

GUIDELINE FOR IMPLEMENTATION

GERMAN STANDARDS-ORIENTED COOPERATIVE TRAINING PROGRAMMES

Mechatronics | Industrial Electronics | Metal Cutting | Construction Mechanics |
Sewage Engineering | Electronics for Energy and Building Technology |
Mechanics for Sanitary, Heating and Climate Technology



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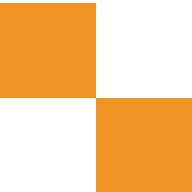
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Abbreviations

AGVC	An Giang Vocational College
BMZ	German Federal Ministry for Economic Cooperation and Development
CVT	Cooperative Vocational Training
DoLISA	Department of Labour, Invalids and Social Affairs
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HWK	German Chamber of Skilled Crafts
IAB	Industry Advisory Board
IHK	Association of German Chambers of Industry and Commerce
LILAMA 2	International Technology College LILAMA 2
MoLISA	Ministry of Labour, Invalids and Social Affairs
MoU	Memorandum of Understanding
PR	Public Relations
TP	Training Programme
TVET	Technical and Vocational Education and Training
TVET Programme	Programme Reform of Technical and Vocational Education and Training
VCCI	Vietnam Chamber of Commerce and Industry
VCMi	College of Machinery and Irrigation





Inclusion Disclaimer

We acknowledge and respect the diversity of learners and the various challenges they may face throughout their participation in vocational education and training. Learners may encounter barriers associated with disabilities, gender, socio-economic circumstances, language, cultural background, learning preferences, or other individual needs.

German standards-oriented cooperative training programmes are designed to be flexible and learner-centred, ensuring that all learners have equal opportunities to access training, participate effectively, and develop their vocational competencies. During implementation, TVET institutes and their partner companies are encouraged to adopt appropriate support measures that respond to the needs of different learner groups. In doing so, they contribute to creating learning and working environments that are safe, respectful of diversity, and inclusive.

Depending on the specific context, support measures may include adapting the learning environment, providing flexible training arrangements, diversifying teaching and assessment methods, offering appropriate learning materials, or implementing other necessary forms of support to minimise barriers to learning and competency assessment.

We encourage managers, teachers, in-company trainers, and other relevant stakeholders to apply gender-responsive, inclusive, and learner-centred approaches throughout the training process. At the same time, learning materials and training activities should be designed and delivered in ways that are accessible to diverse groups of learners, helping to ensure that all learners have equal opportunities to participate and realise their full potential.

Promoting gender equality, social inclusion, and equitable access to training opportunities for disadvantaged groups is one of the guiding principles underpinning the implementation of German standards-oriented cooperative training programmes.

INTRODUCTION

1. German International Cooperation Organisation

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has been operating in Vietnam for more than 25 years. Thanks to the dynamic development of the economy with a high growth rate in the past decade, Vietnam has become a middle-income country. However, Vietnam still faces major challenges, including:



- depleted natural resources
- polluted environment
- high energy consumption
- lack of skilled labour

This is also the goal of GIZ's projects in Vietnam with 3 key areas:

- Environment and natural resources
- Energy
- Technical and Vocational Education and Training (TVET)

GIZ is working closely with Vietnamese authorities to draft and implement strategies and legal frameworks to promote TVET to meet the needs of the labour market with a focus on business cooperation. GIZ supports TVET institutes to improve quality and focus on practice-oriented training. The goal is to improve the supply of skilled labour through training to develop a green and sustainable economy.

2. Vietnamese-German Cooperation Programme "Reform of TVET in Viet Nam"

The Programme "Reform of TVET in Vietnam" (TVET Programme) is commissioned by the German Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ, in collaboration with the General Directorate of Vocational Education and Training (DVET), under the Ministry of Labour, Invalids and Social Affairs (MOLISA). The goal of the programme is to improve the quality of TVET to adapt to the ever-changing and increasingly green and digital labour market.

In recent years, the TVET Programme has been supporting and advising partner TVET institutes in piloting the cooperative training model as well as developing and providing

demand-oriented and German standards-oriented training programmes for a number of key occupations. These training programmes (TPs) are flexibly implemented in the process of coordinating training at TVET institutes and at companies. At the International Technology College LILAMA 2 (LILAMA 2), TPs for 4 occupations (Mechatronics, Industrial Electronics, Metal Cutting & Construction Mechanics) have been successfully piloted and disseminated. At the College of Machinery and Irrigation (VCMI), TPs for 2 occupations (Electronics for Energy and Building Technology, and Mechanics for Sanitary, Heating and Climate Technology) have also been successfully piloted and disseminated to other TVET institutes.



These programmes are developed based on:

- Business demands in Viet Nam.
- Occupational standards of Germany.
- Regulations on the minimum amount of knowledge, competency requirements that learners must achieve after graduating from intermediate and college for related occupations.

Teachers from LILAMA 2 and VCMI, technical staff from partner companies, GIZ experts, and short-term international experts were participating in the compilation of the TPs. The highest level of the six TPs has also been evaluated and recognised by German Chamber of Skilled Crafts - the body responsible for assessing the quality of Germany's dual training, appraising and recognising the equivalence of German standards in terms of theoretical and practical content.

3. The necessity of the implementation guideline

Following the positive results achieved by LILAMA 2 and VCMI together with their business partners in the implementation of training, the cooperative training model and German standard-oriented training programmes are currently being disseminated and transferred to 11 TVET institutes under the support of the TVET Programme. This guideline aims to provide an approach and useful tools for TVET institutes to effectively coordinate with the business sector in the preparation and implementation of demand-oriented training programmes and according to German standards.

This guideline is recommended for managers, teachers of TVET institutes, leaders, in-company trainers, and coordinators at partner companies. The diversity of users requires the guideline to be designed to be easy to understand, easy to apply and user-friendly.

The document is not only an important reference tool for TVET institutes in the implementation of cooperative training programmes oriented to German standards, but also supports the development of cooperation mechanisms and close connection between TVET institutes and the business sector to provide demand-oriented training.

The document includes instructions on: how to establish and maintain cooperative relationships with businesses, develop/update training programmes in accordance with the actual needs of the labour market, specific steps to implement training programmes and evaluate learners' competencies as well as the effectiveness of training activities.

Note on scope and applicability: This guideline has been developed based on the laws, regulations, guidance documents, and information available at the time of its preparation. The content reflects the legal framework and practical implementation context of vocational education and training during the development of the guideline, while also taking into account relevant new regulations that have been issued or are currently being implemented.

As the legal and regulatory framework, as well as implementation guidelines in the field of vocational education and training, may be amended, supplemented, or updated over time, certain contents of this guideline may require revision to ensure alignment with new regulations and practical application.

Users of this guideline are encouraged to refer to the latest applicable laws and regulations, guidance issued by competent authorities, and the internal regulations of their vocational education and training institutes when applying the content in practice. The drafting team will continue to review, update, and improve this guideline based on changes in the legal framework and practical implementation experience gathered from relevant stakeholders.

Since this set of guidelines was edited and published for the first time, it is inevitable that there will be shortcomings, and we look forward to receiving comments from readers to update and improve for the next edition.

Comments and suggestions for improvements are highly appreciated and may be sent to Ms. Nguyen Tra My – Programme Officer - TVET Programme (Email: my.nguyentra@giz.de).

Part 1

COOPERATIVE TRAINING MODEL



1. Dual training model of the Federal Republic of Germany

Germany's dual training model is one of the world's famous education and training models, where learners are trained simultaneously at both TVET institutes and in the actual working environment at companies. Here is some basic information about this model:



The essence of the model

The German dual training model combines theoretical learning at TVET institutes and practical skills at companies



Training according to the needs of the labour market

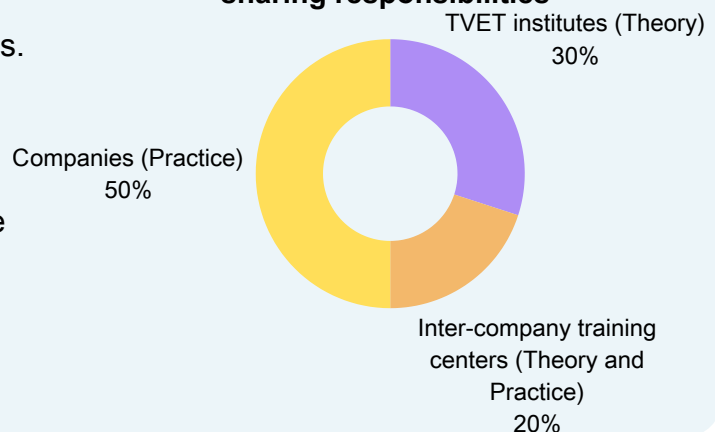
This model focuses on training practical competencies, reflecting the needs of the labour market, thereby facilitating job search after graduation.

Cooperation between TVET institutes and companies

This model facilitates close cooperation between public TVET institutes and the business sector or joint training centers. Businesses often play an active role in:

- Participate in the development of occupational lists, occupational standards and training programmes.
- Select, pay and train learners.
- Participate in competency assessment examinations.
- Jointly responsible for ensuring the quality of vocational education for the economy.

Figure 1: TVET institutes and companies sharing responsibilities



Assessment and Certification System:

This model has a rigorous quality assessment and certification system (with the participation of businesses and diplomas issued by the German Chamber of Skilled Crafts – HWK or the Chamber of Commerce and Industry – IHK in each State), to ensure that graduates from this system are qualified to work in the trained vocational field nationwide.

2. Success factors of the Dual Training Model applicable in Vietnam



Multilateral cooperation

Governments, business community, and social partners need to collaborate to share budget, update, implement TPs, and assess competencies to ensure that the training programmes reflect the needs of the labour market.



Learning in the workplace

Training at the companies as part of the entire training programme helps learners apply knowledge and skills to professional practice. This requires uniform training regulations to ensure the effectiveness and quality of the training process.



Acceptance of national standards

It is extremely important to accept and comply with vocational standards, certificates that are converted and recognised as equivalent. This helps to ensure that learners gain recognition and prestige when participating in the labour market.



Qualified TVET staff

In-company trainers and teachers must be qualified in both professional & pedagogical skills to ensure the quality of training.



Adjusting policies according to practical requirements

Research results on TVET as well as labour market needs are the basis for adjusting TVET policies and activities.

3. Cooperative training model

Based on the success and experience of the German model and the conditions for implementation in Vietnam, the TVET Programme has proposed and supported the successful piloting of the Cooperative Vocational Training (CVT) model at several TVET institutes in Vietnam such as LILAMA 2 and VCMI for Mechatronics, Industrial Electronics, Metal Cutting, Construction Mechanics, Electronics for Energy and Building Technology and Mechanics for Sanitary, Heating and Climate Technology.

Cooperative Vocational Training: is a close cooperation between companies and TVET institutes during the processes: Preparation, Implementation of training and Capacity Assessment to provide demand-oriented training programmes.

The implementation of the CVT model in each phase will be carried out based on the plan agreed between the TVET institutes and partner companies. The professional practical part of the training programme should take place in the workplace and production lines of companies. The time and duration of the training phases at companies can be adjusted to be flexible in case of increased production plans or other important requirements. To ensure the quality and effectiveness of the training programmes, representatives of companies and TVET institutes need to discuss and agree on how to coordinate and manage the training stages at companies and appropriate personnel. The CVT model differs from traditional training through its close coordination between TVET institutes and companies during preparation, training, and learners' capacity assessment.

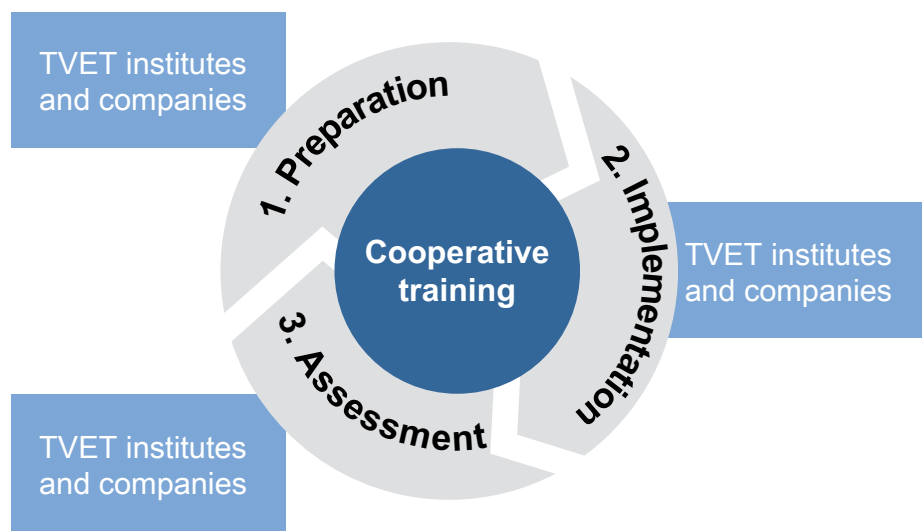


Figure 2: Cooperative Vocational Training model

PREPARATION

TVET institutes establish and operate Industrial Advisory Boards (IABs) with active participation from partner companies to:

- Coordinate to develop demand-oriented TP
- Coordinate the development of teaching and learning materials
- Improve the capacity of teachers, in-company trainers and coordinators from TVET institutes and companies
- Coordinate to developing tools and mechanisms to supervise and ensure training quality
- Sign cooperation agreements between TVET institutes and companies
- Coordinate in communication and enrolment



IMPLEMENTATION



- Implement the agreed TPs at TVET institutes (by the teachers) and at companies (by the in-company trainers)
- Coordinate and collaborate on the training process (by coordinators)
- Jointly monitor and evaluate training activities using agreed tools.

