



PC-I



INTRODUCING
MATRIC-TECH PATHWAYS FOR INTEGRATING
TECHNICAL & VOCATIONAL EDUCATION &
TRAINING (TVET) AND FORMAL EDUCATION

EXECUTING AGENCY

NATIONAL VOCATIONAL & TECHNICAL
TRAINING COMMISSION (NAVTTTC)

Ministry of
Federal Education & Professional Training
Govt of Pakistan,
Islamabad

**Government of Pakistan
Planning Commission**

(PC-1 Form)

(Social Sector - Education, Training and Manpower)

1.	Name of the project:	Introducing Matric-TECH / (Career Education) Integrating Technical & Vocational Education & Training (TVET) and Formal Education
2.	Location:	Islamabad Capital Territory (ICT), Gilgit- Baltistan (GB), Azad Jammu & Kashmir (AJK)
	Provide name of District/Province	Islamabad Capital Territory (ICT), Gilgit- Baltistan (GB), Azad Jammu & Kashmir (AJK)
	Attach a Map of the area, clearly indicating the Project / program location.	Map of the location is at Annex-A . The program will serve youth beneficiaries of federally administered areas under the jurisdiction of M/o Federal Education and Professional Training, Islamabad
3.	Authority responsible for:	
	Sponsoring	M/o Federal Education and Professional Training, Islamabad (Govt. of Pakistan)
	Execution	NAVTTTC/Ministry of Federal Education and Professional Training, in collaboration with Federal Board of Intermediate and Secondary Education (FBISE), Federal Directorate of Education (FDE), concerned departments for TVET as well as general education of Azad Jammu and Kashmir and Gilgit-Baltistan.
	Operation and maintenance	
	For provincial projects / program, name of the concerned Federal Ministry be provided	Primarily, the operations of the project will be looked after by NAVTTTC / M/o Federal Education and Professional Training, Islamabad by virtue of which the labs / workshops will be established in public sector institutes / schools / colleges of general education. Later, the established facilities i.e. labs / workshops and other technological provisions to introduce Technical and Vocational Education and Training (TVET) in formal / general education stream through Matric-TECH/Career Education will be handed-over to partner public institutes / schools / colleges and the concerned governing public departments, agencies, authorities after completion of the project. These public sector institutes will be selected on the basis of recommendations by the concerned Education departments and Ministry of Federal Education and Professional Training, Islamabad. Moreover, the Trade Instructors, Institute Coordinators will be hired by NAVTTTC with collaboration of FDE / Institutes to run the training facilities.
4.	Plan Provision:	
	a. If the project / program is included in the medium term/five year plan, specify actual allocation.	This specific project is not included in the current Medium Term/ Five years plan. However, the instant project is proposed to be funded from the allocated head namely; <i>“TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)”</i> with a financial outlay of Rs.1,000.0 Million included in current year Public Sector Development Programme (PSDP)2019-20 for Ministry of Federal

		<p>Education and Professional Training, Islamabad.</p> <p>Technical & Vocational Education & Training (TVET) is included in the core Programs/activities of HRD in 11th Five years plan (2013-18) and also catered under provisions of 12th five year plan, Vision 2025. The instant project is framed to comply with the recommendations of Taskforce constituted by M/o Federal Education and Professional Training in shape of Roadmap for Implementation of National “Skills for All Strategy”, which emphasize on integrating Technical Education and Vocational Training (TVET) with General education and introducing best TVET practices in country at par with globally acceptable standards of skill development and TVT sector through implementation of NAVTTC’s National Vocational Qualification Framework (NVQF).</p>
	<p>If not included in the current plan, what warrants its inclusion and how is it now proposed to be accommodated.</p>	<p>This project is proposed to be funded from the allocated head of program namely; <i>“TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)”</i> with a financial outlay of Rs1000.0 Million included in current year Public Sector Development Programme 2019-20. The mentioned financial allocation for M/o Federal Education and Professional Training, Islamabad is intended by the federal government to be spent for various TVET related initiatives <i>(Reflected at SR.#175 under the head of M/o Federal Education and Professional Training, Islamabad in PSDP Book Annexure-Q)</i>. This project for Education and Training sector specifically pertaining to Human Resource Development is formulated in-line with Prime Minister’s vision for technology based knowledge economy uplift through innovative interventions in various sectors of economy as conveyed by Ex-Chairman, Higher Education Commission, <i>(Prof. Atta-ur-Rehman)</i>. In this context, skill technology transfer through reforming Matric-TECH scheme is expected to generate effective outcomes by integrating general education and Technical and Vocational Education and Training (TVET).</p> <p>Moreover, Pakistan Vision-2025 (Planning Commission, Government of Pakistan) Pillar-II emphasizes on achieving sustained indigenous and inclusive growth through reduction of poverty level by half in country, Pillar-VI emphasizes on Developing competitive knowledge based economy through value addition and Pillar-VII emphasizes on Modernizing transportation infrastructure and greater regional connectivity (encompassing the roads, infrastructure, energy and human capital through CPEC a flagship projects).</p> <p>Under globally agreed Sustainable Development Goals (SDGs) Pakistan ratifies and supports a universal agenda action to end poverty, protect the planet and ensure that all people enjoy peace also underpins the significance of quality education and technical and vocational education and training. The Target No.4.3, 4.4 & 4.5 chalked under Sustainable Development Goal No.04 includes;</p>

- By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

Socio-economic progress of youth through skill development & infra-structure up-gradation in Human Resource Development especially through Skill development in Technical & Vocational Education & Training (TVET) sector is also included in Vision 2025 and globally agreed 17 Sustainable Development Goals (SDGs) and adopted by Pakistan. Moreover, as per document of present Government namely “Performance reports of Government for first 100 days - Initiative #11, which elaborates milestone(s) of Federal Government for Federal TVET / Skill building Strategy has strong provisions for recommended project inter-alia the roadmap chalked by Taskforce constituted by M/o Federal Education and Professional Training National” Skill for All” Strategy precisely based on recommendations of Task Force on TVET.

