

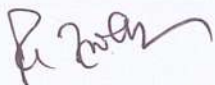
Government of the People's Republic of Bangladesh
Technical and Madrasah Education Division (TMED)
Ministry of Education

Action Plan on the development of
TVET Teacher Qualification Framework (TTQF)

Under
TVET Teachers for the Future (TTF) Program

Directorate of Technical Education
Dhaka, Bangladesh

March -2025



1
Rezwanul Haque
Assistant Director-07
Directorate of Technical Education

Table of Contents

1	Introduction.....	3
2	The present context in Bangladesh.....	3
2.1	<i>Recruitment.....</i>	3
2.2	<i>Qualifications of teachers.....</i>	4
2.3	<i>Structure of the degree.....</i>	4
2.4	<i>Situation of general education teachers.....</i>	4
3	Inputs from international benchmark.....	5
3.1	<i>Proposal in ASEAN.....</i>	5
3.2	<i>European Union proposal.....</i>	6
3.2.1	<i>Proposal of framework.....</i>	6
3.2.2	<i>European study (26 countries + 2) on TVET teachers (2022).....</i>	7
3.3	<i>European Training Foundation (ETF) study.....</i>	8
3.4	<i>Other frameworks.....</i>	8
3.5	<i>TVET teacher management system.....</i>	9
3.6	<i>General education teacher's guideline.....</i>	10
3.7	<i>Conclusion from international benchmark and proposal for TTQF.....</i>	10
4	Qualification structure.....	11
5	Operating manual.....	12
5.1	<i>Job description.....</i>	12
5.2	<i>Assessment process for positioning in the structure.....</i>	12
5.3	<i>Recruitment.....</i>	12
5.4	<i>Performance assessment system.....</i>	12
5.5	<i>Career path evolution.....</i>	13
5.6	<i>Continuing professional development.....</i>	13
5.7	<i>Development programs available.....</i>	13
5.8	<i>Other teaching positions.....</i>	13
6	Proposed action plan to prepare the TTQF components (indicative).....	14
7	Budget.....	21
8	Recommendation for implementation plan after endorsement.....	21
9	Challenges and way to address them.....	21
	Bibliography.....	23
	Appendices.....	24
	<i>Appendix 1: Units of competency for Trainers & Assessors, Level-4.....</i>	24
	<i>Appendix 2: Examples of indicators for assessing TVET teachers' competency.....</i>	26
	<i>Appendix 3: Terms of Reference of the Steering Committee (Task Force).....</i>	27

Introduction

The Development Project Proforma (DPP) of the TVET Teachers for the Future (TTF) Program mentions key challenges concerning TVET teacher situation: delay in recruitment of TVET teachers, inadequate TVET teacher training capacity, Insufficient TVET teacher development system, unclear professional development and career path.

To address these weaknesses, the government has defined in its TVET Action Plan the need to prepare and implement a TVET Teachers' Qualification Framework¹(TTQF). The preparation, endorsement and beginning of implementation of this TTQF is included in the TTF program.

The DPP of TTF mentions that an “Action plan approved for development of TVET teacher qualification framework” is a prior result that needs to be achieved.

The DLI protocol mentions that this prior result will be achieved when “TMED approves the action plan for completing the development of TVET teacher qualification framework. The action plan will at least contain (i) task force with terms of reference to support the development of the framework and (ii) list of timebound activities”.

In this document, the TVET teachers' qualification framework is described as “a guidance tool for TVET teacher management and development system. The framework will define number of qualification levels of the teacher based on competencies and criteria supporting classification levels such as initial teacher education requirements, years of teaching practice, pedagogy level and industry experience.”

This TTQF will be prepared in parallel with the preparation of various teacher short and long training courses as well as the implementation of the infrastructure.

After its approval, the implementation of this Action Plan should keep some flexibility to adapt to the evolution of the context and proposals of the Program Support Unit (PSU) supported by consultants when they are recruited. All through implementation, there could be changes as deemed necessary to lead to approval of TTQF. The terms used in this Action Plan (qualification framework, qualification structure, operating manual, etc.) might also be changed during the process based on requirements of the government.