ASSESSMENT



- Establish a board of examiners, with the participation of examiners from businesses
- Train examiners including teachers and business representatives
- Coordinate in preparing exam questions and assessment tools according to the Occupational Standards/Regulations on the minimum amount of knowledge, competency requirements that learners achieve after graduation
- Coordinate in exam marking and assessing learners' competencies.

To successfully implement the CVT, we need to ensure the following important factors:

01

The active participation of partner companies from the preparation stage.

02

The training programmes are designed flexibly, in accordance with the actual needs of partner companies.

03

The team of teachers, in-company trainers, examiners and coordinators are qualified (knowledge and skills) to implement TPs.

04

The close, regular and synchronous cooperation between TVET institutes and partner companies.

05

TVET institutes need to ensure minimum training equipment to equip learners with basic and necessary competencies before participating in training at companies.

Part 2

GERMAN STANDARD-ORIENTED TRAINING PROGRAMMES

1. Introduction

In recent years, the TVET Programme has supported partner institutes to develop and implement TP for technical occupations, meeting the requirements of the Vietnamese economy and German/International standards. These TPs are used flexibly in the process of implementing the cooperative training model at TVET institutes and partner companies. In LILAMA 2, TPs for Mechatronics, Industrial Electronics, Metal Cutting and Construction Mechanics have been successfully compiled, piloted and disseminated. At VCMI, the TPs for two occupations of Electronics for Energy and Building Technology, Mechanics for Sanitary, Heating and Climate Technology have also been compiled, successfully piloted and are currently being disseminated to other TVET institutes.

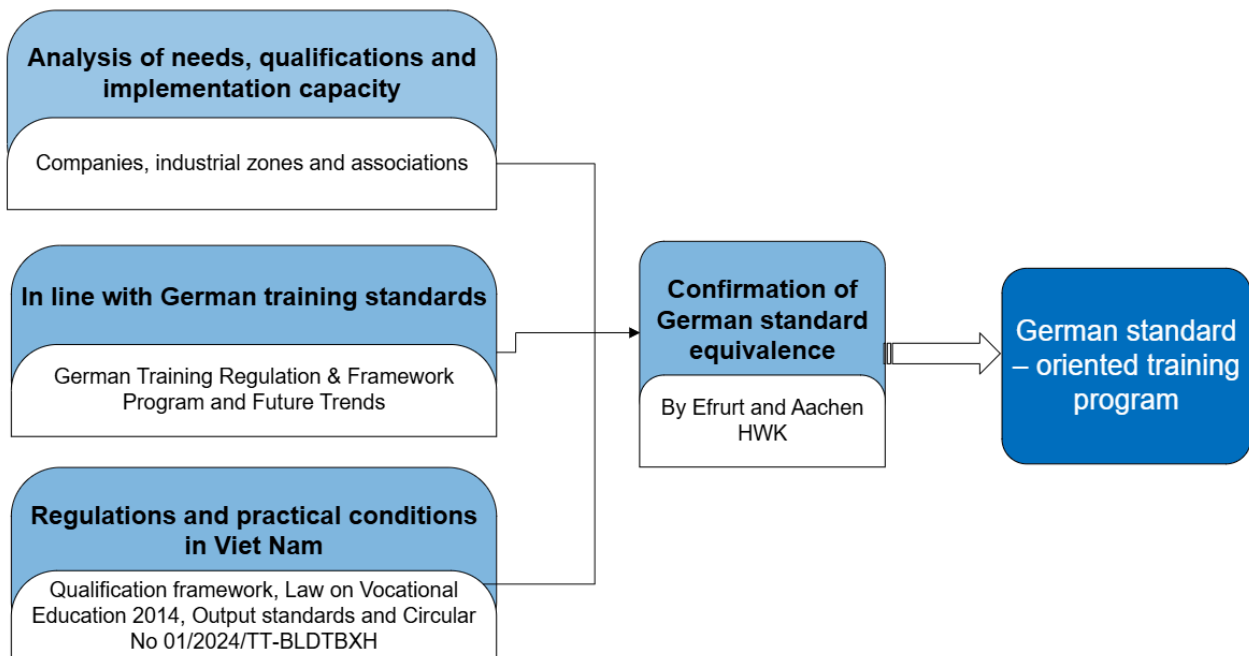


Figure 3: German standard-oriented training programmes development process

These TPs are built based on (i) the needs of Vietnamese businesses, (ii) the occupational standards of Germany, (iii) the regulations on the minimum amount of knowledge, the requirements for competencies that learners achieve after graduating from the intermediate and college level of the respective occupations. Participating in the development of the TPs includes LILAMA 2 and VCMI teachers, technical staff of partner companies, GIZ experts and short-term international experts. The highest level of these 6 TPs has also been evaluated by the German Chamber of Skilled Crafts, responsible for evaluating the quality of the German dual training, appraising and recognising the equivalence of the German standards in terms of theoretical and practical content.

2. Characteristics of the training programmes

The demand-oriented TPs are compiled to have a high degree of interconnection between different levels of training. These programmes also meet the requirements specified in [Circular 01/2024/TT-BLDTBXH](#) on the process of developing, appraising and promulgating programmes. Practice-oriented training modules, from basic to advanced, integrate elements of:



**Digitalisation and
Industry 4.0 (I4.0)**



**Green TVET,
environmental
protection**



**Ensuring occupational
health and safety**



**Gender equality
and inclusion**

3. Structure of training programmes

Intermediate-level training (about 1.5 years)

In addition to the compulsory general subjects according to the regulations of MoLISA, learners need to complete 6 professional modules to achieve intermediate level vocational competence.

College-level training (about 2.5 years)

In addition to the compulsory general subjects according to the regulations of MoLISA, learners need to complete 10 professional modules to achieve college-level vocational competence.

Advanced College-level training (about 3 years)

In addition to the compulsory general subjects according to MoLISA, learners need to complete 12 professional modules to achieve advanced college level vocational competencies equivalent to international/German standards.

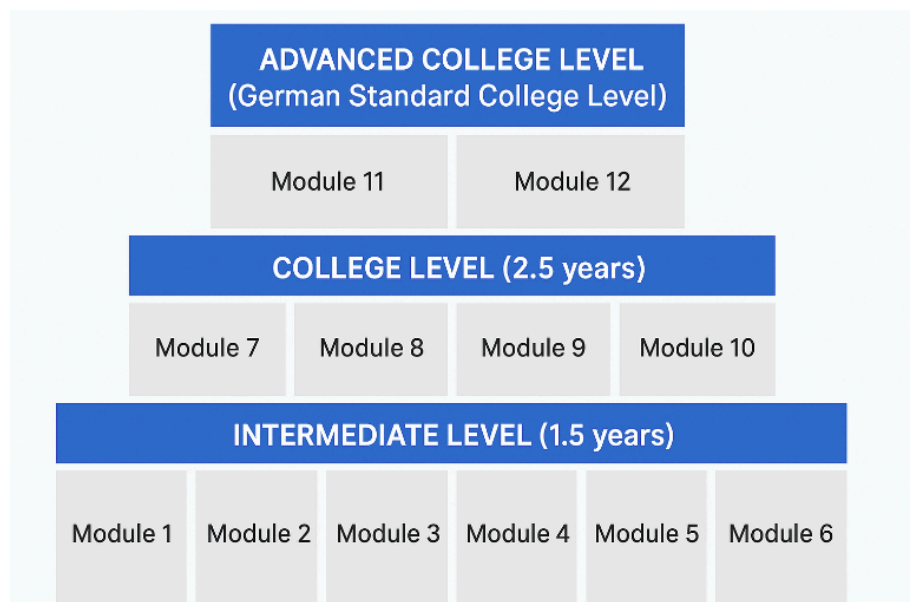


Figure 4: German standard qualification structure

Training programmes exclusively for learners graduating from lower levels have also been compiled, allowing learners to continue their studies to higher levels:

Transfer training programme from Intermediate to College

After graduating from Intermediate level, learners can register for transfer to College and need to complete 4 more modules (from module 7 to module 10).

Transfer training programme from College to Advanced College

After graduating from College, learners can register to study 2 more modules (module 11 and module 12).

With this training structure, TVET institutes can flexibly implement training in coordination with different levels of qualifications at TVET institutes and partner companies based on actual needs and capabilities. In addition to long-term training at intermediate and college levels, TVET institutes can also apply or adjust existing training modules to implement short-term or advanced training for workers and job seekers according to specific requirements.



**Training programmes: Flexible
Multi-level
Permeable**

4. Results of pilot implementation and dissemination

Up to now, at LILAMA 2 College, the training programmes of Mechatronics, Industrial Electronics, Metal Cutting and Construction Mechanics have been successfully developed and piloted with the participation of 18 partner companies. Training at companies for learners accounts for 30-45% of the total training time.

At VCMI, the training programmes in Mechanics for Sanitary, Heating and Climate Technology; Electronics for Energy and Building Technology have also been successfully piloted with the participation of 5 partner companies. Training at companies accounts for 18-30% of the total training time.

Six IABs at LILAMA 2 and VCMI have been established and operated to support the effective implementation of this model.

With the above positive results, the TVET Programme has coordinated with LILAMA 2 and VCMI to disseminate the CVT model and training programmes oriented to German standards at partner institutes of the TVET Programme.

Table 1: Results of implementation and dissemination of the cooperative model and German standard-oriented training programmes as of 31 March 2025 (source: TVET Programme)

TVET institutes within the framework of the TVET Programme	OCCUPATION						
	Metal Cutting	Mechatronics	Industrial Electronics	Construction Mechanics	Electronics for Energy and Building Technology	Mechanics for Sanitary, Heating and Climate Technology	Sewage Engineering
Bac Ninh Industrial College	Enrolled 4 intakes (100 learners). Intake 1: 30 Graduates in May 2024		Enrolled in 3 intake (78 learners)				
Vietnamese-German Technical College of Ha Tinh	Enrolled 2 intakes (36 learners). Intake 1: 17 graduates in June 2024				Survey of implementation conditions in January 2024	Surveyed implementation conditions in January 2024	

TVET institutes within the framework of the TVET Programme	OCCUPATION						
	Metal Cutting	Mechatronics	Industrial Electronics	Construction Mechanics	Electronics for Energy and Building Technology	Mechanics for Sanitary, Heating and Climate Technology	Sewage Engineering
College of Machinery and Irrigation (VCMI)	Enrolled 2 intakes with 3 levels: College, Inter-College, Intermediate (315 learners)		Enrolled 4 intakes with 2 levels: Inter-College and Intermediate (244 learners), 66 graduates		Enrolled 5 intakes with 3 levels: College, Inter-college, Intermediate (229 learners, 83 graduates)	Enrolled 5 intakes with 3 levels: College, Inter-college, Intermediate (236 learners, 96 graduates)	
An Giang Vocational College		Enrolled 4 college intakes (107 learners, 20 learners graduated in September 2024)					
Long An College		Enrolled 4 intakes in both college and intermediate levels			Survey of implementation conditions in January 2024	Survey of implementation conditions in January 2024	

TVET institutes within the framework of the TVET Programme	OCCUPATION						
	Metal Cutting	Mechatronics	Industrial Electronics	Construction Mechanics	Electronics for Energy and Building Technology	Mechanics for Sanitary, Heating and Climate Technology	Sewage Engineering
Long An College		(203 learners, 84 learners graduated in September 2024)					
Hue Industrial College		Enrolled 4 intakes of college level (62 learners, 17 graduates).			Survey of implementation conditions in April 2024	Survey of implementation conditions in April 2024	Enrolled 4 intakes of college level (76 learners, 42 graduates).
Nha Trang College of Technology					Survey of implementation conditions in January 2024		
Ninh Thuan Vocational College		Enrolled in 4 intakes in college & intermediate level (88 learners, 16 graduates).			Survey of implementation conditions in July 2023		

TVET institutes within the framework of the TVET Programme	OCCUPATION						
	Metal Cutting	Mechatronics	Industrial Electronics	Construction Mechanics	Electronics for Energy and Building Technology	Mechanics for Sanitary, Heating and Climate Technology	Sewage Engineering
LILAMA 2 International Technology College	Enrolled 9 intakes of college level (274 learners, 130 graduates)	Enrolled in 9 intakes of college level (344 learners, 137 graduates)	Enrolled 9 intakes of college level (185 learners, 75 graduates)	Enrolled in 9 intakes of college level (151 learners, 86 graduates)	Surveyed implementation conditions in April 2024		
Construction Technical College No.1					Surveyed implementation conditions in April 2024		Enrolled 3 intakes of college level (44 learners, 17 graduated).
College of Technology II							Enrolled 4 intakes of college level (76 learners, 38 graduated).