The instant project amounting to Rs. **315.0** million during F.Y.**2019-20, 2020-21 & 2021-22** is proposed to be funded from federal PSDP allocated to Ministry of Federal Education and Professional Training under the head namely; “***TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)***” with a financial outlay of Rs **1000.0** Million included in current year Public Sector Development Programme **2019-20** (reflection in Budget Book 2019-20 is provided at **Annexure-Q**) and the financial allocation kept for the highlighted initiatives in subsequent years.

Through this project the youth of Islamabad Capital Territory (ICT), Gilgit-Baltistan, Azad Jammu & Kashmir will be enrolled in formally recognized program of Matric-TECH on the pattern of general education after eighth standard (middle pass). This youth will go through the subjects of general education on prescribed format of concerned board of general education alongwith the technical and vocational education and training subjects as prescribed by NAVTTC under its newly formulated / notified NVQF which

is prepared in consultation with concerned federal and provincial stakeholders and also recognized locally as well as internationally by all boards of general and technical education. By virtue of this pattern, youth will be equipped with technical hands-on skills of NVQF level-IV alongwith a formally recognized qualification of Matric-TECH. The project will empower the youth by imparting demanded hands-on skills of various vocations, preparing them for earning decent livelihood. The passed-out youth will have opportunity to restart technical and vocational education and training at any later stage in life as this qualification and TVET certification will allow them vertical and horizontal progression into general education or TVET stream at any time. Under this program state of the art labs / workshops in specific technologies / disciplines will be established in general schooling system working in public sector.

The subject project PC-I aims at establishing new labs / workshops in public schools and colleges of general education stream and ensure the provision of Technical and Vocational Education and Training (TVET) to youth by integrating TVET into General Education stream. This PC-1 will also provide a unique opportunity to pilot NAVTTC's newly developed National Vocational Qualification Framework and reform the existing scheme of Matric-TECH by establishing its equivalency to NVQF Level-IV allowing the vertical and horizontal progression of passed-outs in both streams. This program is specifically for such youth who intends to readily ingress in job market through skill development after tenth class or want to pursue their career in TVET sector by utilizing their acquired hands-on skills in skill-based job market. This project will provide a unique opportunity for integration of formal and vocational education which is included in the skill development section of 11th Five Year Plan. NAVTTC's developed CBT based National Vocational Qualification Framework (NVQF) will be implemented under the instant project and after passing-out the tenth class, the youth will get a formal qualification of Matric-TECH recognized by Federal Board of Intermediate and Secondary Education (FBISE), AJK-BISE and other concerned education Boards and departments alongwith IBCC. This Matric-Tech also stands equivalent to Level-IV of NAVTTC's National Vocational Qualification Framework (NVQF) and the recognition for this Matric-TECH against level-IV of NVQF will also be registered with IBCC.

The target youth (middle pass) after eight standard will be enrolled on the same pattern of general education for this "General Education cum Skill based Qualification" in specific TVET disciplines / technologies as highlighted by NAVTTC naming it as Matric-TECH/Career Education after carrying out need assessment taking into consideration the geographic and market needs. The enrolled students will acquire both formal and skill education during their tenure of study in Matric-TECH/Career Education. In order to uplift image and prestige of TVET education, a drive will be launched to change nomenclature of TVET education to Career Education in line with Canadian

		<p>system/nomenclature to attract talented youth to TVET sector. It will help to increase enrolment ratio in TVET in Pakistan. The passed-out youth will have the opportunity to get enrolled either in Intermediate level of formal education or in TVET. This youth will have the opportunity of vertical and horizontal mobility to pursue their careers in skill level-V of NVQF or otherwise enter into job market. NVQF has a built-in feature of re-entry at any later stage of life for these youth. Ministry of Federal Education and Professional Training, Islamabad's document namely; National "Skills for All" Strategy, a roadmap developed by the Ministry's Taskforce aimed to enhance TVET capacity explores Public Private Partnership for Training Opportunities and setting up industry-based TVET institutes, introducing and implementing standardized curriculum based on National Vocational Quality Framework (NVQF), across the country for standardization and quality enhancement. This project will augment the govt. efforts to achieve the aforementioned objectives.</p> <p>The National Education Policy Framework 2018 launched by Ministry of Federal Education and Professional Training has also prioritized to enhance access to and relevance of skills training.</p> <p><u>The current Government manifesto 2018 of Naya Pakistan also aims at implementing a technical and vocational education reform program for up skilling of work force in demand-driven trades and all the above mentioned targets/ objectives will be achieved through this project.</u></p>
	<ul style="list-style-type: none"> • If the project / program is proposed to be financed out of block provision, indicate: <ul style="list-style-type: none"> ❖ Total block provision ❖ Amount proposed for this project 	<ul style="list-style-type: none"> ❖ Nil <p>The subject project is proposed to be funded from federal PSDP with a financial outlay of Rs. 315.0 Million during F.Y.2019-20, 2020-21 & 2021-22 made for M/o Federal Education and Professional Training, Islamabad to be executed through NAVTTC under the head namely; <i>"TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)"</i>. An amount of Rs1000.0 Million has already been included in current year Public Sector Development Programme2019-20 for this TVET sector Development initiatives through Technology transfer (<i>Knowledge Economy initiative</i>).</p>
<p>b.</p>	<ul style="list-style-type: none"> ▪ Provision in the current years PSDP/ADP 	<p>An amount of Rs1000.0 Million has been provided / included in current year Public Sector Development Programme (PSDP) 2019-20against the head namely; <i>"TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)"</i>allocated for M/o Federal Education and Professional Training, Islamabad and this project is proposed to be funded from this indicated head allocated for knowledge Economy Initiative.</p>
<p>5.</p>	<p>Project Objectives</p>	
	<ul style="list-style-type: none"> • Project Objectives and its relationship with Sectoral objectives. 	<p>Sectoral Background</p> <p>Education sector falling either in the domain of General or Technical / Vocational always plays a vital role in economic, social and human development of any country. Quality education shapes human lives in</p>

accordance with the changing world by providing employable, efficient and suitably transformed skills. The provision of technical and vocational education is a critical part of this process. However, due to many financial, implementation and policy challenges it remained unrealized in Pakistan. In order to uplift image and prestige of TVET education, a drive will be launched to change nomenclature of TVET education to Career Education in line with Canadian system/nomenclature to attract talented youth to TVET sector. It will help to increase enrolment ratio in TVET in Pakistan.