1 The present context in Bangladesh

1.1 Recruitment

For the public sector, TVET teachers' entry level examinations are conducted through two types of agencies depending on the categories or rank of the TVET teachers. These are:

- The Public Service Commission (PSC) is responsible for conducting entry level examination for certain category of teachers (Grade 10 and above). The PSC is an

¹ TMED. 2020. Integrated Technical and Vocational Education and Training (TVET) Development Action Plan, SI number 1.26, p.12

independent commission responsible for conducting examination for the entry level candidates for the civil servants - not only for the TVET but other government departments and ministries.

- In case of polytechnics and TSCs, TMED and DTE are responsible for recruitment of certain category of staff and trainers/teachers according to government recruitment rules.

Present positions in TVET institutions include: junior instructors, senior instructors, craft instructors helping the teachers to train practical skills, workshop superintendents, chief instructors.

1.2 Qualifications of teachers

The National Technical and Vocational Qualification Framework (NTVQF) using competency standards is mainly used for short courses and not for the traditional mainstream TVET system therefore very few teachers have been introduced the Competency Based Training and Assessment (CBT&A) approach and certified NTVQF.

The present pedagogical system for teachers includes 12 units of competency at level 4 and 8 at level 5. Each unit of competency is described in 3-4 pages.

A detailed training description is provided in order to reach levels 4 and 5:

- Level 4 of pedagogy requires 360 hours consisting of 130 hours Off-the-Job and 230 hours On-the-Job training.
- Level 5 of pedagogy requires 270 hours consisting of 98 hours Off-the-Job and 172 hours On-the-Job training.

The Government has approved a new national qualifications framework known as Bangladesh National Qualifications Framework (BNQF) that will replace the current NTVQF.

1.3 Structure of the degree

Presently one degree can have up to 40 subjects. Each subject is described with a syllabus: document of 5-10 pages including the rationale, 10 learning outcomes, 10 topics, duration and credit. Each topic has several contents. The duration of one subject is 25-70 hours. Subjects can be only theoretical or a mix of theory and practice.

Diploma and bachelor's degree in technical education are already implemented. Diploma degree in technical education can be adjusted under DTE.

TVET teachers short courses and technical education degrees planned to be reviewed under TTF Program.

1.4 Situation of general education teachers

The TTQF should relate to regulations used for general education teachers to ensure consistency. The preparation of the TTQF will include a review of these regulations to see which ones must also concern TVET teachers.



Below is a list highlighting some key official regulations concerning teachers in Bangladesh:

- National Education Policy 2010 outlines the overall educational framework, including teacher recruitment, training, and standards.
- White paper on State of the Bangladesh Economy states that majority of the teachers of private TVET institutions are not properly qualified and trained;
- Ministry of Education Circulars issue specific directives and updates regarding teacher evaluations, promotions, and disciplinary actions.
- Bangladesh Civil Service (Education) Recruitment Rules describing details of the recruitment process, requirements, and career progression for teachers.

Organizations in charge of promulgation of these documents are mainly:

- Teacher Registration and Certification Authority (NTRCA) to manage the registration of teachers.
- Bangladesh Public Service Commission (BPSC) Regulation to govern the recruitment of teachers through competitive exams and interviews for public educational institutions.

2 Inputs from international benchmark

TVET Teacher qualification frameworks vary depending on the country and region. The chapters below briefly describe some systems that could be reviewed during the preparation of the TTQF.

2.1 Proposal in ASEAN²

In many countries there is a trend to define competency framework of TVET teachers for pedagogy and related transversal skills for example in ASEAN.³

A regional system is proposed to serve as recommendation for countries interested. These standards are based on the ASEAN Qualifications Reference Framework (AQRF).

The nature of the standard is based on three characteristics: degree (master's degree equivalent to AQRF 7), teaching certificate, ability and orientation (occupational competence).

² SEAMEO VOCTECH-GIZ. 2019. Regional TVET teacher standard for ASEAN, p.28.

³ GIZ-RECOTVET. 2017. Lesson learned from the development and implementation of National Teacher Standards in ASEAN Member States and China.

AQRF-Level

8	TVET Researcher
7	"Fully qualified TVET Teacher" RTTS
6	Semi qualified TVET Teacher
5	Trainer and Instructor

Figure 1: Level and TVET Teacher Type of the Regional TVET Teacher Standard

RTTS means five Relevant Areas for the Regional TVET Teacher Standard including: Vocational Research, Vocational Discipline, Vocational Didactics, Vocational Pedagogy, Vocational Management.