Part 3

IMPLEMENTATION GUIDELINE GERMAN STANDARD-ORIENTED COOPERATIVE TRAINING PROGRAMMES

IMPLEMENTATION PROCESS

German standard-oriented training programmes implemented according to the **Cooperative Vocational Training model** are organised according to the process as shown in the diagram below:

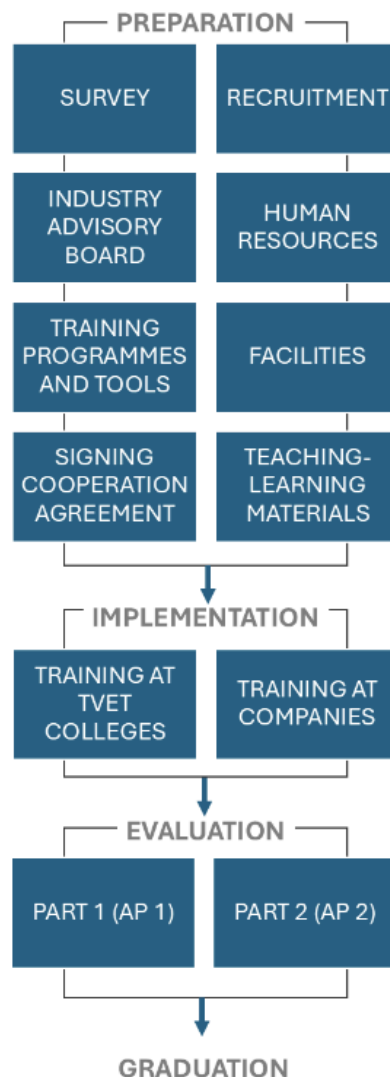


Figure 5: The process of implementing the German standard-oriented cooperative training programmes

To align with the actual conditions of TVET institutes, companies, and the specific training needs of each locality, the implementation of items in the above process should be adapted flexibly.

1. PREPARATION

1.1. Survey of local companies

This is a crucial step which always requires careful preparation by the TVET institutes, especially the participation and guidance of the institute management with the support of local authorities (Provincial People's Committee, DoLISA, local industrial park management boards, professional associations, local entrepreneurs' associations).

The main objectives of the company survey are:



Analyse the needs of human resources in production of local companies with a short-term, medium-term, and long-term vision.



Learn about the field of operation, implementation conditions (e.g. facilities, equipment, technology, technical team) of potential companies.



Look for cooperation opportunities (including training cooperation) between TVET institutes and potential companies.



Connect TVET institutes and potential companies.

1.1.1. Preparation before conducting the company survey



Select the suitable staff and teachers to undertake the survey task: having good understanding of the CVT model, German standard-oriented training programmes, flexible communication skills, and experience in business cooperation.



Make a list of potential companies (suitable for the institutes' training occupations).



Design a questionnaire to complement the training occupations at TVET institutes and local companies.

Refer to [Tool No. 13 – Company Survey](#) in Appendix 1.1 - 13 Business Cooperation Tools.



Communication materials: Shortened training programmes for companies, leaflets introducing the CVT model, current training programmes, general information about TVET institutes.

1.1.2. Conducting surveys

01

Always ensure the questionnaire and important communication materials have been sent to companies in advance.

02

Exchange information directly with companies based on questionnaires in the spirit of openness, conciseness, and effectiveness.

03

Visit production sites: This is a very important step of the company survey process. It is recommended to visit production sites related to the occupations being implemented at TVET institutes.

04

During the survey, we need to pay attention to the human resource needs, abilities and desire to cooperate with TVET institutes of each company.

1.1.3. Information collection and analysis



- The information collected after each company survey needs to be collected and stored immediately in the institute's database.
- The questionnaire as well as the method of conducting the survey should be updated and adjusted regularly adapting to the actual situation.
- Report and propose companies with high potential for cooperation with the Rector Board of TVET institutes.
- Propose the next appropriate approach for each potential partner company.



Notes: Identify a potential company

- Fields of operation of the company
- Short, medium and long-term human resource needs
- Conditions for deployment (equipment, personnel) at the company
- Commitment of the company leadership

1.2. Industry Advisory Board

In German standard-oriented cooperative training, the strong participation of the business sector from the beginning is considered a key factor for training to meet business needs. One mechanism that is considered effective is the establishment of an Industry Advisory Board (IAB) at the institute level for each specific occupation or group of occupations.

The function of the IABs is as a link between TVET institutes and the business sector. Its activities aim to build cooperation towards the common benefit, long-term and sustainable for all partners (win-win).

1.2.1. Legal basis



a. According to Article 7, Clause 5 of the [Law on Vocational Education and Training 2014](#), the Vietnam Chamber of Commerce and Industry - VCCI, business associations and social-professional organisations are responsible for participating in the development and appraisal of TVET programmes; communication, mobilisation, encourage companies to implement their rights and responsibilities in vocational education activities.



b. Along with Article 15, Clause 1 of the Law on Vocational Education and Training as well as [Circular 15/2021/TT-BLDTBXH](#) stipulating the Charter of the institute, the IAB, established by the Rector of the institute, may include internal and external members of the TVET institutes (VCCI, occupational and professional associations, companies) and is part of the organisational structure of the institute.



c. According to Article 15, Clause 2 of the Law on Vocational Education 2014, the organisation, activities, missions and rights of the IAB shall be stipulated in writing by the Rector of the institute.



d. The purpose of the IAB is to encourage and create favourable conditions for the business sector, socio-political and socio-professional organisations as well as Vietnamese and foreign organisations to participate in vocational education activities under the provisions of Article 7, Clause 1 of the Law on Vocational Education and Training 2014.

1.2.2. Missions of the IABs



- Support career orientation for learners and improve the image of TVET.
 - Strengthen communication activities based on the needs of labour market, partner companies, TVET institutes and activities.
 - Survey the needs and requirements of stakeholders.
 - Provide strategic consultancy on occupational development
 - Advise authorities to update the "learning outcomes" in line with the practical needs of the labour market.
-
- Adjust and update appropriate training programmes and teaching-learning materials to meet relevant job positions.
 - Consult on the implementation of training stages at the companies, assessing the capacity of learners. Increase the participation of companies in the training process.
 - Support for job placement for post-graduation learners
 - Other general activities upon request.

1.2.3. Structure of the IABs

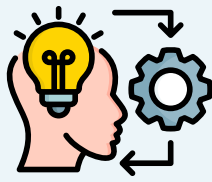
IABs should have a flexible structure, be demand-driven, and adaptable as needed. Members of each IAB should include representatives of the following groups:



Strategic Level

- Leaders of TVET Institutes.
- Local government (DoLISA).
- Business leaders.
- Associations, VCCI, trade unions.
- Representatives of coordinators, teachers and trainers at the companies

Strategic-level members are responsible for drafting and agreeing on operational regulations (especially the coordination mechanism between the strategic level and the operational level in each IAB), making annual activity plans of the IABs, strengthening connections between member companies in the IABs as well as cooperating with other relevant IABs, directly advise leaders of TVET Institutes to improve training efficiency.



Operational Level

- Teachers
- In-company trainers
- Coordinators of TVET institutes and companies
- Learner representatives

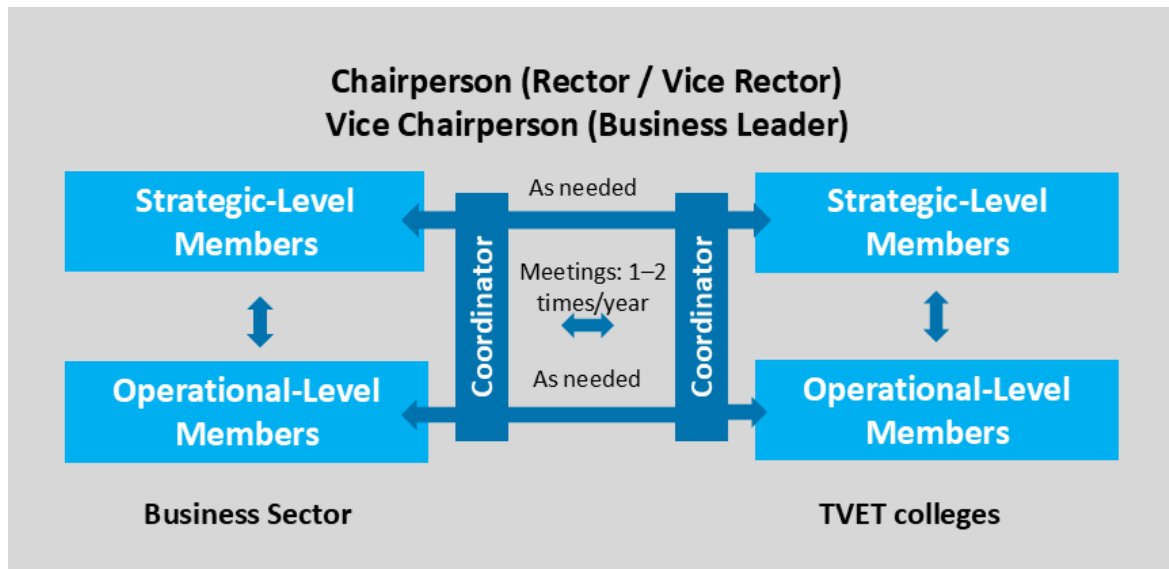


Figure 6: IAB Structure

The representatives elect a president, a vice president and a secretary for each IAB.

The president and vice president are usually elected for a term of 1-2 years.

Depending on the specific situation and characteristics of each institute, the IAB can expand or narrow the organisational structure accordingly. The president of the IAB is usually held by the leader of the TVET institute; the vice president is held by the representative of the company.

1.2.4. Role of members of the IAB

The president of the IAB shall preside over meetings. In the president's absence, the vice president will assume this role.

Decisions are made based on the principle of majority. The president is responsible for the authenticity of the decisions and the implementation of the IAB.

The secretary of the IAB has the following tasks:

- As per the directive, the secretary is responsible for inviting members to meetings, recording meeting minutes, and distributing them to IAB members.
- Oversees public relations (PR) and financial matters.
- Supports the IAB in executing additional activities

The other members of the IAB actively participate in the activities and meetings of the IAB, as well as implement decisions together.

1.2.5. Annual main operation plan of the IABs



- Annual meetings (1-2 times/year) for both strategic and operational levels.
- Technical exchange (on demand) between strategic-level members.
- Periodic meetings and exchanges (or as needed) between members at the operational level.
- Develop a framework programme and a detailed programme of the annual operation plan, in order to clearly define:
 - *Objectives, outputs and implementation deadlines*
 - *Cooperation content, responsibilities of each party for each activity.*
 - *How are resources allocated, by which party contributes?*
 - *Annually, it is necessary to re-evaluate and propose solutions and improve the activities of the IAB.*
 - *For new companies, it is necessary to conduct a thorough survey before inviting them to join the IAB.*

1.2.6. Annual Meetings of the IAB

Annual meetings of the IAB are held on demand, but at least 1-2 times per year, with the participation of members at the strategic and operational levels. The decisions of the IAB meeting are only valid if at least half of the members participate.



Preparations

- The meeting agenda is drafted by the secretary under the direction of the president (or authorised vice president) and in consultation with the members of the IAB.
- The meeting agenda needs to allocate enough time for discussion, alignment on solutions, and next steps.
- TVET institutes actively coordinate with companies to prepare contents related to the meeting.
- Required documents related to the meeting should be sent to all members at least 3 days in advance. For new companies, it is necessary to send information such as training programmes and plans for related professions, the ongoing training progress.



Organise the meeting:

- Companies share the training process at the production sites, difficulties, challenges and suggestions to improve the quality of in-company training as well as coordination between parties.
- Focus time on discussing and concluding solutions, next steps, needs, problems and solutions of the companies
- Company representatives coordinate with the Rector to run the meeting, the Vice Rector, who is in charge of training, needs to participate in the meeting to share and collect feedback from the IAB
- It is recommended to apply a variety of communication methods (online, face-to-face, combined, official mailing, Zalo, etc.,) to reduce meeting time.
- Alternate meetings can be held at TVET institutes and companies to create cohesion.



After the meeting:

- At least 1 week after the meeting, the meeting minutes shall be prepared and sent to the members of the IAB for agreement
- Meeting minutes should be stored on a shared digital platform so that all members can access and review.

1.2.7. Mechanism to enhance the effectiveness of cooperation in the IAB

Between the 2 levels of the IAB

- Develop clear regulations and mechanisms between the institute and the companies, as well as the collaboration between the strategic and operational levels (specific responsibilities, roles, and positions) in each IAB.
- Assign focal points at institutes and at companies to serve as the connection between 2 levels of strategy and implementation.
- Commit to implement and define clear responsibilities between the institute and companies for the in-company training process.
- Develop a master plan and disseminate it in a timely and synchronous manner to all members of the IAB.
- It is necessary to exchange information and expertise regularly and flexibly in order to learn from each other's experience and provide timely solutions.