The 11th Five Years Plan of Government of Pakistan put emphasis on quality education, equal opportunities, improved facilities and human development, producing large pool of highly skilled human resources for better employment opportunities in the country and abroad and increased investment in skills development sector. The plan also aims at introducing Skill Education Scheme for provision of integrated formal and vocational education. The plan will lead to increased output at Secondary School level and encourage joining higher level of technical and vocational education.

The specific objective of this project is to offer a unique opportunity to Pakistani youth through the apparatus of Matric-TECH qualification under NAVTTC's developed National Vocational Qualification Framework (NVQF) by integrating Technical & Vocational Education and Training (TVET) into General Education stream which is also covered under the prescribed roadmap of Taskgroup for education and training. Under this pilot project of reforming / upgrading Matric-TECH through implementation of NVQF, youth of Islamabad Capital Territory (ICT), Gilgit-Baltistan, Azad Jammu & Kashmir will be provided with a formally recognized qualification of Matric-TECH with built-in features to equip such youth with technical hands-on skills falling under skill level-IV of NVQF. This qualification and formal TVET certification will enable passed-out youth to either enter the job market after tenth standard on the basis of their skill Level-IV or pursue their academic or professional career in general education Intermediate level Education and Training.

Such passed-out youth will have opportunity to restart technical and vocational education and training at any later stage in life as this qualification and TVET certification will allow them vertical and horizontal mobility into general education or TVET stream under NVQF at any time starting from Level-V to onward. Under this program state of the art labs / workshops in specific technologies / disciplines will be established in general schooling system working in the public domain. Moreover, free Formal Matric-TECH qualification will be provided to enrolled youth

and all the education and training expenses will be borne by NAVTTC for the duration of this project under this project PC-1. The objectives of the project are to:-

- a. Establish state of the art labs / workshops and technological provisions in public schools & colleges of general education of Islamabad Capital Territory (ICT), Azad Jammu & Kashmir & Gilgit-Baltistan as per requirements of skill level-I to IV of NVQF for specific technologies like Construction, mechanical, Electrical Electronics, Textile, Metallurgy, Automobile, Information Technology etc;
- b. Hiring of Project staff, TVET Trainers / Teachers from open market and their capacity building w.r.t. Competency Based Training (CBT), NVQF registry and other requisite standards prescribed as per NVQF
- c. Enrollment of middle pass youth in ninth standard and provision of free formal education of Matric-TECH with blended learning of skill Level-IV as per National Vocational Qualification Framework;
- d. NVQF record registry of enrolled youth;
- e. Adoption of NAVTTC's developed qualifications of underpinned technologies and provision of free Curricula, Teaching Learning Material (TLMs), books etc;
- f. Assessment of general education subjects of enrolled trainees by concerned general education boards;
- g. Assessment of TVET related subjects of enrolled trainees by concerned technical board, education department under the supervision of NAVTTC;
- h. Motivate, advocate and facilitate individuals to acquire marketable vocational skills through Matric-TECH Program;
- i. Improve literacy, completion rate, enrollment rate, Girl's empowerment etc.

Name(s) of Schools / Colleges of ICT (subject to change as per requirement)	Technologies labs to be established (subject to change as per requirement)	Indicative Technologies (subject to change as per requirement)
Islamabad Model College for Boys, Chak Shahzad, Islamabad	02	<ul style="list-style-type: none"> • Automobile tech. • Electrical tech.

Islamabad Model College for Girls, NHC, FA, NIH, Islamabad	02	<ul style="list-style-type: none"> • Fashion Designing Tech. • Information & Communication Tech.
Islamabad Model College for Boys, G/11-2, Islamabad	02	<ul style="list-style-type: none"> • Hospitality • Graphic Designing
Islamabad Model School for girls, I-14, Islamabad	02	<ul style="list-style-type: none"> • Information Communication Tech. • Fashion Designing
Islamabad Model College for Boys-Humak, Islamabad	02	<ul style="list-style-type: none"> • Automobile Tech. • Electronics Tech.
Islamabad Model College for Girls, Bahara Kahu	02	<ul style="list-style-type: none"> • Fashion Designing • Professional Chef
Islamabad Model College for Boys Bahara Kahu	02	<ul style="list-style-type: none"> • Civil Technology • HVACR Technology
Total	14	

The heads of above stated institutes has been taken on board alongwith concerned authorities of Federal Directorate of Education (FDE), Islamabad to establish these labs / workshops. Moreover, 08 Schools / Colleges of general education working in Azad Jammu & Kashmir and Gilgit-Baltistan has also been taken on board and scrutinized for establishing of labs/ workshops. Moreover, following 08 schools / colleges from Azad Jammu & Kashmir and Gilgit-Baltistan Have also been taken on board / scrutinized for establishing these workshops / labs in general education sector with the consent of their higher management

Name(s) of Schools / Colleges of GB, AJK (subject to change as per requirement)	Technologies to be established (subject to change as per requirement)	Indicative Technologies (subject to change as per requirement)
Gilgit-Baltistan (GB)		
Gilgit Girls High School No.01, Gilgit Baltistan	02	<ul style="list-style-type: none"> • Fashion Designing Tech. • Information & Communication Tech.
Skardu Boys Higher Secondary School No.1, Skardu	02	<ul style="list-style-type: none"> • Automobile Tech. • Electrical tech.