There are four recommendations for TVET teacher qualifications that need to be specified based on national requirements and national discussions: 1) practical skills level higher than the skills level being taught in the TVET program; 2) a Bachelor's either in a subject discipline-related program, in vocational pedagogy or in a vocational discipline/occupational area combined with vocational pedagogy and didactics; 3) at least 6 months of industrial experience gained through internship if not available when recruited; 4) at least one year of mentored teaching experience.

2.2 European Union proposal

2.2.1 Proposal of framework⁴

In 2009, a Cedefop report proposed a framework for VET professions based on four dimensions.

⁴ Cedefop – Finnish National Board of Education - Kristina Volmari, Seppo Helakorpi & Rasmus Frimodt (Eds). 2009. Competence framework for VET professions – Handbook for practitioners.



Figure 2: European guideline of competency framework

Under each of the four components, a set of activities is listed and their corresponding means to achieve them.

2.2.2 European study (26 countries + 2) on TVET teachers (2022)⁵

In this comprehensive study, standards and guidelines are described.

It is mentioned in the page 8 that “In all EU+ countries (EU-27 plus Iceland and Norway), there are pedagogical and/or teaching qualification requirements for all types of VET teachers, which may differ by type of subject taught (teachers of general subjects versus vocational theoretical or practical subjects) as well as by level of education (lower versus upper secondary education). When it comes to teaching vocational theoretical and/or practical subjects, VET teachers are also required to have a degree or professional certificate in a specific field of studies. The pedagogical component often accounts for their initial professional development (IPD), although more specific IPD settings are available in several countries. CPD is a high priority for almost all EU+ countries. Areas covered by CPD focus on three main types of skills: technical or subject-specific; pedagogical/teaching/didactic; and transversal/cross-cutting.”

The table below shows the kind of qualification or competencies required for TVET teachers in various countries.

⁵ Cedefop. 2022. Teachers and trainers in a changing world: building up competences for inclusive, green and digitalised vocational education and training (VET): synthesis report.

Qualification/competence requirement	Countries
Academic requirements (bachelor or master degree, subject field and pedagogical competences)	All EU+
Work experience	AT, CY, DE, EL, FI, FR, HR, IT, LT, MT, PL, SI
State examination/selection test/collective agreement	DE, EL, ES, FR, MT, SI
Foreign language	EE, IT
Practitioners/professionals teaching in schools	CZ, IT
Flexibility (exceptions)	CZ, FI
Social criteria	EL
Probation	IT
CPD	LV
Subsequent supervised practice	PT

Figure 3: Qualification/competence requirements by country⁶

At the time of the review of these systems, there was no mention of a specific Qualification Framework of technical skill of teachers.

2.3 European Training Foundation (ETF) study⁷

In 2018, ETF implemented a study in nine different countries: Albania, Algeria, Belarus, Kosovo, Moldova, Montenegro, Serbia, Tunisia and Turkey.

One of the conclusions is that “In most countries, licensing not only depends on obtaining academic diplomas but also requires a probationary period or a separate exam.” and “In all of the surveyed countries, the main route into vocational teaching is now through a university degree”.

2.4 Other frameworks

As a framework that describes the professional knowledge needed for teaching with technology, TPACK (Technological pedagogical content knowledge) was introduced by Koehler and Mishra (2005).⁸ The three core components of knowledge in the TPACK framework are content

⁶ Ibid, p.33

⁷ ETF. 2021. Listening to vocational teachers and principals - Results of the ETF's international survey 2018

⁸ Springer. 2024. Handbook of Technical and Vocational Teacher Professional Development in the Digital Age, p.21

knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK). It has recently evolved to become a “TAWOCK” as a Technology Andragogy Work Content Knowledge Model. In the same publication, a framework of TVET teachers’ competencies in the digital age is proposed based on six constructs (curriculum improvement/development, facilitating learning and training, vocational knowledge and expertise, vocational capacity, digital competence, and research and self-development) defined with indicators and four developmental stages (beginner, competent teacher, proficient teacher, expert).⁹

In Georgia, a joint project with The World Bank, British Council and ADB to support teacher qualification, performance and development has defined six standards with their description and a list of up to 10 specifications for each kind of TVET teachers (Vocational teacher, invited teacher, in company instructor).¹⁰

In a report on the Bangladesh TVET teacher system made in 2021 for ADB, it is proposed to set up a TVET teacher qualification structure that should first elaborate a generic standards structure drawing on examples from countries which are already well advanced in the field.¹¹ The report proposes three mayor frameworks for the development of TVET teacher system: 1) generic standard of teacher qualification framework with four fields and 12 key elements; 2) TVET teacher qualification framework showing the structure of the training and development programs; 3) a framework for digital competence of educators¹².

