicate the sequencing and mention key activities during the implementation to ensure the achievement of the overall and specific objectives and mandatory results/outputs. The interested MS/s shall include in their proposal the CVs of the designated PL and RTA, as well as the CVs of the potentially designated CLs.

The Twinning project will be implemented through close co-operation between the partners aiming to achieve the mandatory results in sustainable manner. The set of proposed activities will be further developed with the Twinning partners when drafting the initial workplan and successive rolling workplans every three months, keeping in mind that the final list of activities will be decided in cooperation with the Twinning partner. The components are closely interlinked and need to be sequenced accordingly taking into account the BS targets deadlines.

### 3.6.1 Profile and tasks of the PL:

The PL shall be a senior staff member at an EU MS administration. S/he will be responsible for the overall management of the project and the coordination of activities performed and ensures the overall quality of the services provided onsite. S/he will have the overall responsibility for the implementation of all twinning activities.

#### Profile

- At least a bachelor degree in education or another relevant discipline or equivalent relevant professional experience in a related field of minimum 8 years;
- Minimum 3 years of relevant professional experience in vocational and technical education;
- Strong experience in the management of education reforms;
- Good knowledge of the EU Acquis/legislation on technical education and WBL;
- Good analytical and organizational skills; experience in implementation and coordination of technical assistance/cooperation projects with third countries would be an asset;
- Good leadership and gravitas; well-developed interpersonal skills and excellent ability to mediate;
- Extensive experience in working with the various levels of governments;
- Fluency in both written and spoken English;
- Adequate computer literacy.
- Experience in the International sector and/or in Asia as an asset, but not compulsory.

### <u>Tasks</u>

- Overall direction, supervision, guidance and monitoring of the Twinning project;
- Mobilization of the necessary expertise in support of the efficient implementation of the project;
- In close coordination and under the overall direction of the EUD, lead an operational dialogue, advocate, thrust and back-up the project at political level;

- In cooperation with the PL counterpart signing and submission of the interim quarterly and final project reports prepared with the support of the RTA to the concerned authorities and the EU;
- Formal signing of project work plan(s) and/or their updates;
- Ensuring timely achievement of the project results;
- Provision of legal and technical advice whenever needed including to the EUD;
- Co-chairing of the project steering committees.

#### 3.6.2 Profile and tasks of the RTA:

The RTA<sup>30</sup> will be responsible for the day-day implementation of the project. S/he will be located in the premises of MoEYS on a fulltime basis. The RTA will ensure the completion of planning and preparation, engage and supervise short-term experts required for activities, ensure training and study visit performances and manage the individual components of activities according to specified budgetary and other targets. S/he will work closely with the beneficiary country (BC) Project leader and the RTA counterpart. The RTA needs to be in Cambodia for the entire duration of the project.

The RTA should be supported by a Permanent RTA Assistant and a Permanent Language Assistant. The Assistants should work in close collaboration with the BA. The Assistants will perform general project duties (such as logistics, expert missions, conferences, training, seminars, keeping project records...) and will be providing translation and interpretation.

#### Profile 199

- At least a bachelor degree in education or other relevant discipline or equivalent professional experience in a related field of minimum 8 years;
- A minimum of 2 years of relevant professional experience in vocational and technical education;
- Minimum 3 years professional experience of project and/or team management;
- Good knowledge of the EU Acquis/legislation on technical education and WBL;
- Very good analytical and organisational skills; very good mediation skills with a problem-solving attitude;
- Good interpersonal skills, patience and resilient/positive attitude; adaptability and openness to a new culture and a different working modalities;
- Experience of working with the various levels of governments;
- Very good proficiency in written and spoken English;
- Good computer literacy;
- Previous experience in International projects and/or in Asia would be considered as an asset, but not compulsory.