Chillas Boys High School, Chillas	02	<ul style="list-style-type: none"> • Tourism & Hotel Management • Automobile Tech.
Girls High School Khaplu district Ghanche	02	<ul style="list-style-type: none"> • Information Communication Tech. • Fashion Designing
Azad Jammu & Kashmir		
Govt. Boys High School Jangian Kotla Mirpur	02	<ul style="list-style-type: none"> • Automobile Tech. • Garments Technology
Govt. Girls High School Ban Khurman Mirpur	02	<ul style="list-style-type: none"> • Fashion Designing • Professional Chef
Govt. Boys High School Dachor Miran Hattian Balla	02	<ul style="list-style-type: none"> • Civil Technology • Electronics Technology
Govt. Girls High School Palandri	02	<ul style="list-style-type: none"> • Hair & Beauty services • Graphic Designing Tech.
Total	16	

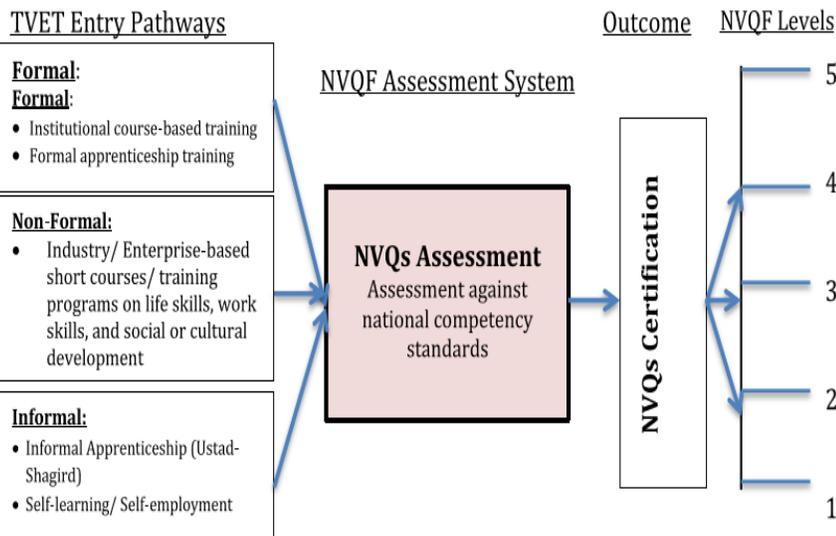
The heads of Schools / colleges and the management of directorates / departments of general education schools / colleges of above tabulated areas have also been taken on board for establishing TVET technologies labs / workshops and introducing Matric-TECH.

The current economic and social condition of the country needs quick reforms in education sector especially in technical and vocational sector. This project is a tool to bring some positive educational and livelihood reforms through skill development ensuring quality delivery. This project has direct link with all the objectives mentioned above and is expected to achieve all.

National Vocational and Technical Training Commission (NAVTTTC) is an apex body and a national regulatory agency that has been set-up to address the challenges of technical and vocational education and training (TVET) in the country. It is involved in policy making, strategy formulation and regulation apart from revamping of the obsolete provisions of TVET system. The Commission is also focused on providing an enabling environment to the disadvantaged segments of society and the socio-economic development of youth belonging to under developed areas of country.

NAVTTTC is making all efforts to produce skilled manpower in the country in shortest possible time by utilizing all ways and means and to commensurate with the needs of various sectors of economy like; Construction, Energy, Industry, Agriculture & Horticulture, Female oriented trades and Services for local and international market. ***The***

		<p><u><i>proposed program is vital, to its own degree of contribution as this project will give a new direction to education and training sector of country by revamping the existing model of Matric-TECH, implementing Pakistan's first ever National Vocational Qualification Framework (NVQF), prepared at par with international standards of skill development and job market and integrate TVT education with general education. In order to uplift image and prestige of TVET education, a drive will be launched to change nomenclature of TVET education to Career Education in line with Canadian system/nomenclature to attract talented youth to TVET sector. It will help to increase enrolment ratio in TVET in Pakistan.</i></u></p>
<ul style="list-style-type: none"> • Specific Objectives of this Project: 		<p>The specific objectives of the project aim at establishing new labs / workshops in public sector schools and colleges of general education stream and ensure the provision of Technical and Vocational Education and Training (TVET) to youth by integrating TVET into General stream Education. This project will also provide an opportunity to pilot NAVTTC's newly developed National Vocational Qualification Framework (NVQF). NVQF contains levels 1 to 8 qualifications with levels 1 to 4 for National Vocation Certificates, Level 5 for Diploma and Level 6 to 8 leading to graduate and post graduate level degree qualifications assuring the upward mobility within TVET sector. NVQs certification for level 1 to 5 falls within the purview of the Qualification Awarding Bodies (QABs) while certification of qualifications for level 6 to 8 falls within the purview of universities. Each level of the qualification is determined by a set of approved Level Descriptors, describing the broad outcomes expected of achievers and the complexity of skills and knowledge at that level. This scheme of vocational qualification is being followed globally and every developed and developing nation has its own National Vocational Qualification Framework (NVQF). Previously, no formally recognized NVQF in Pakistan existed due to which Pakistani skilled workforce either formally or informally skilled were totally directionless having no opportunities for career progression in TVET sector or general education stream. After development of Pakistan's first ever NVQF by NAVTTC in collaboration with all concerned stakeholders and getting its recognition from international assessment & certification agencies, Pakistani skilled workforce will have an opportunities for TVET entry Pathway as portrayed below;</p>



As there is a need to ensure portability and mobility of foreign qualifications in Pakistan and equivalence of our locally development qualifications with that of international NVQs. It will not only create a healthy competitive environment with NVQs but also will contribute towards up-skilling of Pakistan NVQs and acceptance of Pakistani skilled workforce abroad. This project will provide an opportunity to test and pilot NAVTTC's NVQF with prime objective to attain better recognition of Pakistani skilled workforce abroad.