2.5 TVET teacher management system

A review of the international experience (e.g., European, or Asian countries) will not only concern the way to structure qualifications but also the way to manage TVET teachers: recruitment rules, performance evaluation, career development, continuing professional development.

Georgia provides an example of this kind of manual.¹³

Examples of TVET as well as General Education teacher management systems need be reviewed using existing literature (see examples of reports in the bibliography).

The proposed TVET teacher management system will have to consider the General Education teacher management system presently used in Bangladesh and how it will be linked to it.

⁹ Ibid, p.51

¹⁰ Ministry of Education, Science, Culture and Sport of Georgia. 2021. Professional Standard for Vocational Education Teachers (Draft).

¹¹ GFA. 2021. Regional Project Development Support for the South Asia Subregional Economic Cooperation Operational Plan, 2016-2025, p. 17

¹² Ibid, p.5

¹³ Ministry of Education, Science, Culture and Sport of Georgia. 2021. VET Teacher’s Commencement of Work, Professional Development and Career Advancement Concept (Draft)

2.6 General education teacher's guideline

The preparation of the TTQF can also include the review of available documents from international benchmark such as the UNESCO “Teacher Policy Development Guide”¹⁴ providing recommendations for the preparation of a framework or guide including professional standards; non-discriminatory, comprehensive, professional teacher recruitment; effective teacher induction and mentoring; continual professional development; remuneration and material incentives package; a safe, healthy, stimulating teaching and learning environment; career progression; formal teacher assessment; social dialogue; effective school governance. Other resources from general education that can support the preparation of the TTQF are listed in the bibliography.

2.7 Conclusion from international benchmark and proposal for TTQF

The review of the international experience shows that the most common way used to classify TVET teacher levels is either by position or competency standards.

When teachers are classified by position, the criteria used are most of the time education level, pedagogical certificate, years of experience as teacher, years of experience in industry.

Other criteria helping to classify teachers can be:

- *Mentoring*: for example, it can be required to a junior teacher to be mentored during a specific period and a senior teacher to have had experience as a mentor.
- *Extra-teaching activities*: this criterion includes the participation to extra-teaching activities such as coordination of student projects, leading projects with external partners such as companies or development partners, support to the local community, etc.
- *Management or expertise responsibilities*: for example, a master teacher can be required to have a management position in the organization such as vice principal or expertise responsibilities (leading the development of new modules, content, teaching materials or making research).
- *Student counseling*: some teachers have the potential to support students, advise them during their studies.
- *Involvement in professional development*: a requirement could be to participate to professional development programs (trainer of teachers).

Based on the needs and context of Bangladesh and the international benchmark, the TTQF could include two components:

- An overall qualification structure or matrix
- An operating manual.

Both components are briefly described below.

¹⁴ UNESCO. 2019. Teacher Policy Development Guide, p.12, 29.

3 Qualification structure

This first component will describe the levels of TVET teachers either based on competencies or positions with a set of criteria.

The table below shows the example, from the handbook of Springer¹⁵, of what this qualification structure (or matrix) using a competency-based approach based could be.