#### <u>Tasks</u>

• Overall supervision and on-site coordination of all activities performed during the project lifetime according to the defined workplans and ensuring the timely delivery of the mandatory results;

<sup>&</sup>lt;sup>30</sup> Member State officials or assimilated agents are civil servants and other contractual staff of a Member State administration or a registered mandated body who are mobilised as an RTA to implement a Twinning project. The RTA has to come from a Member State administration which is part of the consortia, either as Lead or as junior partner. A Member State participating in the Twinning project as Lead or as a junior partner can propose as a RTA a person who retired from a public institution or a mandated body no more than three years before the date of circulation of the Twinning Fiche.

- Technical and administrative organisation and planning of the project activities;
- Supervision of Components leaders and short-term experts;
- Day-to-day advice to the staff of the BA;
- Permanent contact with the Cambodian RTA counterpart;
- Monitoring project implementation and timely proposal of corrective measures;
- Contribution to preparation of reports under the PL;
- Liaison with the EUD including drafting technical inputs (such as high-level speaking points, key messages...) for policy dialogue and visibility/communication events.

3.6.3 Profile and tasks of three (3) Component Leaders:

The 3 Component Leaders are expected to coordinate the activities focussed on the achievement of a specific mandatory result. They will be identified by PL/RTA in the course of the project designing and implementation and shall be agreed with the BA and the EUD project manager prior to contracting. The Beneficiary administration will also assign a Component Leader counterpart for each component who will be the permanent interlocutor of the MS Component Leader coordinating the specific component.

#### Profiles **Profiles**

- At least a bachelor degree in education or another relevant discipline or equivalent professional experience in a related field of minimum 8 years;
- At least 5 years of professional experience in vocational/technical education/WBL/areas that are relevant for the project components to be covered;
- Knowledge of the best European practices on technical education and WBL;
- Good analytical and organizational skills;
- Well-developed interpersonal skills and experience of working with the various levels of governments; adaptability and problem-solving attitude;
- Coaching, training and facilitator skills;
- Demonstrated analytical and mentoring skills ;
- Fluency in both written and spoken English;
- Good computer literacy.
- Experience in the International sector and/or in Asia as an asset, but not compulsory.

<u>Tasks</u>

- Component coordination, guidance and monitoring;
- Supervise the works of the STEs related to their component;
- Conducting analysis of the area relevant to the component;
- Contribution to preparing and conducting training programs;
- Providing technical advice, support and assistance to the Beneficiary Country institution in the context of the project's components;
- Providing practical expertise/advice to relevant staff for execution of different tasks related to the project ;
- Contribute to project reporting (interim and final), to drafting the notes and other documents and reports on experts' missions;
- Liaise with the PL, the RTA and their Cambodian counterparts.

3.6.4 Profile and tasks of other short-term experts:

In order to provide the full range of expertise necessary, short-term experts will be drawn from different skill sets to assist the RTA on specific activities. They will be identified by the PL/RTA in the course of the project designing and implementation and will be agreed with the BA and the EUD prior to contracting. The specific profile and task will be determined within the project implementation according to the specific needs the project in agreement with BA.

## 4. Budget

The maximum budget available for the grant is EUR 2 500 000.

### 5. Implementation Arrangements

5.1 Implementing Agency responsible for tendering, contracting and accounting:

European Union (EU) Delegation to Cambodia. The contact person is: Mr. BOU Noeun European Union Delegation to the Kingdom of Cambodia N° 100A – Preah Norodom Boulevard – Khan Daun Penh – 12207 Phnom Penh – Cambodia Tel: + 855 23 216 996 - E-mail: <u>noeun.bou@eeas.europa.eu</u>

5.2 Institutional framework

The Beneficiary administration is the Ministry of Education, Youth and Sport (MoEYS) of Cambodia.

5.3 Counterparts in the Beneficiary administration:

The PL and RTA counterparts will be staff of the Beneficiary administration and will be actively involved in the management and coordination of the project.

5.3.1 Contact person:

Mr. RATH Sara, Director of the Vocational Orientation Department, MOEYS Phnom Penh, Cambodia

5.3.2 PL counterpart

H.E. Mr IM Koch, Secretary of State, MoEYS, Phnom Penh, Cambodia

5.3.3 RTA counterpart

Mr. RATH Sara, Director of the Vocational Orientation Department, MOEYS, Phnom Penh, Cambodia

### 6. **Duration of the project**

The execution period (legal duration) of the project is 39 months (implementation period of 36 months + 3 months of closure).