Technical School Certificate (Matric-TECH) being offered by the Boards of Technical Education in the Country is considered equivalent to Secondary School Certificate (SSC) / Matriculation of the General Education Boards / BISEs by the Inter Board Committee of Chairmen (IBCC) and M/o Federal Education and Professional Training, Islamabad. But this scheme has faced gross failure in past due to its non-compliant standards with both formal education and Technical and vocational Education and Training sectors, non-recognition of certification of a Matric-TECH passed-out graduate and non-mobility for academic or career progression of this individual. At present, the world economies has shifted to more advance and versatile approached towards integration of formal / general education system with TVET in accordance with the need of their job market and industry but unfortunately, The existing scheme of Matric-TECH will also be revamped by establishing its equivalency to NVQF Level-IV allowing the vertical and horizontal progression of passed-outs in both streams, allowing re-entry through creating pathways under NVQF. After passing-out the tenth standard, the youth will get a formal qualification of Matric-TECH recognized by Federal Board of Intermediate and Secondary Education (FBISE), Boards of AJK/GB and

other concerned education Boards and departments alongwith **IBCC**. And this Matric-TECH also stands equivalent to **Level-IV** of NAVTTC's National Vocational Qualification Framework (NVQF) and the recognition for this Matric-TECH against level-IV of NVQF will also be registered with IBCC. The committee of Chairmen & Directors Technical Education (CCDTE) in its meeting held on 22nd of March, 2018 and 160th Inter Board Committee of Chairmen (IBCC) meeting held on 17-18 of July, 2018 vide Resolution No.18 has declared **National Vocational Qualification Framework (NVQF) Skill Level-04** equivalent to Matric-TECH (TSC) offered by Technical Board in Pakistan (Notification attached at **Annexure-II**)

In perspective of employment generation and readily ingestion of skilled youth into state economy, the proposed project is specifically for such youth who intends to immediately enter the job market through skill development after tenth class or want to pursue their career in TVET sector by utilizing their acquired hands-on skills in skill-based job market. This project will provide a unique opportunity for integration of formal and vocational education which is included in the skill development section of 11th Five Year Plan.

Under this project free formal and vocational education blended with skills training well-fitted in NAVTTC's NVQF regime will be introduced for socio-economically deprived youth of society paving their quick ways to job market, with reliably traceable footprints of their latest acquired skill level under NVQF allowing their re-entry in education and training stream at any stage of their life. After successful pilot of this Matric-TECH scheme and its implantation across the country, uniform vocational skill standard, curricula and certification regime will be introduced in variety of vocational occupations / trades available with NAVTTC. Pool of the skilled workforce will be enhanced across Pakistan bridging the demand and supply gap of skilled workforce in and outside the country. In addition to above specific objectives, other socio-economic and sectoral objectives to be attained through this project PC-1 are;

- a. Positively engaging the huge youth bulge in Pakistan, by providing them opportunities to channelize their latent energies in the right direction, and in doing so, prevent the indulgence of our youth in anti-social activities.
- b. Blending technical and vocational training with formal education to enhance career choices and employability of Pakistani youth;
- c. Provision of sufficiently skilled workforce for various national projects like CPEC projects and international job market;

		<ul style="list-style-type: none"> d. Creating and enhancing skill development facilities to produce skilled workforce in Construction, Infrastructure and energy production related projects; e. Providing constant streams of highly skilled workforce trained in trades related to international job market, CPEC and other emerging national projects; f. Showcasing best international practices in the TVET sector for the rest of the TVET institutes of the country; g. Providing trainings in demand driven skills of high quality, in line with international standards; h. Establishing linkages with industry, especially the industries catering international job market, CPEC etc., which are offering new opportunities of employment for the youth; i. Bridging the demand and supply gap in the labor market of the country by responding proactively to the opportunities opened up in international job market and local projects related to construction, infrastructure and hospitality; j. Contributing towards such larger national goals as poverty alleviation, reducing deprivations and enhancing socio-economic prosperity through greater youth engagement; k. Providing opportunities to Pakistani youth to acquire relevant, market-oriented and demand driven skills for gainful employment in both national and international markets; l. Contributing towards poverty reduction and socio-economic developments through facilitating demand driven, high quality technical and vocational training as tool for enhanced incomes and livelihood opportunities; m. Expanding the pool of quality skilled workers in the country for increased industrial efficiency and productivity; n. Effectively responding to the expanding demand of local and international job markets for high skilled workers by providing the competent, motivated, entrepreneurial, adaptable, creative and well trained individuals
<ul style="list-style-type: none"> • In case of revised Projects, indicate objectives of the project, if different from original PC-1 		Not Applicable
6.	Description and justification of project:	

- Describe the project / program and indicate existing facilities in the area and justify the establishment of the project / program.

Provide technical parameters and discuss technology aspect of the project / program

This project for integrating Education and Training sectors specifically pertains to Human Resource Development in Pakistan and is formulated in-line with Prime Minister’s vision for technology based knowledge economy uplift through innovative interventions in various sectors of economy as conveyed by Ex-Chairman, Higher Education Commission, (**Prof. Atta-ur-Rehman, Chairperson of Taskforce for Technology based knowledge Economy**). In this context, skill technology transfer through reforming Matric-TECH scheme is expected to generate effective outcomes by integrating general education and Technical and Vocational Education and Training (TVET). In pursuance of this, M/o Federal Education and Professional Training directed NAVTTC to prepare a new project PC-Ito integrate TVET into formal / general education stream by means of implementing NVQF through establishing labs/workshops in public schools & colleges of general education located in ICT, AJK, GB.