Between businesses in each IAB

- The institute needs to be a connection to find common ground between companies (e.g., the same field of operation), thereby supporting and strengthening cooperation between companies.
- Ensuring harmony of interests between the parties.

1.2.8. Mechanism for providing finance to the IAB

On the basis of:



- Clearly define goals, develop an activity plan for the IAB, assign clear tasks to each key member
- Identify the benefits and interests of companies and social organisations.

Need

- Communicate and exchange the interests of parties to have the companionship of companies and social organisations, maintain and develop strategic partnerships.
- Operate budget estimates.
- Appraise the budget, approve & include it in the internal expenditure regulations (supervision and management mechanism) of the TVET institutes.

Note

- When TVET institutes are financially autonomous, they can be more flexible in cooperating with companies, using revenues from those cooperative activities to provide operating budgets for IAB.
- Companies also need to have their own budget when participating in the IAB and implementing cooperative training.

Industry Advisory Board



- Flexible structure, oriented to actual needs
- Ensuring the interests of the parties
- Strengthening business cooperation and communication on TVET
- Supporting the cooperative training process
- Employment support for graduates

1.3. Alignment on training programmes and evaluation tools

In the company survey step, the TVET institutes send to representatives of companies the training programme of the occupation suitable for the field of operation of the company. At this step, the TVET institutes need to clearly explain to the company about:

- Characteristics and benefits of the cooperative training model
- Structure and characteristics of the training programme and
- Expected training contents (modules) to be implemented at the company

At the same time, discuss with the company side the necessary changes of the training programme and the coordination and implementation method to meet the needs of businesses.

After agreeing on the adjustments in the TP with the companies, the focal teachers at the TVET institute needs to regularly contact and work with the representative of the companies to agree on: The content and duration of in-company training, testing and assessment tools, teaching-learning materials, in-company trainers, coordinators. The training contents (modules) agreed between TVET institutes and companies should be included in the training cooperation agreement between the parties.

Table 2: 13 business cooperation tools [1]

Tool	Name	References
Tool 1	Business cohesion master plan	Annex 1.1: 13 Business Cooperation Tools
Tool 2	Business-connected tracking panel	
Tool 3	Business engagement tracking dashboard	
Tool 4	Business contact list	
Tool 5	Cooperation Memorandum of Understanding Template	
Tool 6	The training plan at the company is unified between the TVET institutes and the company	

[1] Excerpt from the Handbook "[Connecting TVET Institutes with companies](#)" issued by DVET in cooperation with the TVET programme

Tool	Name	References
Tool 7	Information board for learners before the training at the company	Annex 1.1: 13 Business Cooperation Tools
Tool 8	Form of training association contract between TVET institutes and companies	
Tool 9	Vocational training contract	
Tool 10	Training diary at the company	
Tool 11	Evaluation of training results at the company	
Tool 12	Four-Party Agreement on Training Support and Recruitment of Post-Graduation Learners	
Tool 13	Company Survey Form	

1.4. Signing cooperation agreements with companies

1.4.1. Memorandum of Understanding

It is a document that is not legally binding but is valid in establishing a cooperative relationship between two or more parties. In the case of cooperation between a TVET institute and a company, a memorandum of understanding can be used to clarify the terms and conditions of the cooperative relationship. Memorandum of Understanding is appropriate in the period of identifying strategic partners of TVET institutes.

Here are some basic contents that can be included in a Memorandum of Understanding (MoU) between TVET institutes and companies in training cooperation:

Purpose



Present the general goal of the collaboration, including providing training opportunities for learners and providing quality human resources for the company.

Scope of cooperation



Clearly describe the specific activities that the two parties are committed to undertake, such as a TP, internship, or joint research project.

Commitment of both parties (or several parties)



Refers to the specific commitment of both parties to the implementation of the activities described in the MOU.

Rights and obligations:



Clearly define the rights and obligations of each party, including financial and management responsibility, support of learners, and participation in the IAB.

Cooperation Period



Determine the expected duration of the partnership and the conditions for renewal or termination.

Dispute resolution mechanism



An important part of the MOU is the regulation on the settlement of any disputes arising between the two parties.

Signature and validity



This states that the MOU is only valid when signed by the legal representatives of both parties and does not create any legal commitment beyond what is described in the document.

Note: The specific content of the Memorandum of Understanding may change depending on the specific needs of each company and TVET institute. Refer to tool [No. 5 sample Memorandum of Understanding in Appendix 1.1: 13 Business Cooperation Tools](#)

1.4.2. Agreement on training cooperation

A training cooperation agreement between a TVET institute and a company is a more formal document than a Memorandum of Understanding and is usually legally valid. After having a Memorandum of Understanding with one or more companies, the TVET institute can proceed to sign an agreement on training cooperation with companies that have agreed to implement the CVT for specific occupations.

The signing of the training cooperation agreement should only be carried out when there is the following agreement between the TVET institute and the company:



- Unification of specific training occupation.
- Unification of the training programme: specifically, which modules in the CVT are implemented at the company.
- The number of learners that companies can receive training.
- Training plan.
- Implementation mechanism: allowances for teachers, trainers at companies, coordinators of each party, learners from TVET institutes and companies.

Below is a proposal for the basic contents that a [Training Cooperation Agreement](#) can include:

- **Parties:** Clearly identify the TVET institute and the company participating in the agreement, including information about the legal representatives of both parties.
- **Purpose:** Present the specific objectives of the agreement, including the training programmes that both parties are committed to.
- **Scope of cooperation:** Describe in detail the training contents (modules) conducted at the company and the requirements for quality supervision and assessment.
- **Specific responsibilities of the parties:** Describe in detail the roles, tasks and responsibilities of TVET institutes and companies during the implementation of the training programme (enrolment, development of teaching and learning materials, assessment tools, tests and exams, communication and information channels, etc.).
- **Specific conditions:** Includes specific conditions and regulations on the implementation of training activities, including the time, location, and means of support.

- **Financial Responsibility:** Clearly define each party's financial responsibility for the implementation of training activities, including costs and funding.
- **Information security:** Refer to information security measures to protect important data and information of both parties.
- **Dispute resolution:** Determine the mechanism for resolving any disputes or conflicts that arise between the two parties in the process of cooperation.
- **Termination of Agreement:** Describe the terms and conditions for termination or modification of the agreement, including information about notice and term.
- **Validity and Signature:** Determine the validity period of the agreement and require the signatures of the parties to confirm the agreement.



In practice, depending on the needs of companies, TVET institutes and learners, different templates of training agreements can be used

- Between TVET institutes and companies (tool No. 8)
- Between companies and learners (tool No. 9)
- Between TVET institutes, companies, parents and learners (tool No. 12).

1.5. Communication and Admissions

1.5.1 Communication

Communication and marketing should be focused on building the brand and image of the TVET institute as a practical and high-quality training institute, thereby contributing to the enrolment target of training occupations at the institutes as well as attracting cooperation from partners, especially businesses. TVET institutes should develop and implement communication activities in a professional, transparent, uniform and strategic manner instead of focusing resources only on the enrolment stage. Communication activities need to be carried out in parallel in all stages of the CVT model, from preparation to implementation and evaluation. The following are some important notes for TVET institutes to refer to and adjust to their needs and resources:

❖ **Media content and images need to be synchronous, consistent, and suitable to the identified objects**

The communication and marketing of TVET institutes is not only limited to the goal of attracting learners, but needs to be comprehensively identified with diverse audiences, mainly divided into two models:



B2C (Business to Consumer): Here it can be understood as the relationship between TVET institutes and potential learners, learners, former learners, parents, occupational orientation teachers in middle and high schools.



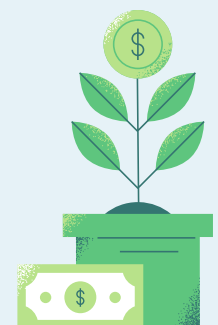
B2B (Business to Business): can be understood as the relationship between TVET institutes and business partners, middle and high schools, partner organisations, etc.).

- Based on the objectives and audiences of the communication, the TVET institutes will identify the most appropriate marketing communication models, and integrate the throughout, consistent messages that have been clearly defined in all promotional activities carried out by the TVET institutes.
- TVET institutes and CVT programmes (if possible) also need to build a synchronous identity, with keywords, symbols, and typical colours that express the spirit of a certain institutes or occupations/professions. It should be noted that DVET has built a common brand identity for TVET in Vietnam, with the logo "Skilling up Vietnam/ Upskilling Vietnamese Workers" approved by the Ministry of Labour, Invalids and Social Affairs, accompanied with the message: "learning, practice, solid start-up, bright future". DVET encourages institutes in the system to integrate this logo and message in their communication activities, in order to create a spreading effect to promote the image of TVET in Vietnam.



Figure 7: Skilling Up Viet Nam Logo

Invest resources in communication and marketing



Currently, most TVET institutes do not have specialised departments or groups for communication, marketing, and enrolment activities. Mainly, the staff in charge of communication at TVET institutes are part-time officials with limited time, access to budget and expertise. Some TVET institutes have admissions departments/departments, but they usually only focus on attracting learners. Therefore, it is necessary to invest in human resources and finance for communication & marketing, including enrolment to ensure consistency & professionalism in content and image. In particular, these officials need to understand the model of CVT and TPs of each occupation to communicate effectively & accurately.

Improve expertise and share communication experiences within TVET institutes, and among TVET institutes in the system



Currently, the communication focal points of TVET institutes are all active members of the TVET Communication Collaborator network established by the TVET Programme. This is a useful forum for TVET institutes to share experiences and initiatives in communication and marketing.

In addition, TVET institutes also need to promote internal communication through training and dissemination of communication and marketing for other staff of TVET institutes. Communication, marketing, and enrolment are not only the responsibility of a full-time officer or department, but any staff in a TVET institute also acts as a media ambassador to spread messages about the institute and training occupations/professions.

Develop and implement integrated communication solutions, especially local journalism and marketing communications on digital platforms



Communication trends in the digital age are changing rapidly, requiring media workers to have a flexible mindset and constantly update and innovate. Instead of maintaining traditional ways, TVET institutes need to build and implement integrated and creative communication solutions, towards diverse communication channels to reach the maximum media audience.



Within the scope of this document, only some of the most important communication channels are introduced:



Social Media Development

Invest in building content and images in social networks, especially channels that are commonly used among young people in Vietnam such as Youtube, Tiktok, Facebook, Zalo and Twitter. Creating quality content and actively interacting on social networks will help information spread quickly and generate interest from the online community.



Various formats and targets

Develop diverse communication products for target groups such as: Leaflets and short videos about training occupations/professions, manuals on training, introductory videos about practical sessions at companies, short videos about learners who have graduated and worked at the training companies.

Combination with events



Combining events such as Career Fair, Open day, Skills Contest, or Webinar with companies is also a good way to create understanding and direct interaction with both learners and companies. Through these events, the CVT model and training programmes can be introduced in a realistic way and attract the wide attention of all target audiences: learners, companies, parents.



Build relationships with local media outlets

Build relationships with local media outlets, as these are highly reliable sources of information for media subjects, especially families and parents.

An example of media of Mechatronics Vocational Education at An Giang Vocational College (AGVC).

Communication tools: DIVERSE, CREATIVE, and CONSISTENT throughout the training process.

BUSINESS INVOLVEMENT in communication is extremely important, highlighting the benefits of Cooperative Vocational Training.

TVET institutes need to develop a phased communication strategy and an annual communication plan. This will help institutes allocate resources and monitor and evaluate the progress of effective communication activities. The most important contents of a communication strategy include objectives, audiences, messages, communication channels, marketing tools suitable for each audience, budget estimates, resources, implementation time (note in combination with the annual enrolment time) and expected indicators/results.

1.5.2. Enrolment

Currently, enrolment for CVT programmes is still in the common enrolment activities of TVET institutes. The establishment of a separate enrolment channel for this training programme is still an open question for managers at TVET institutes and participating companies.

The enrolment for CVT programmes should be closely associated with the communication work of the TVET institutes and is part of the communication strategy that the TVET institutes develops. The following are some specific notes for enrolment for CVT programmes:



Clearly communicate the characteristics and benefits of CVT programmes, why youth should participate in these programmes.



Attract the participation of companies in enrolment process. Having some businesses participating in enrolment activities of TVET institutes such as enrolment days, direct enrolment trips at high schools and middle schools will create a good effect for learners and parents.



Design highly interactive enrolment events with industry experience activities to attract young people so that they have a clear and specific picture vision of the occupation. The photos and sharings of the learners during the visit and direct experience of the occupation can also be used as media materials on social networks.



Share success stories from CVT programmes to inspire young people who are considering studying. Maintain sharing and cohesion activities between graduates, current learners and potential learners.