	Beginner	Competent teacher	Proficient teacher	Expert
Curriculum improvement/development	Improve/develop blended learning curricula with support	Improve/develop blended learning curricula with less or without support	Innovate blended learning curricula informed by new theories, practices, and industry needs	Innovate and transform curricula informed by new theories, practices, and industry needs
Facilitating learning and training	Facilitate learning and training in blended mode with support	Facilitate learning and training in blended mode with less or without support	Innovate blended learning and training pedagogy based on learners' needs	Innovate and transform blended learning and training pedagogy with new knowledge, theories, and skills
Vocational knowledge and expertise	Apply vocational knowledge and expertise in blended learning and training with support	Update and apply vocational knowledge and expertise to solve problems in blended learning and training with less or without support	Update and apply vocational knowledge and expertise in an integrated manner in blended learning and training	Integrate vocational knowledge and expertise to innovate and transform blended teaching, learning, and skill training
Vocational capacity	Gain new understanding of occupational skills needed by industry	Apply new understanding and knowledge of occupational skills to blended learning and training	Update and apply occupational knowledge and skills to training in an integrated manner	Transform and innovate occupational skills learning and training in collaboration with industry
Digital competence	Use basic ICT in blended learning and skill training with support	Apply ICT pedagogically to improve blended learning and skill training	Infuse ICT with pedagogical approaches innovatively to improve blended learning and skill training	Transform teaching, learning, and training with ICT and lead TVET to new practices
Research and self-development	Conduct teaching-related research and self-development with support	Conduct teaching-related research and self-development with less or without support	Conduct research on teaching innovation and design self-development plans and strategies	Develop forward thinking and conduct peer mentoring on research and teaching innovation

Figure 4: A framework of TVET teachers' competency in the digital age

¹⁵ Ibid, p.51

In this case, the framework of competencies is supported by assessment instruments including different levels of indicators.¹⁶

4 Operating manual

This manual describes the process and procedures that are implemented to manage TVET teachers. The endorsement of this manual enacts rules and regulations that should be applied. This operating manual can eventually be included in a TVET quality manual if available.

It should be prepared while considering strengths and weaknesses of the components of the present system (performance assessment, recruitment, training, etc.).

The chapters of such an operating manual can include job description, assessment process, recruitment, performance assessment, career development, continuing professional development, development programs, other teaching positions.

4.1 Job description

Job descriptions of various teaching positions at different levels are defined based on the qualification framework. They list main roles, duties, required qualifications based on a given format.

4.2 Assessment process for positioning in the structure

There are now thousands of TVET teachers at different levels. If there is a new qualification structure, there is a need to build a mechanism to recognize their level in this new structure.

This chapter will explain this mechanism to integrate these teachers. It can be based on portfolio, committees, assessment sessions, etc.

4.3 Recruitment

This chapter includes the pre-requisites of applicants and process of recruitment (who is doing what? When? How?).

It will follow government rules applied.

4.4 Performance assessment system

The system requires adherence to the principles of transparency (clear criteria and procedures), reliability (impartial, evidence-based) and validity (procedure appropriate to the purpose of the evaluation).

This chapter describes the detailed process of TVET teacher performance evaluation including the persons involved in the evaluation at the institute or national level and all relevant templates used.

¹⁶ See an example in appendix



This system also describes the modalities of regular feedback sessions necessary to have during the year to ensure a fair final evaluation.

4.5 Career path evolution

This chapter explains the process of changing the position and responsibility either vertically following the structure or horizontally (same position in another organization, institute).

It describes what the applicant must prepare, including forms and templates used, the modalities of application, the persons involved in the decision (e.g., principals, committee, etc.), following criteria defined in the structure.

4.6 Continuing professional development

This chapter explains the requirements of yearly professional development, the modalities of this development (training, e-learning, member of a learning community, special assignment, etc.), the process of training needs analysis in the institute, the way to decide the professional development activity, how new skills should be applied at work and the training evaluation system.

4.7 Development programs available

During the 5 years of TTF implementation, various long and short courses will be created. They will be based on existing syllabi and their corresponding learning outcomes adapted to teacher training programs with input from international support. Teacher development and career path will be supported by these development programs.

The operating manual succinctly describes the variety of these development modalities (duration, main content, prerequisites) such as:

- Engineering degrees
- Technical education degrees
- Foundation programs
- Short skills courses
- Pedagogy certification courses
- e-learning modules

4.8 Other teaching positions

As mentioned in the European study¹⁷, teachers in vocational education institutions are not the only ones to transfer knowledge.

In-company trainers have an important role in case the student is doing an internship or is within an apprenticeship path.

The institution might also call for part-time teachers and experts.

Therefore, this chapter describes selection modalities, pre-requisites, roles, responsibilities and qualifications of in-company trainers and part-time teachers.

¹⁷ Ibid

5 Proposed action plan to prepare the TTQF components (indicative)

After the preparation phase, the action plan includes five outputs:

1. International benchmark reviewed
2. Components of the TTQF defined
3. TTQF qualification structure prepared and validated
4. Operating manual drafted
5. TTQF endorsed and being disseminated

These outputs will be validated by a TTQF Steering Committee (Task Force), Terms of Reference of this committee are drafted including list of members and main responsibilities (see Appendix 3).