## 7. Management and reporting

## 7.1 Language

The official language of the project is English. All formal communications regarding the project, including interim and final reports, shall be produced in the language of the contract.

The translation into Khmer of key deliverables will be supported by the project thanks to the language assistance.

## 7.2 **Project Steering Committee**

A Project Steering Committee (PSC) shall oversee the implementation of the project. The main duties of the PSC include verification of the progress and achievements via-à-vis the mandatory results/outputs chain (from mandatory results/outputs per component to impact), ensuring good coordination among the actors, finalising the interim reports and discuss the updated work plan. Other details concerning the establishment and functioning of the PSC are described in the Twinning Manual.

## 7.3 Reporting

All reports shall have a narrative section and a financial section. They shall include as a minimum the information detailed in section 5.5.2 (interim reports) and 5.5.3 (final report) of the Twinning Manual. Reports need to go beyond activities and inputs. Two types of reports are foreseen in the framework of the Twining: interim quarterly reports and a final report. An interim quarterly report shall be presented for discussion at each meeting of the PSC. The narrative part shall primarily take stock of the progress and achievements via-à-vis the mandatory results and provide precise recommendations and corrective measures to be decided by in order to ensure further progress.

## 8. Sustainability

The exchange of knowledge with counterparts in corresponding EU MS institution is expected to provide i-depth knowledge on working methods and methodologies that will enable Cambodian MoEYS civil servants, teachers and principals from GTHSs to continue to adjust to best European standards in technical education in a timely manner beyond the lifetime of the project. The Twinning experts should also suggest to the EU key policy dialogue inputs to bring up in the official policy dialogue for uptaking all inputs/learning and follow-up.

### 9. Crosscutting issues

**Gender:** The action financing the Twinning programme is labelled as OECD Gender Marker 2. This implies that gender equality (SDG 5) is the main objective of the overall programme and is fundamental is its design and expected results, as clearly indicated in the objectives and the GAP III indicators related to the Thematic Area: "Promoting economic and social rights and empowering girls and women". In particular for the Twinning, IO 1.2, 1.3 and 1.4 (to which the Twinning contributes) deal directly with addressing gender barriers to quality education (SDG 4) and skills for decent work (SDG 8), by: making technical education more relevant and interesting to encourage both boys and girls to pursue it, instead of dropping-out. Under IO 1.4, the EU will support the drafting a new policy on domestically financed scholarships for girls in STEM in Cambodia, in line with the GAP III and the CLIP 2021-2025.

**Climate change mitigation and adaptation**: The action financing the Twinning programme is labelled as OECD Rio Marker 1 (Climate Change Mitigation and Adaptation) thanks to its support to improving human resources for energy-efficiency, renewable energy and climate-resilient agriculture and way of production, as clearly detailed in the Twinning results.

## 10. Conditionality and sequencing

There are no preconditions defined for this Twinning project.

## **11. Indicators for performance measurement**

# Component 1 - An upgraded, EU-inspired, Cambodia-adapted WBL system for the upper secondary (Grade 10, 11, 12) technical education<sup>31</sup>.

**Indicator/s Component 1:** Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on technical education and WBL models including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc.

- <u>Mandatory Result 1.1</u>: Adopted Technical Education Master Plan towards WBL Indicator 1.1.1: The Technical Education Master Plan is updated and approved by Q4 2025.
- <u>Mandatory Result 1.2</u>: Implementation of a fast-tracking pilot for the undergraduate programme for students from GTHSs supported -Indicator 1.2.1: The guidelines on fast-tracking undergraduate programmes for

technical high school graduates are adopted by MoEYS by Q4 2024, based on the recommendations by the Twinning

**-Indicator 1.2.2**: The piloting of the fast-tracking is conducted in academic year 2026/2027.

-**Indicator 1.2.3:** Evaluation/Lessons learnt of the piloting and options for scaleup/recommendations for future EU technical support drafted by the end of the Twinning contract with a focus on gender: how to increase the number of women studying STEM.