1.6. Prepare a team of teachers and in-company trainers

1.6.1. Capacity survey and further training for teachers

In order to implement labour market demand-oriented training and according to international standards, TVET institutes need to have a team of teachers with satisfactory professional capacity and vocational pedagogy. This is also the basis to provide learners with the knowledge, skills and autonomous capacity to take on job positions in related occupational fields. To determine the need to improve the capacity of teachers, it is necessary to conduct a survey, determine their current capacity through different flexible forms.

The survey team needs to meet a number of specific competency requirements to ensure accuracy and efficiency in the process of collecting information and making appropriate recommendations. First of all, the surveyors must be core teachers, experts with solid professional knowledge of the trained occupations, and a firm grasp of the requirements of teachers' competencies as well as the requirements of the current and future labour market. In addition, surveyors also need to have skills in designing and implementing information gathering tools (questionnaires, interviews, observations, etc.), communication skills, analytical skills, and information compiling skills to make accurate assessments and recommendations. Survey methods and forms should be adapted to the specific context of each TVET institute and locality.

Table 3: Capacity Survey and Further Training for Teachers

Steps	Implementation content	Document
Design of competency self-assessment table	Developing a competency self-assessment table for each module in the training programme includes: • Teacher's name • Further training courses taken • Modules • Specific description of knowledge and skill requirements • Self-assessment (colour-coded) 1. Level 1 (red): I have no knowledge and skills in many parts of this topic/ I have not taught these parts in the last 5 years. 2. Level 2 (yellow): I have knowledge and skills in some parts of this topic/I have taught several parts in the last 3 years. 3. Level 3 (green): I have good knowledge and skills in many sections of this topic/I have been teaching most of these sections for many years. If you choose level 2, please note what needs to be improved to reach level 3. • Readiness to teach modules/topics in future	Teacher competency assessment table (Refer to Annex 1.6. Teacher Competency Survey.)

Table 3: Capacity Survey and Further Training for Teachers (cont.)

Steps	Implementation content	Document
Conduct a self-assessment	• Send a self-assessment sheet to all teachers who will participate in the training programme. • Instructions on how to fill out the survey form.	
Synthesise needs and develop further training plans	• Collect self-assessment tables from teachers • Summarise the existing knowledge and skills of the teaching staff. • Identify training needs through surveys: ◦ Skills and knowledge that need to be fostered for teachers. ◦ Further training courses need to be implemented: Content, duration, objectives, priority order and number of teachers need to be trained in each course. • If the number of teachers at Level 1 is small, teachers can train each other internally. • If the number of teachers at Level 1 is large, it is necessary to build a corresponding further training course for teachers to meet the training needs • Prepare supporting resources: facilities, teachers, logistics, etc.	Summary table of teachers' competencies. Master Training Plan for Teachers Refer to Annex 1.7 Summary of competencies and training plans
Implement further training courses as planned	Note: • The time and method of implementation of further training should be in accordance with the plans of participants and master trainers. • It is necessary to have support policies from specialised departments and faculties for teachers participating in further training	1. Training programme (Annex 1.8). 2. Training Plan (Annex 1.9).

Table 3: Capacity Survey and Further Training for Teachers (cont.)

Steps	Implementation content	Document
Implement further training courses as planned	• Conditions of facilities, machinery, equipment, tools and workpieces required to carry out practice-oriented training • Materials for training • Financial resources • Quality assurance tools for training course include: ◦ Training programmes ◦ Training plan ◦ Participant list ◦ Estimate of materials ◦ Letter of invitation to teachers to attend the training ◦ Feedback on the training ◦ Competency assessment based on training course objectives: each participant needs to carry out project-oriented work according to the 6-step method (project method) ◦ Summary of the training course.	3. List of participants in the training course (Annex 1.10). 4. Estimation of materials for the training course (Annex 1.11). 5. Invitation letter for teachers to attend the training course 6. Daily report on the contents of the training (Annex 1.12). 7. Training Evaluation Form. (Annex 1.13).

1.6.2. Capacity building for in-company trainers

Usually, the staff at the company who are selected to become trainers and participate in the CVT are engineers and technicians with high professional qualifications and many years of experience working at the companies. However, the majority of these in-company trainers still lack teaching and learning skills, including training planning, preparing necessary resources, training methods, guidance as well as assessing learners' achievement capacity. The training content for in-company trainers should closely follow the programmes of fostering teaching skills for trainers at companies (according to Decision 868/QD-TCGDNN issued on November 23, 2020) and include the following topics:



- General issues of TVET and training at companies
- Identifying training needs
- Developing a training programme
- Competency Assessment of Joint Training
- Compilation of lesson plans
- Training Preparation
- Training Implementation
- Assessment of learning outcomes

In order to encourage company staff to participate fully and effectively, the further training programme needs to be organised flexibly, combining face-to-face and online training.

1.6.3. Coordinators

To coordinate and effectively implement the training stages at the institute and at the company, it is necessary to arrange a coordinator with professional expertise and skills in coordinating and organising the activities of each party. Each occupation or group of occupations should have:



- A coordinator at the institute
- A coordinator at the company

❖ The role of the coordinator

It is a connection to implement specific tasks related to planning and training progress, plans to mobilise teachers/trainers at companies, making timetables, implementing training at institutes and companies, evaluating learners' learning outcomes and updating training programmes.

❖ Responsibilities of coordinators



- Coordinate with relevant departments to make training schedules, plans for the use of training teams, and training schedules.
 - Manage and monitor training progress and scheduled plans.
 - Establish an information exchange channel between the institutes' teachers and the team of in-company trainers.
 - Discuss with teachers and in-company trainers about how to coordinate and implement training content at institutes and companies, input for admission.
-
- Support the training team in the process of compiling teaching and learning materials as well as in the process of teaching assigned contents.
 - Coordinate with the specialised department in charge of quality assurance to build and complete a set of quality management tools before learners begin their training at the company.
 - Report and consult with leaders on issues arising during the implementation process.
 - Manage the learning progress of learners at institutes and at companies.

- Instruct in-company trainers on how to make a detailed training plan for each session/day and how to evaluate learners' learning outcomes.
- Collect and store learners learning evidence and assessment results.
- Participate in the Committee of developing, editing and updating the TPs.



❖ **Criteria for selecting coordinators at institutes and partner companies:**

To ensure efficiency in the implementation process, TVET institutes and companies need to rely on a number of criteria such as professional qualifications, management and communication capacity, attitude and occupational experience to select suitable candidates.

❖ **Coordinator Rights:**

In order to ensure quality and improve work efficiency, TVET institutes should encourage and support coordinators at institutes and companies to complete their tasks. This not only shows recognition and appreciation for their contributions but also motivates them to strive in their work. TVET institutes can apply flexible policies such as financial support, providing allowances for missions that require high intensity or travel. At the same time, TVET institutes should strongly encourage the organisation of further training programmes to improve professional capacity and integrate digital tools to support the monitoring and coordinating training activities training, as well as coordination between TVET institutes and partner companies is strongly encouraged.

The team of teachers, in-company trainers, and coordinators is one of the factors that create the success of CVT programmes.

1.7. Preparation of training facilities and equipment

1.7.1. Survey of facilities and equipment at TVET Institutes

TVET institutes need to assess their existing training resources based on the list of minimum equipment prescribed by MoLISA, with reference to the list of minimum equipment recommended for German standard-oriented training programmes.

The detailed steps are shown in Table 4:

Table 4: Steps to carry out the assessment of equipment and facilities at TVET Institutes

Steps	Implementation content	Document
Questionnaire design	Design a survey based on: • Principle: ensure the minimum list of training equipment issued by the Ministry of Labour, Invalids and Social Affairs according to relevant circulars. • Requirements from the training programme. • Consult with experts and dissemination officers. The contents of the questionnaire include: • The name of the area. • Equipment name. • Size, brand, type. • Quantity. • Status (by colour code).	<u>Circular No. 26/2019/TT-BLDTBXH.</u> <u>Annex 1.14: Example of equipment survey at TVET institutes (Metal Cutting occupation).</u>

Table 4: Steps to carry out the assessment of equipment and facilities at TVET Institutes (cont.)

Steps	Implementation content	Document
Questionnaire design	Green: We have all the necessary equipment/machines/tools. Red: We don't have the necessary equipment/machines/tools. Yellow: We have some necessary equipment/machines/tools. + Missing equipment. + Equipment proposed for investment.	
Conducting a survey	• Conduct surveys, based on actual conditions, take detailed notes on all columns, and evaluate according to colour schemes. • When choosing red or yellow, teachers should state exactly what they need/lack to propose investment. • In addition, teachers should mention the need for equipment/machinery/tools in the future so that they can teach all modules according to the training programme.	
Synthesising surveys and determining implementation capacity	• Propose the investment to ensure a minimum list of training equipment. • For intensive training modules that require modern machinery and equipment, TVET institutes can link with companies to train directly on the production line and machinery system of the company.	

1.7.2. Arrangement and management of practical workshops

Effective workshop management is a very important factor in the process of practice-oriented training. On the basis of international experience, in recent years, the TVET Programme has been consulting TVET institutes in Vietnam to design, arrange and exploit training equipment according to the Orientation of the 3-layer workshop, ensuring occupational health safety and 5S standards. The detailed instructions are mentioned in [Workshop Management Handbook](#).

1.7.3. Survey of facilities and equipment at the company

In order to effectively implement training at companies, TVET institutes need to conduct a survey of the fields of operation, job positions, production lines, equipment, machinery and facilities at each partner company. Based on the results of this survey, TVET institutes and companies need to discuss and agree on the contents of the training programme that will be conducted at the company.

Due to the differences in equipment, facilities and technological characteristics of each company, the coordination of training with each company will also be different. This requires TVET institutes to be flexible in selecting and adjusting training content to suit the needs and capabilities of companies. The survey of equipment and facilities at the partner company should be carried out based on coordination between the TVET institute and the company before signing the training cooperation agreement.

1.8. Compilation of teaching and learning materials

Teaching-learning materials should be compiled based on the content of the corresponding training modules as well as the implementation conditions (facilities, equipment) of the TVET institutes and partner companies. In the process of compiling teaching-learning materials, it is necessary to pay attention to the contents that can be digitalised to implement online or hybrid training. For training contents/modules at companies, specialised Faculties/Departments need to invite relevant companies to participate in compiling teaching-learning materials to ensure suitability with development needs and conditions declared at the companies.

Before being put into application, the teaching and learning materials for each module in the TP need to be signed by the Rector for promulgation based on the regulations stated in the Circular 01/2024/TT-BLDTBXH.

Details of the implementation steps are presented in Table 5 - Steps to develop teaching and learning materials.

Table 5: Steps to develop teaching and learning materials

Steps	Implementation content	Document
Subject/Module Analysis	Analyse the location, characteristics, objectives and content of subjects/modules that need to compile for teaching and learning materials.	Circular 01/2024/TT-BLDTBXH
Analysis of the conditions and requirements to be achieved	The conditions for the implementation of subjects/modules, assessment methods and guidelines for the implementation of subjects/modules need to compile for teaching and learning materials in the training programme. Knowledge requirements, for example: • Occupational safety • Technical calculations • Technical Communication • Testing techniques • Technology Engineering • Machine and equipment engineering Skill requirements, for example: • Implementation planning, operation of equipment, workplace management • Evaluation of work results.	Annex 1.15: Example of teaching-learning materials for MD1 - Metal Cutting Occupation
Collection of materials related to the subject/module	Collect materials related to the course or module content: • Knowledge-related materials • Skill-related materials	

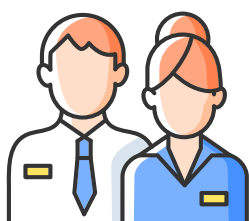
Table 5: Steps to develop teaching and learning materials (cont.)

Steps	Implementation content	Document
Collection of materials related to the subject/module	From the relevant specialised documents collected, teachers will proceed to develop teaching and learning materials (curriculum) in accordance with the training programmes, the institute's existing equipment and the level of learners.	
Compilation of teaching and learning materials for subjects/modules in the training programme	Compile teaching and learning materials according to these guidelines: • Integrate relevant theoretical content into each practical exercise • Digitise content that can be deployed online or hybrid (online and in-person) • Develop: (i) product-oriented practice worksheets; (ii) Assessment sheets and self-assessment of learners' performance • Practice exercises are sequential, from basic to advanced • Apply the 4-step and/or project methods during the hands-on instruction process • Suitable for the equipment and facilities of the institute/partner company • Suitable for different training targets (considering gender and inclusion factors) • Use standardised, environmentally friendly tools, consumables, fuel, which are available and easy to purchase.	

2. IMPLEMENTATION

During the implementation phase, TVET institutes and partner companies need to work closely with each other to jointly plan and implement training at institutes and companies in a synchronous, flexible and effective manner. The TPs and quality assurance tools agreed at the preparation stage should be introduced and specifically instructed to learners and related people. It is necessary to exploit the role of the IABs as well as digital tools to promote cooperation between parties, especially between TVET institutes and partner companies as well as between partner companies. At the same time, unify the coordination mechanism, roles and responsibilities of personnel of each party, including teachers, in-company trainers, coordinators.