As the prime objective of the project is to integrate TVET into formal / general education, which will be attained through establishing labs / workshops in general education schools and colleges of ICT, AJK and GB. This will also lead to revamp the existing model / scheme of Matric-TECH by means of implementing NAVTTC’s developed NVQF (attached at **Annexure-K**). The proposed interventions fall under the jurisdiction of NAVTTC, therefore, M/o Federal Education and Professional Training, Islamabad, directed NAVTTC to work-out a comprehensive plan in shape of instant project PC-1 with target to revamp existing model of Matric-TECH in federal areas by implementing CBT qualifications of TVET developed by NAVTTC, pilot NVQF and integrate general education with TVET. NAVTTC in collaboration with concerned stakeholders of public and private sectors has till to date developed /completed following TVET Qualifications upto Skill **level-V in accordance with NVQF** (More Qualifications are under process which would be included later);

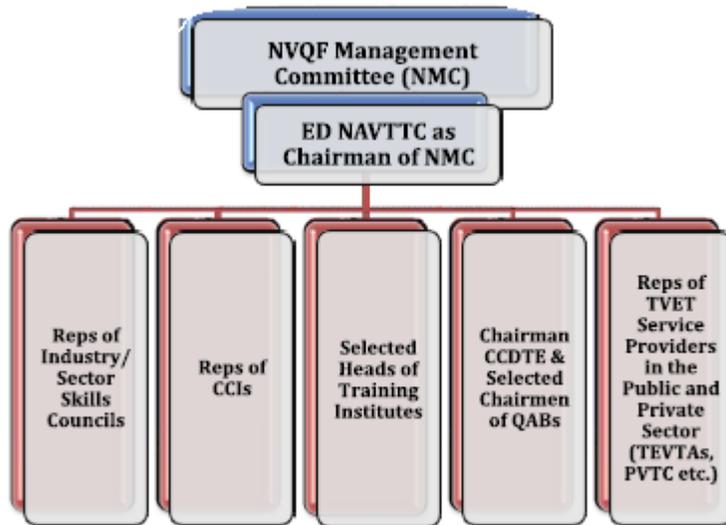
S. National Vocational Qualifications Level-I to V

- 1 National Qualification Level-5 diploma in **Automobile Technology**
- 2 National Qualification Level-5 diploma in **Civil Technology**
- 3 National Qualification Level-5 diploma in **Construction Technology**
- 4 National Qualification Level-5 diploma in **Information & Commutation Techn (ICT)**
- 5 National Qualification Level-5 diploma in **Garment Manufacturing Technolog**
- 6 National Qualification Level-5 diploma in **Electrical Technology**
- 7 National Qualification Level-5 diploma in **Electronics Technology**
- 8 National Qualification Level-5 diploma in **Instrumentation Technology**

- | | | | |
|--|--|---|--|
| | | <p>9 National Qualification Level-5 diploma in Computer Aided Design & Manufacturing (CAD/CAM)</p> <p>10 National Qualification Level-5 diploma in Mechanical Technology</p> <p>11 National Qualification Level-5 diploma in Graphics Designing</p> <p>12 National Qualification Level-5 diploma in Heating, Ventilation, Air-conditioning & Refrigeration (HVACR) Technology</p> <p>13 National Qualification Level-5 diploma in Media Production</p> <p>14 National Qualification Level-5 diploma in Hotel Management</p> <p>15 National Qualification Level-5 diploma in Professional Chef</p> <p>16 National Qualification Level-5 diploma in Tourism Management</p> <p>17 National Qualification Level-5 diploma in Hair & Beauty Services</p> <p>18 National Qualification Level-5 diploma in Fashion Designing</p> <p>19 National Qualification Level-5 diploma in Ceramics Technology</p> <p>20 National Qualification Level-5 diploma in Telecom Technology</p> <p>21 National Qualification Level-5 diploma in Artificial Intelligence</p> <p>22 National Qualification Level-5 diploma in Robotics Technology</p> <p>23 National Qualification Level-5 diploma in Automation & Process Control</p> <p>24 National Qualification Level-5 diploma in Mechatronics Technology</p> <p>25 National Qualification Level-5 diploma in Water Quality & Resource Management</p> <p>26 National Qualification Level-5 diploma in Retail and Merchandize Management</p> <p>27 National Qualification Level-5 diploma in Printing & Publishing Technology</p> | <p>Manufacturing</p> <p>Technology</p> |
|--|--|---|--|

NAVTTTC in light of lessons learnt from previous has prescribed its own financial model for financing of skill development programs for the vocations / trades falling under aforementioned technologies. Skill development training for the vocational & technical trades falling under above tabulated technologies to be introduced in Matric-TECH is provided at **Annexure-i**. Under this project the executing public institutes / schools / colleges will ensure the project based hiring / engagement of technical and non-technical staff. The criteria for selection of such technical and non-technical staff will be prescribed keeping in view NAVTTTC's lessons learnt and the prevailing rules and procedures of partner public school / college / institute. However, the technical staff as Course Instructor possessing minimum of Bachelor level qualification in the relevant technology and with appropriate teaching experience will be considered for implementation of the project. Whereas, in case of non-technical / administrative / managerial staff the project coordinator for each institute will be hired with specified ToRs.

By now, NAVTTC has already prepared aforementioned 27 qualifications by clustering of all requisite competencies of the technologies starting from skill level-I to V and the skill standards, Teaching Learning Materials, Assessment packages has also been prepared. The attached document of NVQF envisages the comprehensive policy of formulating a NV qualification and its implementation. Under the provisions of this approved /notified document the hierarchical Management of NVQF is as under;



The subject PC-1 prepared by NAVTTC envisages the input of all stakeholders for implementation of new Matric-TECH scheme as well as NVQF. This project has been designed for 03 years i.e. **FY2019-20, 2020-21 & 2021-22**, wherein, during 1st year workshops / labs of specific technologies will be established and students will be enrolled after 8th class in class 9th with the start of new academic session. Under the subject PC-I, NAVTTC will enter into partnership with public sector schools / colleges of general / formal education stream from Federally Administered Areas i.e. Islamabad Capital Territory, Azad Jammu & Kashmir and Gilgit-Baltistan for the introduction of Matric-TECH education with implementation of Skill Education of Level-V under NVQF under which 30 set of technologies (02 - 03 labs / workshops for each technology) will be established in most demanded technologies out of aforementioned technologies or any other emerging technology as conceived by NAVTTC. The number of public sector institutes may vary in accordance with number of technologies in each institute. However, tentatively 30 new technological departments with full-fledged labs / workshops are proposed to be established in 15 general education schools and colleges in ICT, AJK, GB. As tabulated below;

S.	Area	Public Institutes to be covered	No. of Technologies to be established
1	Islamabad Capital Territory (ICT)	07	14
2	Azad Jammu & Kashmir	04	8
3	Gilgit Baltistan (GB)	04	8
	Grand Total	15	30

As mention above at least two technologies comprising of two to three laboratories/ workshops each public institution will be established in aforementioned areas. These institutes will be highlighted while execution of the project by the ministry of federal education and professional training in collaboration with FDE and the concerned Authorities / Directorates of the region/area.