• <u>Mandatory Result 1.3</u>: Piloting of the proposed Work-Based Learning (WBL) in 5 GTHSs supported and assessed

**-Indicator 1.3.**1: Number of General Technical High Schools (GTHSs) applying and piloting Dual Training Systems by Q4 2026.

-Indicator 1.3.2: Evaluation/Lessons learnt of the piloting and options for scaleup/recommendations for future EU technical support drafted by the end of the Twinning contract.

Component 2 – Improved curriculum of the secondary technical education with a focus on low-carbon, climate-adapted techniques, hand—in-hand with digitalisation

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**Indicator/s Component 2**: Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on curriculum revision including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc, with a special focus on green and digital skills, as well as interactions with the private sector. Number of technical curricula updated to include climate and digital elements<sup>32</sup>.

• Mandatory Result 2.1: Training needs for five majors with a special focus on "green" and digitalisation formulated

<sup>&</sup>lt;sup>31</sup> The proposed system must be directly applicable in General and Technical High Schools (GTHS), within the timeframe of the Budget Support programme, i.e. 3 years.

<sup>&</sup>lt;sup>32</sup> Linked to indicator 1.5 (*Number of technical curricula updated to include climate and digital elements*) of the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027

**-Indicator 2.1.1** Number of majors (out of pre-selected five majors<sup>33</sup>) whose training needs have been assessed with a special focus on "green and digitalization" and involvement of the private sector by Q2 2025.

• Mandatory Result 2.2: Improved technical education curriculum framework, course syllabi and training guidelines -Indicator 2.2.1: The technical education training guidelines are updated and approved

by Q4 2025. -**Indicator 2.2.2:** The curriculum framework is updated and approved by Q4 2025.

-Indicator 2.2.2: The curriculum framework is updated and approved by Q4 2025. -Indicator 2.2.3: Number of course syllabi (out of the pre-selected five majors) updated and approved by Q4 2025.

• Mandatory Result 2.3: Five technical education students' textbooks developed/revised

**-Indicator 2.3.1**: Number of technical education students' textbooks (out of the preselected five majors) developed/revised and approved in collaboration with the private sector and academia, according to the approved WBL curriculum and syllabus with a special focus on 'green and digitalization' by Q4 2025.

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### **Component 3 – Improved teachers' training in technical education**

**Indicator/s Component 3:** Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on technical education teacher training including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc, with a special focus on green and digital skills, as well as interactions with the private sector.

• Mandatory Result 3.1: Improved PreSet and InSet technical education teachers training and course syllabi on 5 majors

**-Indicators 3.1.1:** The Pre- and In-Set technical education teachers' training is updated by Q4 2025.

**-Indicator 3.1.2**: Number of course syllabi (out of the pre-selected five majors) updated by Q4 2025.

Mandatory Result 3.2: Piloting of the updated PreSet and InSet teachers' curriculum and course syllabi in teacher training institutions supported -Indicator 3.2.1: Number of institutions where the updated teacher training curriculum and syllabi are applied with the support of the Vocational Orientation Department (VOD) of the Ministry by Q4 2026.
 Indicator 3.2.2: Evaluation/Lessons learnt of the piloting and options for scale-up/recommendations for future EU technical support drafted by the end of the Twinning contract on technical teachers' training.

#### **12.** Facilities available

The MoEYS, as main beneficiary of the Twinning, will host the EUMS experts and will ensure the provision of adequate offices accommodation, international telephone line, internet access,

<sup>33</sup> The five pre-selected ones are: electricity, electronics, mechanics, food processing and computer science.

printer, projectors for workshops and photocopier to the RTA, the RTA's assistants and the MS experts.