2.1. Organisation of general activities



Main responsibilities

- Focal point of contact between companies and TVET institutes.
- Jointly coordinate and make a general plan for each stage of training at the companies, paying attention to the operation plan of the companies (production, maintenance, etc.).

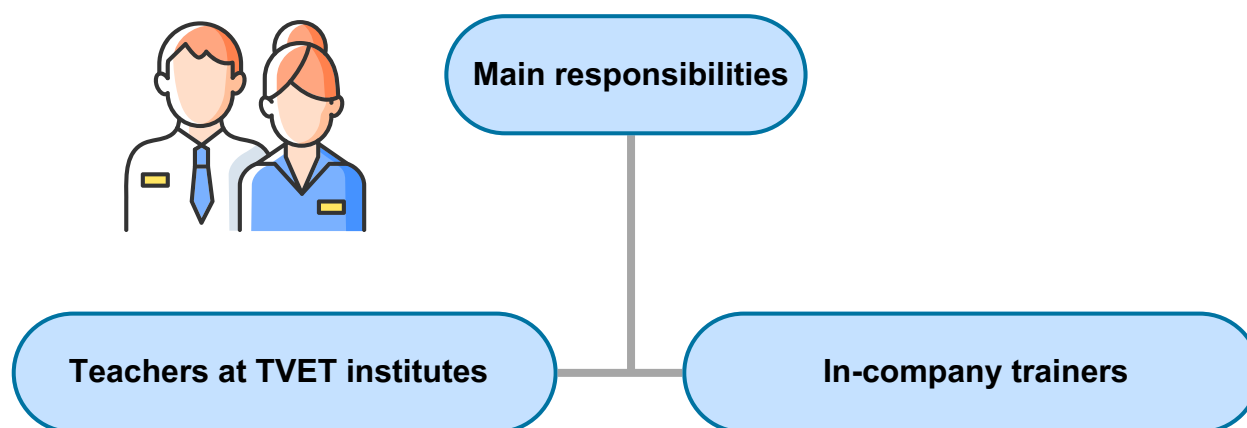
Coordinators at TVET institutes

- Identify teachers of TVET institutes participating in supporting in-company training activities and in which companies
- Divide learners into groups according to the number of learners and the capacity of the company.
- Regularly provide orientation and support to learners before and during the in-company training phase.
- Prepare quality assurance and monitoring tools (e.g., training logs, assessment templates, feedback), and send them to the coordinator at the company.
- Discuss and agree on the implementation process with the CVT management officers of the TVET institutes.
- Communicate regularly with the in-company coordinator during the preparation and implementation of training at the company.

Coordinators at the companies

- Focal point of contact from the company side
- Make a daily, weekly and monthly implementation schedule.
- Send tracking and quality assurance tools to the in-company trainers.
- Introduce the company to learners.
- Provide guidance on working culture and safety regulations at the company.
- Provide safety clothing for learners according to the regulations of the company.
- Divide learners into groups, distribute and explain the rotation plan for practice positions
- Guide learners to the workplace to practice and introduce trainers.
- Regularly inquire and communicate with learners on training problems.
- Organise weekly meetings to review training results & exchange information.
- Coordinate to manage learners during the in-company training period.
- Communicate regularly with the coordinator at the TVET institute.

2.2. Organisation of professional activities



- Provide in-company trainers with an overview of the training content implemented at the TVET institute (theory and practice), information about learners, and the noticeable contents that are considered difficult for learners.
- Explain to the company the training content which will be implemented at the company, and adjust the training content with the in-company trainer if necessary.
- Organise professional meetings and discussions with in-company trainers.

- Identify specific training areas in the company, e.g. tool areas, production areas, maintenance areas.
- Prepare guidelines according to the training content: instructions on occupational safety, working with machinery/equipment, tasks of learners (competencies to be achieved, tasks to be completed).
- Determine the criteria for learners at each training area.

The training model at Schaeffler demonstrates a structured approach to training based on specialised areas within the company, with coordination between departments and oversight by a training coordinator. This model supports the organisation and implementation of training aligned with specific goals (tools, production, maintenance) to improve skills and ensure workforce quality.

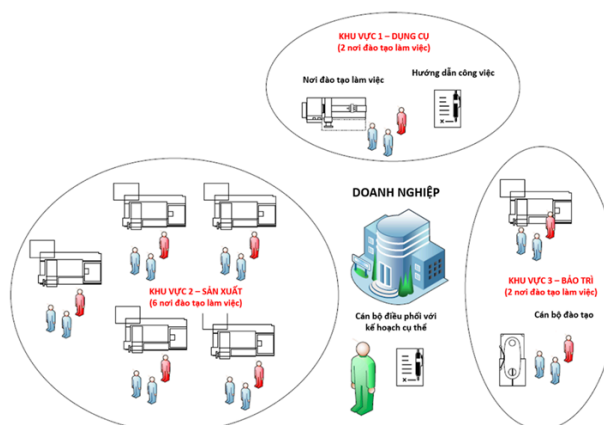


Figure 8: Examples of training areas at Schaeffler

2.3. Organisation of training at TVET institutes

In addition to complying with the regulations and guidelines for training organisations of TVET management units, TVET institutes should:

Organise specific briefings for learners on:

- CVT model,
- Structure and method of implementation of the CVT programme and
- Quality assurance tools at the first stage of the training process

Arrange laboratories and practice workshops in 3 layers and organise occupational training according to appropriate methods and at appropriate workshop level.

Buildings, classrooms, laboratories and workshops need to ensure favourable conditions so that all targets (including women and people with disabilities) can participate and utilise.

Integrate training on occupational health and safety, digital competencies and basic green elements into training modules.

Train basic professional competencies and necessary soft skills before sending learners for in-company training.

2.4. Conducting in-company training

The training process at the company usually consists of two stages: the orientation stage and the rotation stage.



Orientation stage

Coordinators and in-company trainers will provide general guidance to learners about the company (such as regulations, communication culture), work and occupational safety. Learners will get information on the form of rotation between departments, and production team to participate in all related fields of work in the programme.



Rotation stage

Learners will be guided by in-company trainers and apply the obtained knowledge and skills to the actual working environment at each working position. All activities at the company need to meet the requirements of the training plan, the requirements for the quantity and quality of work.

Main responsibility: In-company trainers

- Train at the workplace according to the plan, ensuring that work is arranged regularly and without interruption.
- Familiarise learners with work processes, occupational safety standards, and technical instructions (e.g., Machinery and Equipment Manuals).
- Introduce learners to specific information about the training content and workplace, train learners, and monitor regular workflows.
- Check and confirm learners' training logs.
- Track learners in daily record of exercises and technical processes (Training Records).
- Assess learners daily, weekly and at the end of the training period: check and give feedback on the learners' learning process, learning spirit and attitude; complete the assessment form at the request of the coordinators.
- Discuss with teachers of TVET institutes about technical issues, if necessary, participate in the development of TPs.
- Exchange with the coordinator at the company about changes and updates in the organisation, for example: change of in-company trainers due to health reasons, change of training workshop, absence of learners, etc.



Coordinators at the company

Update the training plan if there is any changes



Teachers at TVET institutes

Accompany learners in the first days of each stage of training at the company, support the in-company trainer, if necessary, especially in the early stage of implementing training at the company.

Ensure the quality of the in-company training by guiding learners to record the training content in the training logs. After each week of training, learners will transfer the logs to the trainer or the staff in charge of training to sign for confirmation. Based on this content, the coordinator or teacher of the TVET institute can control and compare the contents that need to be trained, and at the same time give feedback to the coordinator at the company if the contents trained at the company are not appropriate or incomplete.

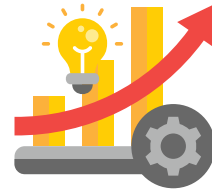
2.5. Summarising, evaluating and reporting

Main responsibility: Coordinator at the company and at the TVET institutes



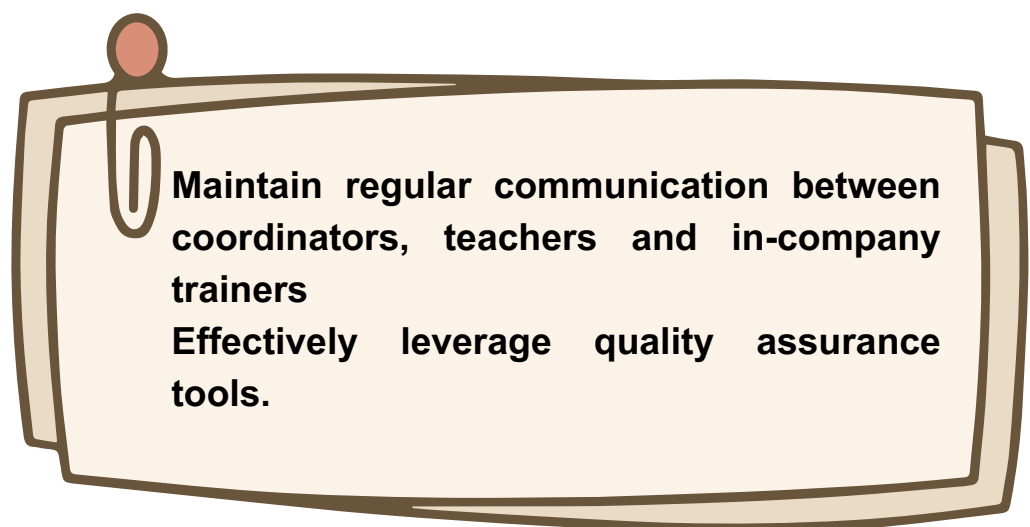
Summary and report

- Ensure that all training materials (training logs and evaluation and feedback forms) are completed, collected and sent back to the TVET institute (necessary documents) after each training period at the company [Refer to all appendixes from 2.1 to 2.9.](#)
- Send an overview of the actual content of training at the company to the TVET institute.



Feedback and improvement

- Comment on the learning process of learners through learning materials and reports.
- Organise a meeting between learners, teachers and in-company trainers to discuss the process of organising training at the company.
- Evaluate the stages of in-company training phases: strengths, weaknesses, potentials, lessons learned, supports for in-company trainers and teachers at TVET institutes.



3. EVALUATION

3.1. Establish a board of examiners with the participation of companies

According to the CVT model, companies and TVET institutes cooperate closely with each other in all stages from preparation, training implementation to learner capacity assessment. Therefore, when establishing a board of examiners, the participation of companies is very important and necessary. TVET institutes should invite technical staff of companies with at least 5 years of experience and professional qualifications suitable to the training occupation to participate in this board. Priority will be given to examiners from companies that have collaborated with TVET institutes on CVT programmes, in-company training and other related cooperation activities.

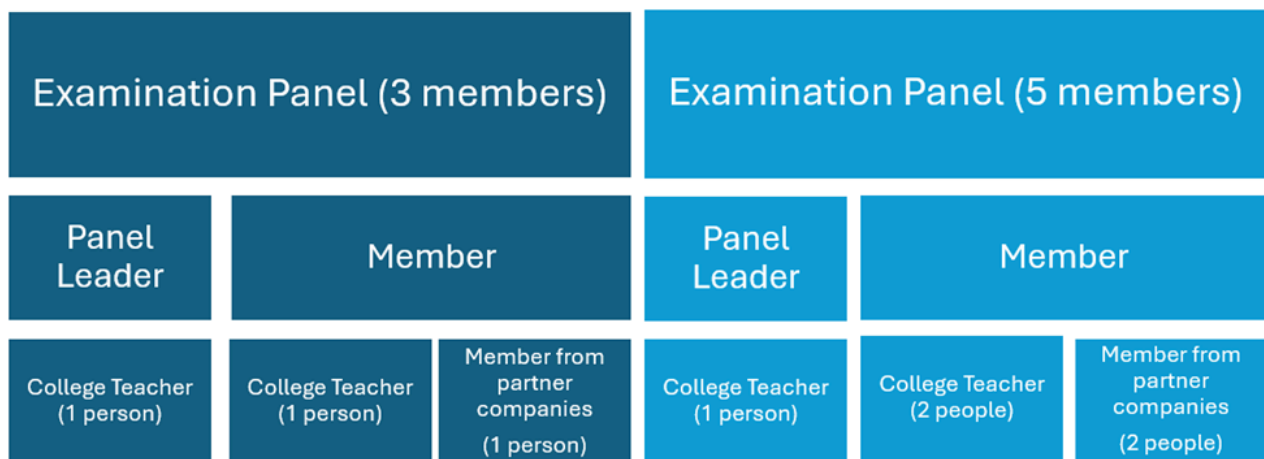


Figure 9: Composition of the board of examiners

Before directly participating in the student competency assessment process, examiners need to be trained on the assessment process, scoring methods, question-and-answer or interview methods and entering scores into forms according to the German standard exam orientation. This is especially important for in-company trainers or teachers who are participating in the assessment for the first time.



Note: It is necessary to prepare backup examiners and send invitation letters to the company at least one week in advance so that the examiners from the company can arrange time and arrange work at the company.

3.2. Examiner training

The examiner training of TVET institutes and companies is extremely important and necessary to have a transparent and effective final exam that meets the goals of the training programme.