Each output has a set of activities.

Output Activity	Month																								Responsi bility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
Preparation																										
Recruitment of consultants																										PSU
Formation and endorsement of a TTQF Steering committee (Task force)																										TMED, DTE
1. International benchmark reviewed																										



Output Activity	Month																								Responsibility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
Office work to prepare a leadership development program in Europe																										PSU with consultant
Office work to review international benchmark of classification and development of teachers																										PSU with consultant
Implementation of a leadership development program abroad																										PSU with consultant
Office work to prepare a workshop to present results of international benchmark																										PSU with consultant
3-day workshop to present lessons learnt from																										PSU with consultant

Output Activity	Month																								Responsibility		
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.			
international benchmark and define what could be applied to TTQF																											
2. Components of the TTQF defined																											
Office work to finalize the outlines, components of the TTQF based on the present action plan and international benchmark following workshop																											
Meetings with government organizations (TMED, DTE, DSHE, BTEB, etc.) for validation																											

Output Activity	Month																								Responsibility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
of the components of the TTQF (qualification structure, operating manual)																										
Validation of the components by the steering committee																										PSU, Steer. committee
3. TTQF qualification structure validated																										
Office work to prepare the qualification structure																										PSU with consultant
Meetings with government organizations (TMED, DTE, DSHE, BTEB, DME, etc.) to get feedback on the structure																										PSU, DTE

Output Activity	Month																								Responsibility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
Office work to prepare the workshop																										PSU with consultant
3-day workshop to present and validate the draft structure: positions, competencies, levels, criteria																										PSU with consultant
Office work to adjust the structure																										PSU with consultant
Validation by the steering committee																										PSU, Steer. committee
4. Operating manual drafted																										
Office work to draft the manual																										PSU with consultant
Meetings with government organizations (TMED, DTE, BTEB, etc.) to get																										PSU, DTE

Output Activity	Month																								Responsibility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
feedback on the manual																										
Office work to adjust the manual																										PSU with consultant
Office work to prepare the workshop																										PSU with consultant
3-day workshop to review draft manual																										PSU with consultant
Office work to adjust the manual and prepare workshop																										PSU with consultant
3-day workshop to validate draft manual																										PSU with consultant
Office work to adjust the manual																										PSU with consultant
Validation by the steering committee																										Steer. committee
5. TTQF endorsed and																										

Output Activity	Month																								Responsibility	
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
being disseminated																										PSU DTE
Publication on the website for getting feedback (3 weeks)																										PSU, DTE
Submission of the draft TTQF for government approval																										PSU, DTE
Approval																										TMED PSU DTE
Start implementation including launching and dissemination workshops																										PSU DTE

6 Budget

This preparation of this TTQF will require the following budget:

Items	Budget
International and national consultants	As per TOR in TTF: 1 international for 10 PM and 1 national for 25 PM
Leadership development program for policy makers: "Policy implementation leadership"	Included in the DPP Appendix "Calculation", "Overseas training"
13 workshops of 3 days for preparation and dissemination	Included in the DPP Appendix "Calculation", "Workshops"

7 Recommendation for implementation plan after endorsement

The document submitted for approval will include not only the TTQF but also the proposal for implementation that will answer the question: "How are we going to implement his newly designed TTQF?"

The main activities of this implementation plan might include:

- Selection of the step-by-step approach to implement TTQF for all TVET teachers: what priority positions and districts?
- Planning of various launching and dissemination workshops
- Training and information on TTQF qualification structure and operating manual to the partners, using a cascade approach from government officials to principals to teachers.
- Dissemination to other positions and divisions.

8 Challenges and way to address them

The creation of a national qualification system that concerns thousands of TVET teachers is a very important task. Challenges will appear.

The table below lists possible challenges and ways to address them.

Challenges based on outputs in the plan	Action to do
Preparation	
Get quick approval of the members and ensure involvement of various organizations	Start discussing with organizations as soon as the loan is agreed, use this Action Plan to build confidence.