## **ANNEXES TO PROJECT FICHE**

- C1a Simplified Logical framework matrix
- C1b Mid Term Review 2021 of the Cambodia Education Sector Policy
- C1c MoEYS Organisational Chart
- C1d Cambodia Qualifications Framework (CQF) 2012
- C1e Action Document: "Transforming Technical Education EU-Cambodia Partnership 2024-2027"
- C1f- Nationl Curriculum Framework for Technical Education (Eng/Kh)
- C1g Draft Appendix for Budget Support: Disbursement Arrangements, Conditions and Performance Indicators.

#### Annex C1a : Simplified Logical Framework

	Description	Indicators (with relevant baseline and target data)	Sources of verification	Risks	Assumptions (external to project)	
Overall Objective	Support the transition of Cambodian upper- secondary technical education towards a 21st century and EU-inspired work-based learning (WBL) system.	-Number of students enrolled in education with EU support: secondary education, tertiary education) (GERF 2.36) <sup>1</sup> Baseline: Lower secondary: 694 161 (M: 331,506; F: 362,655); Upper secondary: 401 605 (M: 183,089; F: 281, 516); tertiary: 209 059 (M: 113, 440; F: 95, 619) (Congress Report published in April 2023) Target: TBD in the new ESP 2024-2028	ESP for target; Annual Congress Report for reporting	The effects of the protracted schools and technical schools closures due to Covid-19, which have resulted in learning loss and increased drop- outs.	Macro-economic and political situation remain stable; Ongoing political and budgetary support to MoEYS and its reform agenda	
Specific (Project) Objective	Improve the quality of teaching and learning at upper-secondary (Grade 10, 11, 12) technical education by integrating Work-Based Learning (WBL), gender, digitalisation and climate change in curricula and teacher training within the proposed timeframe.	<ul> <li>Survival rate upper secondary<sup>2</sup> Baseline: 24.7% (2019) (M: 22.6%; F:27.0%) Target: TBD in the new ESP 2024-2028</li> <li>Transition rate from lower to upper secondary education, disaggregated by sex, ethnicity and disability whenever possible<sup>3</sup> Baseline: 1.6 81.3% (M: 80.1%, F: 82.4%) (2020/21) Target: TBD in the new ESP 2024-2028</li> <li>Extent to which appropriate policies and measures are implemented by government to improve the access of girls and women to inclusive and quality education, including STEM fields and quality digital education and training (GAP III)<sup>4</sup> Baseline: There are currently no appropriate policies in place to improve access of girls and women to STEM mayors in higher education Target: A policy is in place</li> </ul>	ESP for target; Annual Congress Report for reporting in addition to Twinning reporting	Staff turnover and retirement Insufficient willingness by private sector in Cambodia to engage in technical education	Satisfactory implementation of the EU Budget Support programme "Transforming Technical Education EU- Cambodia Partnership 2024-2027" Coordination among all stakeholders	
Mandatory results by components						

<sup>&</sup>lt;sup>1</sup> Linked to indicator 1.1 (*Number of students enrolled in education with EU support: secondary education, tertiary education*) of the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027 and GERF indicator 2.36.

<sup>&</sup>lt;sup>2</sup> Linked to indicator 1.3 (*Survival rate upper secondary*) the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027.

<sup>&</sup>lt;sup>3</sup> Linked to indicator 1.6 (*Transition rate from lower to upper secondary education, disaggregated by sex, ethnicity and disability whenever possible*) of the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027.

<sup>&</sup>lt;sup>4</sup> Linked to indicator IO 1.4.3 (*Extent to which appropriate policies and measures are implemented by government to improve the access of girls and women to inclusive and quality education, including STEM fields and quality digital education and training*) of the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027 and GAP III.