The examiner training programme needs to include the following contents:



Introduction on:

- regulations related to the final examination,
- examination objectives,
- examination regulations and organisation process of final examination in German standard orientation
- board of examiners: Composition, functions and tasks of each member.



The process of:

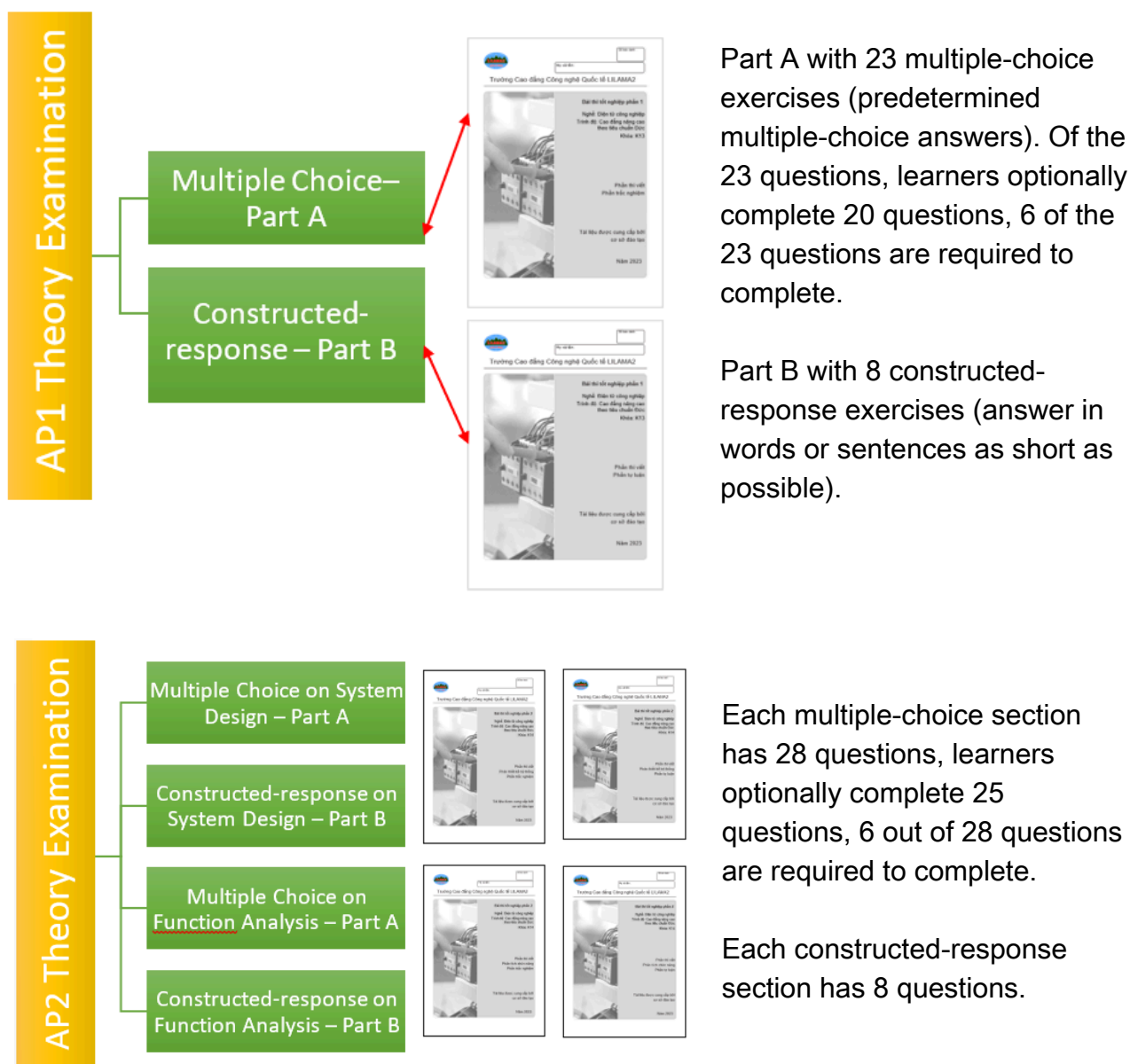
- organising the written examination (theory): The explanation should be accompanied by an analysis of sample questions and assessment tables.
- organising the practice examination (preparation of documents and marking methods): the explanation should be accompanied by an analysis of sample questions and assessment sheets.

- Approach to examination question development
- Check the technical requirements for the written and practice examination parts
- Coordinating, monitoring and documenting the exam process at all stages of the examination: managing time and data for the examination.
- Mock Examination

3.3. Contents of the final examination

The structure of the final examination consists of part 1 and part 2 with the weighting and time specified for each part are detailed in Table 7 - German standards-oriented graduation examination structure on page 65.

3.3.1. Theory Examination



3.3.2. Practical Examination

Table 6: Final Practical Examination Part 1 and Part 2

	Practical Examination Part 1	Practical Examination Part 2
Requirements	• Examinees must perform the task of changing/expanding the system functions prepared in the training institute as required. • The task of function changing consists of three stages of processing and is divided as follows: ◦ Planning stage (implemented in the theoretical test) ◦ Implementation stage ◦ Inspection phase • Examinees must complete the task within the specified time. In which, there will be professional interview about the situations and content of the examination.	• Examinees must be prepared to perform a practical project within the specified time. Project-specific documents will be provided during the implementation. • Examinees must perform the project through a complete process with stages of information gathering, planning, implementation, and testing. • During the implementation process, all activities of the examinees will be observed, and a professional interview will take place. Professional questions and answers with examinees are part of the examination implementation process. • There is an allocation of break time.
Documents	Examinees need to bring the "booklet" and "list of materials and equipment" provided by the TVET institute to solve the tasks in the examination.	• Device documents and data sheets or copies of equipment technical specifications may be used as documentation. • Do not make personal notes or markings in the documents and data sheets of the device. • Specialised handbooks are not allowed, including the abstract.

Table 6: Final Practical Examination Part 1 and Part 2 (cont.)

	Practical Examination Part 1	Practical Examination Part 2
Documents		• All examinees' records, documents, or other supporting devices (such as data memory cards, etc.) that are not approved by the board will not be allowed to be used.
Preparation from TVET institutes	• All necessary content related to the examination must be fully communicated to the examinees to eliminate disadvantages due to lack of information. • A summary of the occupational safety requirements as well as the actual conditions that need to be met before the examination. • The testing equipment listed in the examination materials must be provided by the TVET institutes. • Testing equipment that meets the standards is allowed to be used.	
Occupational Safety	• Ensure that examinees have been instructed in occupational safety according to current working regulations. • The examiners must obtain a commitment to ensure safety signed by the examinees before the start of the examination. With this signature, the examinees confirms that they have been given safety instructions, will observe and comply with it. • Eligibility to participate in the examination is excluded if there is no suitable protective clothing and safety equipment as prescribed or there is no proof that has been instructed on safety.	

Table 6: Final Practical Examination Part 1 and Part 2 (cont.)

	Practical Examination Part 1	Practical Examination Part 2
Assessment	• The examiners will evaluate the implementation process and testing on the "assessment sheet" ◦ Functional inspection, professional and safe operation ◦ Evaluation of planning, implementation and inspection documents • In addition to the specific evaluation criteria decided by the examiner board, other criteria may be proposed (if necessary).	• The process of preparing and implementing the practical test is divided into four stages: i. Collection of Information ii. Planning iii. Implementation iv. Testing • During these stages, examinees must demonstrate skills and knowledge in the context of overall activities (competencies suitable for the process) as a basis for evaluating examination results. • The Board shall use the following tools to evaluate: ◦ Observation during the implementation process. ◦ Specific documents on the tasks to be performed. ◦ Professional questions and answers or interview during the implementation process. • Upon completion of the examination, project-specific documents and notes from the professional discussion as well as from the observation process will be compiled.

3.4. Coordinating the organisation of final examinations and acknowledgement

TVET institutes need to actively coordinate with relevant IABs and partner companies to organise German standard-oriented final examinations, including:

- Develop an examination plan and a tentative list of examiners,
- Invitation letters from TVET institutes and companies,
- Examiner training,
- Issue a decision on the establishment of the examiner board,
- Agree on examination regulations, questions and assessment methods,
- Send examination notice forms to examinees,
- Arrange theoretical and practical examination labs and workshops, and necessary equipment, tools and consumption materials,
- Organise examinations, assessments and acknowledgement.

Refer to the attached appendixes for details to implement the examination (Appendix 3.1 to 3.17).



Figure 10: Examinees taking the theory examination



Figure 11: Examinees taking the practical examination

Table 7: German Standard-oriented graduation examination structure

Graduation Examination Structure				
	Part 1 (AP1)		Part 2 (AP2)	
Weighting	40%		60%	
Content	Complete the basic competency requirements of the occupation (product orientation), professional questions and answers or interview		Complete customer demand-oriented products, professional questions and answers or interview	
Weighting	Practical	Theory	Practical	Theory
	25%	15%	40%	20%
Time	MD06 completion		At the end of the programme	
Examination Duration	Up to 8 hours		Up to 16 hours	
Location	TVET institutes or companies			
Examiners	The number of members in the examiner board must be an odd number, at least 3 examiners, of which at least 1 member is from the company.			

Table 8: Summary of German standards-oriented training programmes implementation

Steps	Tasks	Implementers	Purpose
STEP 1: PREPARATION			
1. Company Survey	• Human resources demand • Technology and equipment • Cooperation willingness • Staff capacity	• Teachers • Business Cooperation Staff	Identify potential companies for training coordination
2. Establishment of the IAB at the TVET institutes	• Operation Regulations • Functions and tasks • Members • Decision on establishment	Management Board of TVET institutes	Establish IABs to effectively support the training process
3. Training Programmes and Assessment Tools	• Training modules at the company • Assessment Toolkit	• Teachers • Focal points • Trainers	Agree on detailed training programme between TVET institutes and companies Agree on training quality monitoring tools at companies
4. Signing the agreement	• MoU • Training Cooperation Agreement	• Management Board of TVET institutes • Management Board of companies • IABs	Signing MoU or agreements on CVT in specific occupations between TVET institutes and 1 or many companies.

Table 8: Summary of German standards-oriented training programmes implementation (cont.)

Steps	Work Item	Performers	Purpose
5. PR + Admissions	• Communication and promotion • Enrolment events and activities	IABs PR Officers Focal Points	Change target perception Attract interests Implement enrolment of the expected number of learners
6. Human Resources	• Teachers' competence • Focal Points • In-company Trainers	• IABs • Teachers • Focal Points	Fully prepare the teachers, focal points and training staff in both quality and quantity to ensure the implementation of the signed training programmes
7. Facilities	• TVET institutes (Theory + Practice) • Companies (Practice)	• Management Boards of TVET institutes • Management Boards of the companies • IABs • Teachers • Focal Points • In-company Trainers	Ensure adequate facilities and equipment for training programmes both at TVET institutes and companies

Table 8: Summary of German standards-oriented training programmes implementation (cont.)

8. Teaching and learning materials	• Analyse the location, characteristics, objectives and contents • Analyse the requirements • Gather relevant documents • Compile teaching-learning materials	• Teachers • Focal Points • In-company Trainers	Develop a complete set of teaching and learning materials for the entire training programme
STEP 2: IMPLEMENTATION OF TRAINING			
Alignment on training plan	• Develop a training plan for each stage • Training progress • Timetable	• Teachers • Focal Points • In-company Trainers	Detailed training plan for the training phase at the company
Training at institutes	• Theory • Practice	• Coordinators • Teachers	Training according to the programme and timetable at TVET institutes
In-company training	• Orient intensive practice and apply the knowledge and skills acquired at the institute to the actual working environment	• Coordinators • In-company Trainers • Teachers	Training according to agreed content/module

Table 8: Summary of German standards-oriented training programmes implementation (cont.)

STEP 3: EVALUATION			
Periodic /end-of-module assessment	• Theory • Practice	• Teachers • Focal Points • In-company Trainers	Strictly follow the training plan
Part 1 (AP1) Examination	• Theory (15%) • Practical (25%)	• Board of examiners (TVET institutes and companies)	Assessment of learners' capacity, accounting for 40% of the weighting
Part 2 (AP2) Examination	• Theory (20%) • Practical (40%)	• Board of examiners (TVET institutes and companies)	Assessment of learners' capacity, accounting for 60% of the weighting
ACKNOWLEDGEMENT & DIPLOMA ISSUANCE			

Part 4

LESSONS LEARNED



1. Successful lessons of CVT at LILAMA 2

Located in Dong Nai, a province in the southern key economic region and an autonomous TVET College since 2016, LILAMA 2 is interested in improving the quality of training to meet the requirements of the private sector. To achieve this, with the support and consultation of the TVET Programme, the College strived to build and strengthen sustainable cooperation with partner companies to provide demand-oriented and international standard training programmes.