The existing model of secondary school education with technical group being offered by Federal Board of Intermediate and Secondary Education Islamabad could not attract the students and institutions due to non-equivalence of qualification, restricted options for horizontal and vertical mobility of students, non-ownership of TVET regime, lack of qualified trainer, latest curriculum, market based quality training and assessment etc. Therefore, this model has been devised addressing all aforementioned issues. This project will be a game changer in the secondary school education scenario of Pakistan which introduces technical group with inclusion of demand driven trades, uniform certification, public private partnership, uniform and latest qualifications developed by NAVTTC viz-a-viz adoption of relevant CBT based curricula of relevant technology. Moreover, the establishment of standardized vocational facility in accordance with the financial provision and uniform assessment of the students in technical and vocational field is another significant feature of this project.

The integrated model of the project has two basic components of integrated education i.e. General education and Vocational education. Under this project NAVTTC has already taken

Federal Board of Intermediate and Secondary Education (FBISE) on board for adoption of qualifications, curriculum, assessment of general subjects and award of Matric-TECH qualification to passed-outs, and for the purpose all the expenditures for assessment and certification will be paid to FBISE under this project. Whereas, the establishment of

workshops, development of assessment tools and certification, development and adoption of skill standards and curricula fall directly under the jurisdiction and domain of NAVTTC etc.

Under this project, the curriculum of Federal and AJK boards will be opted for subjects related to general/ formal education while curriculum of NAVTTC will be implemented for provision TVET. NAVTTC will include the market oriented technologies / technical and vocational occupations and trades for this Matric-TECH qualification, keeping in view the latest demand of market. However Soon the new Curricula will be available program will be shifted to new scheme of studies. The existing scheme of study of FBISE for Secondary School Certificate with technical group will be implemented with some modification in the trade and its level. The scheme of study is placed at **Annexure-K**

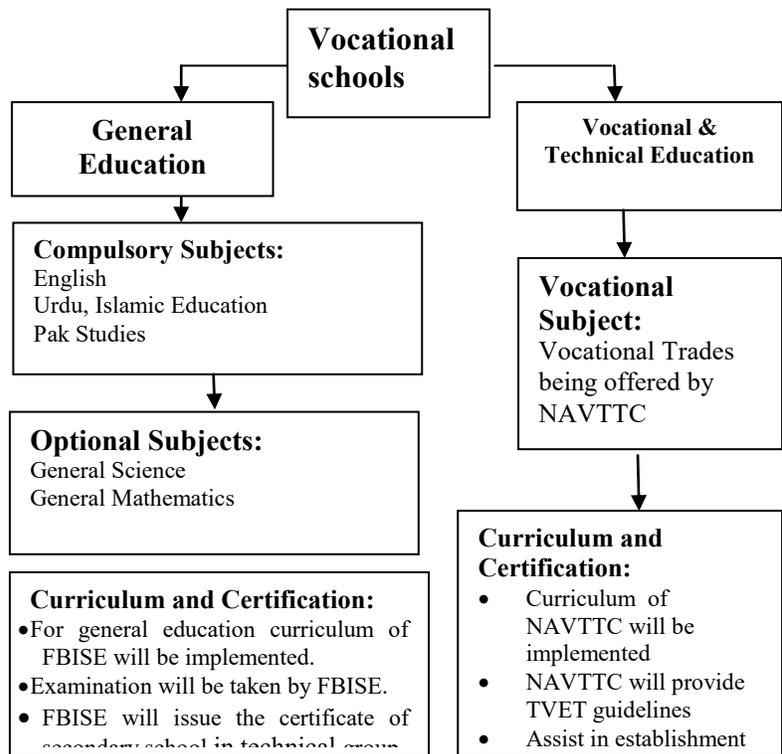
The scheme of study is as under:-

Compulsory subjects

- i. English
- ii. Urdu
- iii. Islamic studies/Ethics for non-Muslims
- iv. Pakistan Studies

Optional Groups subjects

- i. Technical Group
- ii. General Science
- iii. General Mathematics
- iv. TVET subjects



The above scheme of study will be subject to any changes introduced through consultation between NAVTTC and concerned stakeholders. NAVTTC is carrying out consultations with concerned stakeholders i.e. FDE, FBISE, Gilgit-Baltistan and AJK directorates of Education and Boards of Intermediate and Secondary Education (BISE) under the umbrella of M/o Federal Education and Professional Training. Moreover, National Curriculum Council (NCC) and Inter Board Committee of Chairman (IBCC) are also taken onboard for revision of scheme of study and examination. NAVTTC has proposed a new scheme of study (**attached at Annexure-L**), which once approved will be adopted for Matric-TECH/Career Education stream at first in federal territories and later in provinces by the provincial departments as agreed by the provincial agencies while discussion with NAVTTC at various forums. Assessment & Certification under the instant project PC-I will be responsibility of FBISE under the prevailing system / regime, however, NAVTTC will provide its prescribed / developed Skill Standards and Curricula alongwith Assessment patterns for TVET component of Matric-TECH qualification. The expenditures for Assessment and certification will be borne under the relevant head of the instant PC-I.

What is National Vocational Qualification Framework

National Vocational Qualifications Framework (NVQF) is a comprehensive framework of vocational qualifications from skill level-I to VIII which was evolved by NAVTTC in year 2013 with the aim to define skills required for a qualification, determine equivalence across the countries for seeking jobs in global market, provide guidelines for Recognition of Prior Learning (RPL) and assure quality of training. This system was created and adopted in line with practices and reforms in TVET sector of the developed countries. NAVTTC as per defined mandated is making efforts for development of CBT based Qualifications from **Level-I to Level-V**. Level-I is for beginners, whereas, level-V is equivalent to Intermediate level or Diploma level of Associate Engineering program level. NAVTTC's developed qualifications are also available on http://www.npess.pk/nvqf/view_qualifications.php.