1. Components of the TTQF defined	
Alignment of TTQF with existing policies, rules, national development plans	Involve key stakeholders during the complete process through individual meetings and workshops.
2. International benchmark reviewed	
Implementation of the leadership development program on time	Start reviewing possible partners as soon as the loan is agreed, use the network of international partners having MOU under TTF
3. TTQF qualification structure validated	
Correspondence of the TTQF with salary structure for government officials	Compromise to make it feasible based on the local context
4. Operating manual drafted	
Ensuring quality assurance	Integrate a mechanism of monitoring inside the operating manual
Correspondence between competencies in the development programs and levels in the TTQF structure	Start quickly the preparation of the development programs by defining the competencies, use existing pedagogy competencies reviewed to apply to the TTQF structure as needed.
Integration into the data management system	Integrate data with the data management system being improved
5. TTQF endorsed and being disseminated	
Resistance to change of teachers and other stakeholders	Use education change management approaches as proposed in various literature (see bibliography)



Bibliography

Education management

- Radhika Iyengar, Matthew A. Witenstein, Erik Byker, Annual Review of Comparative and International Education. 2014. Comparative Perspectives on Teacher Education in South Asia.
- Yin Cheong Cheng. 2019. Teacher Education Reform in the Asia-Pacific Region.
- Department of Education, UK. 2022. Delivering world class teacher development.
- EC-EURYDICE. 2021. Teachers in Europe: Careers, Development and Well-being, a Eurydice Report
- European Commission/EACEA/Eurydice. 2018. Teaching Careers in Europe: Access, Progression and Support.
- OECD. 2017. Pedagogical Knowledge and the Changing Nature of the Teaching Profession, chapter 3.
- UNESCO. 2016. Teachers in the Asia-Pacific: career progression and professional development.
- UNESCO. 2019. Teacher Policy Development Guide, p.12, 29.

Education reform

- Colleen McLaughlin, Alan Ruby. 2021. Implementing Educational Reform.
- Ignacio Barrenechea, Jason Beech & Axel Rivas. 2022. How can education systems improve? A systematic literature review.
- Patricia Bromley, Rie Kijima, Lisa Overbey, Jared Furuta, Minju Choi, Heitor Santos, Jieun Song & Tom Nachtigal. 2023. World Education Reform Database (WERD): A Global Dataset on Education Reforms, version 2.

TVET

- Cedefop – Finnish National Board of Education - Kristina Volmari, Seppo Helakorpi & Rasmus Frimodt (Eds). 2009. Competence framework for VET professions – Handbook for practitioners.
- Cedefop. 2022. Teachers and trainers in a changing world: building up competences for inclusive, green and digitalised vocational education and training (VET): synthesis report
- ETF. 2021. Listening to vocational teachers and principals - Results of the ETF's international survey 2018
- GFA. 2021. Regional Project Development Support for the South Asia Subregional Economic Cooperation Operational Plan, 2016-2025, p. 17
GIZ-RECOTVET. 2017. Lesson learned from the development and implementation of National Teacher Standards in ASEAN Member States and China.

- Ministry of Education, Science, Culture and Sport of Georgia. 2021. Professional Standard for Vocational Education Teachers (Draft).
- Ministry of Education, Science, Culture and Sport of Georgia. 2021. VET Teacher's Commencement of Work, Professional Development and Career Advancement Concept (Draft)
- OECD. 2021. Teachers and leaders in Vocational Education and Training.
- SEAMEO VOCTECH-GIZ. 2019. Regional TVET teacher standard for ASEAN, p.28
- Springer. 2024. Handbook of Technical and Vocational Teacher Professional Development in the Digital Age, p.21
- TMED. 2020. Integrated Technical and Vocational Education and Training (TVET) Development Action Plan, SI number 1.26, p.12

Appendices

Appendix 1: Units of competency for Trainers & Assessors, Level-4

Sl. No.	Unit Code	Units of Competency (UoC)	TM Level	Unit Type	Nominal Hours
1		Work effectively within Bangladesh TVET sector	4	TVET Sector Specific	40
2		Promote inclusive learning in a CBT&A environment	4	TVET Sector Specific	20
3		Apply OSH practices in a CBT&A environment	4	TVET Sector Specific	15
4		Use ICT to Facilitate Teaching and Learning	4	TVET Sector Specific	45
5		Maintain training equipment and facilities	4	TVET Sector Specific	15
6		Maintain and enhance professional & technical competency	4	TVET Sector Specific	30
7		Design and modify CBT learning materials and resources	4	Occupational Standards	40
8		Organize competency-based training sessions	4	Occupational Standards	20
9		Deliver competency-based training	4	Occupational Standards	40
10		Design competency-based assessment	4	Occupational Standards	25