Since 2016, the CVT model and the German Standard-oriented College Level Training Programme for Metal Cutting, Construction Mechanics, Mechatronics and Industrial Electronics have been successfully implemented at LILAMA 2 and its partner companies. Every year, the college enrolls about 100 new college-level learners for these occupations and almost implements these programmes themselves. To ensure close cooperation in the preparation and cooperative training, cooperation agreements have been signed between LILAMA 2 and partner companies for each occupation. Partner companies are not only involved in the development of training programmes together with the College, but also join in training and assessment of learners in the graduation examinations.

The team of qualified teachers, trained and experienced in-company trainers & examiners is one of the success factors of CVT. So far, 97 teachers of LILAMA 2 have been trained by national & international experts to improve their expertise and pedagogical skills. In particular, 30 teachers have been evaluated and recognised by the German Chamber of Skilled Crafts as having professional qualifications equivalent to German skilled technicians. This also allows LILAMA 2 to successfully implement the programme at the College and provide further training and consulting to disseminate German standard-oriented training programmes for other TVET institutes in the system. Based on the ASEAN Standards for in-company trainers as well as German training regulations, trainers at partner companies are instructed on how to define tasks and evaluate training requirements at their companies, plan, and organise in-company training for the agreed training programme with LILAMA 2. They are also instructed to prepare and conduct training at companies with appropriate teaching methods such as the 4-step method, the project method and assess learners' capabilities. In addition, in-company trainers are also familiar with how to form a team and simulate training sessions. This is also one of the most important factors contributing to the effectiveness of the CVT model.

In-Company Training Experience

Align training plans: LILAMA 2 and partner companies agree on the content and develop training plans

On-site practical training: Core vocational skills are practiced at the company's workshops and production lines, with flexible schedules to avoid production interruptions.

Pre-training preparation: Assure that learners are equipped with basic skills, knowledge of occupational safety, company regulations and rules, job positions, and training content before training at the company.

Clear role assignment: Both LILAMA 2 and the companies assign specific roles, including company trainers, company coordinators and LILAMA 2 coordinators.

Regular planning meetings: Coordinators and trainers from both sides hold regular meetings to plan and review training for each semester or academic year.

Development of common monitoring tools: Companies and LILAMA 2 jointly develop monitoring tools such as training logs, progress reports and evaluation forms.

Flexible training duration: Training time at companies is adjusted according to the capacity and production technology conditions of each company, accounting for about 30-45% of the training programme.

Practical application: Learners apply skills in a real working environment, accumulating experience with high professional standards.

Close participation of companies: Active participation of companies in all training steps ensures that the program meets the needs and expectations of businesses.



Figure 12: A metal cutting student in the training stage at partner company ISHISEI





"We highly appreciate the teamworking skills as well as the ability to apply the obtained knowledge and professional skills to the actual work of the students. After two weeks of training with the careful guidance of in-company trainers and highly experienced technicians or engineers, they were able to work together with our employees in different job positions in the company",

Mr. Do Dinh Hoang, The training manager of MARTECH BOILER Company, a partner of LILAMA 2 for Construction Mechanics and Mechatronics occupations

Most partner companies have supported learners with a monthly allowance during the in-company training period. In addition, they pay for health & accident insurance; and in some cases, they contribute to the expenses on travel, accommodation and lunch for learners during their time at the company.

Final examination (graduation)

The final examination is the final stage of the CVT process to assess the learners' competencies based on the "Minimum amount of knowledge, competency requirements that learners achieve after graduating from intermediate and college levels" as well as tasks, jobs are given by the business sector and stated in the professional documents (occupational standards). Therefore, the active participation of the business sector in this period is necessary. With the support of the IABs, a board of examiners for each occupation was established and operated with members of LILAMA 2 and partner companies (Thuan Hai, Sang Tao, Martech Boiler, ISHISEI, etc.). The involvement of partner companies in the board of examiners is essential to determine whether learners meet the requirements of the business sector and the agreed general standards. The board of examiners is responsible for developing the content of the final examination as well as the organisation and implementation of the examination. The designated examiners of LILAMA 2 and partner companies supervise the examinees and evaluate their examination results.

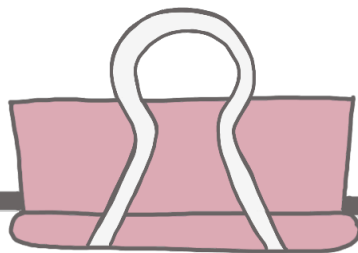
In order to equip the board with the ability to prepare and evaluate learners, an 80-hour training course was organised for potential examiners of LILAMA 2 and qualified companies. In this training, the examiners are trained in:

- (i) Steps to prepare and apply pre-selected tools for the final examination,
- (ii) The structure and process of organising the final examination, and
- (iii) Methods for developing and evaluating written tests and practical tests of learners, including situation interviews according to German standards.

Through this training, the collaboration between the experienced technicians of partner companies and the teachers of LILAMA 2 has been further strengthened.

The final examinations for the first four pilot classes were supervised by the experts from the German Chamber of Skilled Crafts (Handwerkskammer zu Erfurt) to ensure that the examination content and process are equivalent to the German examination standards. On November 12, 2019, at LILAMA 2, the German Chamber of Skilled Crafts in Erfurt, the German authority for training and final examinations, awarded the "Equivalence Confirmation" for the implementation of the final examination based on German standards at LILAMA 2 within the framework of the CVT programmes.

From 2019 to now, qualified examiners from partner companies and the College have always been working together to prepare, organise and conduct final examinations to assess learners' competencies. The requirements for competency and examination process are based on the "learning outcomes" and German examination standards and are adjusted by the board of examiners for 4 German standard-oriented occupations to meet the needs of Vietnamese business sector. In the final examination, learners will demonstrate the competencies they have achieved during the training process at LILAMA 2 and the training stages at partner companies, according to the quality requirements and conditions that they will face in real work - real life.



Support of the Industry Advisory Boards (IABs) at LILAMA 2

- **IAB establishment:** IABs have been established and operated for different occupational fields aiming to establish a coordination mechanism.
- **Flexibility:** Participants from College Management, faculty level and teachers, company's leadership, technicians and in-company trainers, industry associations & DoLISA.
- **Roles:** Feedbacks and advise on developing training programmes on needs of the business sector, enrolment, organising training, participation of the business sector in examinations & after graduation.
- **Core-team:** The President is the Vice Rector in charge of training, the Vice President of the IABs is from the company, and the secretary is the Dean in charge of related occupations.
- **Meeting frequency:** at least twice per year. The decisions are only effective if at least half of the members participate.
- **Cooperation:** Members share their feedback and suggestions on CVT programmes, in-company training phases, and TP, content and methods.
- **Coordination:** Appoint a coordinator to actively and regularly participate together with LILAMA 2.

Achievements (as of May 2024)

71

technical staff of are trained to become in-company trainers

08

examiners from companies have been trained.

97

teachers (33 managers) of LILAMA 2 have been trained, 30 staff professional qualifications equivalent to German skilled technicians.

18

companies actively participate in CVT programmes.

682

learners enrolled and trained in the CVT programmes.

115

teachers of other colleges have been consulted and trained by LILAMA 2.

07

colleges successfully disseminated training programmes by LILAMA 2.

02 IABs and 04 working groups

ensure regular exchanges between LILAMA 2 and the business sector.

2. Some challenges for TVET institutes

❖ **Active participation and commitment of companies:** TVET institutes need to be proactive in finding potential companies and communicating about the benefits of companies when participating in the CVT model as well as the German standard-oriented training programme.

❖ **German standard-oriented training programmes often require long training periods and high cost.** Therefore, in addition to flexibly deploying, coordinating with companies to train and reduce costs, TVET institutes also need to communicate so that learners and parents obtain full information from the beginning.

❖ It is necessary to have **equipment and tools** that meet or are equivalent to **international standards** to serve training and assessment.

❖ It is necessary to have a **team of trainers with high vocational skills and rich teaching experience** as well as practical work experience to be able to train and meet various job positions.

❖ There are **no formal regulations for the final examination of part 1 and part 2**. The examination process has not been integrated into the quality assurance process of TVET institutes.

❖ The **legal basis for training and acknowledgement for in-company trainers** as well as regulations on the organisation and implementation of in-company training for learners: The mechanism and budget to ensure training funds as well as benefits for coordinators and in-company trainers are also not clear and sustainable.

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ANNEX

Forms and templates related to the Guideline for the Implementation of the German Standard-Oriented Cooperative Training Programme are enclosed with this guidance document in the following sections:

Annex Number	Content
1. PREPARATION	
1.1	<u>13 Business Cooperation Tools</u>
1.2	<u>Template of Memorandum of Understanding on Cooperation</u>
1.3	<u>Template of Training Contract</u>
1.4	<u>Training Plan between TVET institutes and companies</u>
1.5	<u>The In-company training plan agreed by the TVET institute and the company.</u>
1.6	<u>Teacher Competency Assessment Sheet</u>
1.7	<u>Summary table of competencies and training plans</u>
1.8	<u>Training Programmes</u>
1.9	<u>Training Plan</u>
1.10	<u>List of participating learners</u>
1.11	<u>Estimated materials for the training course</u>
1.12	<u>Daily Reports</u>
1.13	<u>Training Evaluation</u>
1.14	<u>Example of equipment survey at TVET institutes - Metal Cutting occupation</u>
1.15	<u>Example of teaching-learning materials for MD1 - Metal Cutting Occupation</u>

Annex Number	Content
2. IMPLEMENTATION	
2.1	Forms in Decision 62- LDTBXH
2.2	Training Contract at the company
2.3	Inspection Record of the practical workshop Management
2.4	Training Track Record
2.5	Weekly Training Records
2.6	Evaluation of learners at companies
2.7	Evaluation of learners' Outcomes at companies
2.8	Feedbacks of learners trained at companies
3. EVALUATION	
3.1	Examination Notice to learners
3.2	Letter of invitation to the Examiner to participate in the Final Exam part 1
3.3	Theory Examination Plan Part 1
3.4	Minutes of notifying examination regulations (theory part)
3.5	Minutes of notifying examination regulations (practical part)
3.6	Minutes - Writing Examination
3.7	Part 1 (AP1) multiple-choice test answer sheet
3.8	Part 1 (AP1) Final Examination Papers – Part A (multiple-choice)
3.9	Part 1 (AP1) Final Examination Papers – Part B (written)
3.10	Part 1 (AP1) Practical Examination Paper
3.11	Assessment Sheet on Practical Examination Part
3.12	Part 1 (AP1) Examination Transcript
3.13	Part 2 (AP2) Examination Transcript
3.14	Summary Examination Transcript
3.15	List of tasks to organise the final examination
3.16	Part 1 (AP1) Final Examination Report
3.17	Part 2 (AP2) Final Examination Report

GLOSSARY



3-Level Practice Workshop

The 3-level workshop is a model of arranging the workshop at 3 different levels to effectively implement practical training, meeting the needs of the business sector.

1. Level 1 Workshop (Training room, laboratory): Providing basic capacity for one or more occupational groups. Applying the 4-step method to guide practical training.
2. Level 2 Workshop (Advanced practical workshop): Applying the skills and knowledge learned as well as providing specialized capacity specific to each occupation. It is possible to combine the application of the project method and the 4-step method in the workshop.
3. Level 3 Workshop (Project Workshop): Applying the acquired capacity in a real environment and implementing production tasks according to needs. Applying the project method to guide implementation.

Career Day / Career Fair

An event organized to provide professional orientation, career guidance, and direct networking channels connecting learners, job seekers, TVET institutes, companies, and industry experts.

Cooperative Vocational Training Model (CVT)

CVT is a close cooperation between companies and TVET institutes in all stages of the training process: Preparation, Implementation and Assessment, in order to provide on-demand training programmes.

German Dual System

A parallel training model where learners acquire knowledge and skills simultaneously at two learning venues: the TVET institutes (for theory and basic training) and the workplace in a company (for actual in-company production and work processes).

Hybrid/Blended Learning

An educational model that combines in-person training and online training, taking advantage of both methods to optimize learning efficiency, help minimize travel time, and flexibly take advantage of online resources. Combining face-to-face practice with online theory effectively strengthens knowledge and skills. Learners can adjust their own learning pace through online materials and lessons.

Learning Outcomes (LO)

Learning outcomes specify the minimum amount of knowledge and capacity requirements that learners must achieve after graduating from intermediate and college levels.

Open Day

Open day is an event organized by TVET Institutes to provide information on training activities and facilities to the community, learners, parents, partners or interested parties. This is an opportunity for TVET institutes to build images, connect with the community and promote values they bring.

Potential Companies

Potential companies are those that are capable and willing to participate in the implementation of training programmes with TVET institutes.

Quality Assurance Tools

Quality assurance is a planned and systematic process that ensures trust in programme design, training organization, and qualification certification in an education and training system. Quality assurance tools are methods, processes, or systems used to assess, control, and improve quality in TVET.

Industry Advisory Board (IAB)

The Industry Advisory Board is established by the Rector of TVET institute, may include members within and outside the institute and is a part of its organizational structure. IAB supports, consults on implementation of demands-oriented training, especially in-company training activities, assessing and evaluating learners' capacity.