Component 1	An upgraded, EU-inspired, Cambodia-adapted Work-Based Learning (WBL) system for the upper secondary (Grade 10, 11, 12) technical education <sup>5</sup> .	-Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on technical education and WBL models including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc.	Interim Quarterly Report from the Twinning MOEYS annual reporting to the EU in the framework of the Budget Support Programme		cc77
Mandatory Result 1.1:	Adopted Technical Education Master Plan towards WBL	-The Technical Education Master Plan is updated and approved by Q4 2025			
Mandatory Result 1.2:	Implementation of a fast-tracking pilot for undergraduate programme for students from GTHSs supported	<ul> <li>-The guidelines on fast-tracking undergraduate programmes for technical high school graduates are adopted by MoEYS by Q4 2024, based on the recommendations by the Twinning, (including possibly on the National Qualification Framework)</li> <li>- The piloting of the fast-tracking is piloted in academic year 2026/2027.</li> <li>- Evaluation/Lessons learnt of the piloting and options for scale-up/recommendations for future Twinnings drafted by the end of the Twinning contract with a focus on gender: how to increase the number of women studying STEM</li> </ul>	""		
Mandatory Result 1.3	Piloting of the proposed Work-Based Learning (WBL) in 5 GTHSs supported and assessed	-Number of General Technical High Schools (GTHSs) where Dual Training Systems is applied and piloted by Q4 2026 -Evaluation/Lessons learnt of the piloting and options for scale-up/recommendations for future Twinnings drafted by the end of the Twinning contract			
Component 2	Improved curriculum of the secondary technical education with a focus on low carbon, climate- adapted techniques, hand-in-hand with digitalisation	<ul> <li>-Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on curriculum revision including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc, with a special focus on green and digital skills, as well as interactions with the private sector</li> <li>- Number of technical curricula updated to include climate and digital elements<sup>6</sup></li> </ul>	Interim Quarterly Report from the Twinning MoEYS annual reporting to the EU in the framework of the Budget Support Programme	633	
Mandatory Result 2.1	Training needs for five majors with a special focus on "green" and digitalisation formulated	-Number of majors (out of pre-selected five majors <sup>7</sup> ) whose training needs have been assessed with a special focus on "green and digitalization" and involvement of the private sector by Q2 2025		6633	(()))

<sup>&</sup>lt;sup>5</sup> The proposed system must be directly applicable in GTHS, within the timeframe of the Budget Support programme, i.e. 3 years.

<sup>&</sup>lt;sup>6</sup> Linked to indicator 1.5 (*Number of technical curricula updated to include climate and digital elements*) of the Logical Framework of the Transforming Technical Education EU-Cambodia Partnership 2024-2027.

<sup>&</sup>lt;sup>7</sup> The five pre-selected ones are: electricity, electronics, mechanics, food processing and computer science.

Mandatory Result 2.2	Improved technical education curriculum framework, course syllabi and training guidelines	-The technical education training guidelines are updated and approved by Q4 2025 -The curriculum framework is updated and approved by Q4 2025 -Number of course syllabi (out of the pre-selected five majors) updated and approved by Q4 2025			c697
Mandatory Result 2.3	Five technical education students' textbooks developed/revised	-Number of technical education students' textbooks (out of the pre-selected five majors) developed/revised and approved in collaboration with the private sector and academia, according to the approved WBL curriculum and syllabus with a special focus on "green and digitalization by Q4 2025	6637	(6))	(6))
Component 3	Improved teacher training in technical education	-Number and type of interactions and policy dialogues between the EU and EUMS and the Government of Cambodia on technical education teacher training including study visits, seminars/dialogues, situation analysis, proposals, costing studies, policy dialogue speaking points raised etc, with a special focus on green and digital skills, as well as interactions with the private sector	cc77		
Mandatory Result 3.1	Improved PreSet and InSet technical education teachers' training and course syllabi on 5 majors	<ul> <li>The Pre- and In-Set technical education teachers' training is updated by Q4 2025</li> <li>-Number of course syllabi (out of the pre-selected five majors) updated by Q4 2025</li> </ul>		cc>>	6625
Mandatory Result 3.2	Piloting of the updated PreSet and InSet teachers' curriculum and course syllabi in teacher training institutions supported	-Number of institutions where the updated teacher training curriculum and syllabi are applied with the support of the Vocational Orientation Department (VOD) of the Ministry and possible involvement of the private sector and academia by Q4 2026 -Evaluation/Lessons learnt of the piloting and options for scale-up/recommendations for future Twinnings drafted by the end of the Twinning contract on technical teachers' training.			