11		Develop competency Based assessment tool	4	TVET Sector Specific	40
12		Organize and conduct competency-based assessment	4	Occupational Standards	30
				Total	360

A

Appendix 2: Examples of indicators for assessing TVET teachers' competency

The handbook from Springer proposes a list of indicators for each competency.¹⁸

First-level indicators	Second-level indicators	Third-level indicators
A. Curriculum improvement/development	A1. Analysis of industry needs and standards	<ul style="list-style-type: none"> (a) investigate the needs of industry for subject area/course improvement/development (b) analyze the needs and propose further actions (c) analyze relevant vocational competence standards required by industry (d) adopt/adapt these standards to curriculum improvement/development to meet students' needs
	A2. Analysis of relevant knowledge, skill and professional ethics requirements	<ul style="list-style-type: none"> (a) Analyze relevant knowledge requirements for the targeted subject area(s)/course(s) (b) Analyze relevant skill requirements for the targeted subject area(s)/course(s) (c) Analyze relevant professional ethics requirements for the targeted subject area(s)/course(s)
	A3. Subject area/course improvement/development	<ul style="list-style-type: none"> (a) improve/develop subject areas/course objectives (b) improve/develop subject areas/course contents (c) improve/develop subject areas/course structure (d) improve/develop instructional plans (e) improve/develop assessment schemes
	A4. Learning module/project/task improvement/development	<ul style="list-style-type: none"> (a) improve/develop modules/project/tasks in accordance with relevant vocational competence standards and student needs (b) Specify objectives of each module/project/task (c) Specify procedures for hands-on practice in each module/project/task (d) specify learning outcomes for each module/project/task

¹⁸ Ibid, p.56

Appendix 3: Terms of Reference of the Steering Committee (Task Force)

A Steering Committee will be formed for the formulation and approval of Technical Teachers Qualifications Framework (TTQF) following the outputs listed in the Action Plan.

Participants will be as follows.

1.	Secretary, Technical and Madrasah Education Division (TMED)	Chairman
2.	Additional Secretary (Technical), TMED	Member
3.	Additional Secretary (Development), TMED	Member
4.	Additional Secretary (Madrasah), TMED	Member
5.	Additional Secretary (College), Secondary and Higher Education Division (SHED)	Member
6.	Member, National Skills Development Authority (NSDA)	Member
7.	Director General, Directorate of Technical Education (DTE)	Member
8.	Director General, Bureau of Manpower Employment and Training (BMET)	Member
9.	Director General, Directorate of Secondary and Higher Education (DSHE)	Member
10.	Director General, Directorate of Madrasah Education (DME)	Member
11.	Chairman, Bangladesh Technical Education Board (BTEB)	Member
12.	Chairman, Bangladesh Madrasah Education Board (BMEB)	Member
13.	Representative, Dhaka University of Engineering and Technology (DUET)	Member
14.	Head of TVE Department, Islamic University of Technology (IUT) Gazipur	Member
15.	Director (Planning and Development), DTE	Member
16.	Principal, Technical Teachers Training College (TTTC)	Member
17.	Deputy Secretary (Technical), TMED	Member Secretary

Remarks:

- *The committee can co-opt the member/(s) as necessary.*
- *TTF-PSU will provide secretarial support.*

Responsibilities

1. Validate the various outputs of the Action Plan as agreed;
2. Establish priority action areas for Technical Teachers Qualifications Framework (TTQF) in the context of long-term strategy to unify and harmonize technical and vocational teachers training stream in Bangladesh;
3. Identify different levels of competency of technical teachers to be included in the TTQF;

4. Form a working group to prepare the draft structure of the TTQF with the help of consultants;
5. Develop consultation documents on the design and implementation of TTQF, and conduct public consultation to receive the views and aspiration of internal and external stakeholders;
6. Review and incorporate consultation feedback, finalize TTQF summary document, and submit the final version to the government;
7. Finalize the implementation arrangement of TTQF in the Technical and Vocational Education stream;
8. Implement any other relevant actions as required.

Rezwanul Haque
16/03/2025

Rezwanul Haque
Assistant Director-07
Directorate of Technical Education