The purpose of NVQF and CBT qualifications are;

- Vertical & Horizontal Progression for Learners / enrolled youth;
- National & International recognition of TVET qualification
- Facilitate Conversion of Informal Training to Formal Training - RPL
- Improvement in Quality of Training

		<ul style="list-style-type: none"> • Increased options for learners for selecting training programs • Vertical & horizontal progression for passed-outs • Facilitate conversion of informal training to formal training through Recognition of Prior Learning (RPL) • Improvement in quality of training alongwith determination of equivalency of acquired skills with that of general education stream • Increased options for learners for selecting training programs • Liberty to re-enter into skill development / TVET stream at any age of life <p>NVQF has been evolved in consultation with stakeholders including academia, researchers, policy makers industry & chambers and TEVTAs. The Framework is aimed at improving the quality of vocational training and to provide vertical and horizontal progression to trainees in the vocational stream and the procedure for which is as mentioned below;</p> <ol style="list-style-type: none"> i) Classify skills, knowledge, understanding and competences a person must have in order to perform a job from the basic level to the highest level ii) Identify pathways in a vertical sense between the different levels and in a horizontal sense for knowing the equivalence of qualifications achieved in different training and education streams iii) Identify a range of appropriate levels of qualifications iv) Describe in a generic manner the different levels: what a graduate must know and can do <p><u>Main features of NVQF</u></p> <ul style="list-style-type: none"> • Level descriptors determining knowledge, skills & competency outcomes • Rules on Horizontal and Vertical Progression (HVP) • Rules on Credit Accumulation and Transfer (CAT) • Rules on Recognition of Prior Learning (RPL) <ul style="list-style-type: none"> • Level 1 – Semi Skilled • Level 2 – Skilled • Level 3 – Highly Skilled • Level 4 – Professional Worker • Level 5 – Specialist Worker
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CPEC, International Job Market and NVQF

Pakistani TVET qualifications lack international recognition due to non-equivalence, which is compromising the prospects of employment of skilled workers, not only in international job market but also in domestic market where many of the local employers look for skills of international standards (particularly in the projects under CPEC framework). A number of Pakistani TVET institutes have been identified/accredited by NAVTTC which are delivering training in accordance with international standards but their degrees/qualifications are not internationally recognized as neither fulfill the skill requirements of international job market nor fall equivalent to any international qualification framework. Now, Pakistan's first ever Qualification Framework devised NAVTTC and other stakeholders will provide this opportunity to get Pakistani skilled workforce recognized globally.

The emergence of CPEC and transit of Asia Pacific trade through Gwadar port has also provided the central government with an opportunity to set their paths towards economic development. But the significant portion of requisite potential can only be contributed through locally available competent and well prepared workforce, matching international standards of job market. National Vocational & Technical Training Commission (NAVTTC) well cognizant of this fact is making all its efforts to expand the pool of skilled workforce in country by utilizing all ways & means and available resources. This will also enable us to promptly respond to emerging job opportunities in the national (with focus on CPEC projects) as international market, particularly in relation to the countries like Japan Germany and Canada which, faced with ageing populations, are increasingly looking at import of skilled force. Apart from aforementioned hardcore sector CPEC is expected to generate enormous employment and self-employment opportunities in SMEs, Business & digital Entrepreneurship, E-Commerce, Media & Film Industry, Hospitality Services, Optical fibers, BTS technicians. CPEC route running through the country is likely to promote geographic Tourism (Eco Tourism, Cultural Tourism, Desert Tourism, Agriculture Tourism & Coastal Tourism, Banking & Accounting sector, Property & Real Estate business). Implementation of high-tech seed & harvesting technologies to upgrade Agriculture and food value chain at advanced pattern as being practiced worldwide. Modern technologies for automation and enhancing industrial productivity like, artificial intelligence, robotics, Mechatronics etc. Modern techniques and skills in the hospitality and services sector and trades like restaurant

management, front desk operators, professional chefs etc. So, by integrating TVET into formal education, the desired outcome of skilled workforce for high-tech / high-end sector can be achieved. The sectors and trades highlighted by the various concerned stakeholders to be included for CPEC and the projects under CPEC framework are;

Sector-I : Construction Sector

- i. Advance Diploma in Land Resource Survey & GIS
- ii. Aluminum Fabricator & Steel Fixer
- iii. Carpenter (Woodwork & Handicraft)
- iv. Civil Drafting with AutoCAD
- v. Civil Surveyor/Quantity surveyor
- vi. Fitter
- vii. Mason / Tile fixer
- viii. Plumber / Pipe Fitter
- ix. Scaffolder
- x. Shuttering Carpenter
- xi. Welder (TIG, SMAW, MIG, SAW)
- xii. Health & Safety Manager
- xiii. Material Testing Operator
- xiv. Motor Winder & Extruder
- xv. Optical Fiber Technician / Cable Jointer
- xvi. Programmable Logical Control (PLC)
- xvii. Auto Electrician
- xviii. Auto Mobile Mechanic (Diesel / Petrol)
- xix. CNC Machinist
- xx. Denter & Painter
- xxi. Electrician (General, Domestic, Industrial)
- xxii. Electronic Technician
- xxiii. Fire Fighter
- xxiv. Heating Ventilation, Refrigeration & Air Conditioning
- xxv. HTV Driver / Operator (including Bulldozer, Loader, Crane, Dozzer, Excavator etc)
- xxvi. Lift Operator
- xxvii. LTV Driver (Car, Jeep, etc)
- xxviii. Plumber cum Solar Water Heater Installation
- xxix. Solar, Wind & UPS System Assembly
- xxx. Security Guard

Sector-II: Hotel Management & Tourism

- i. Bakery & Pastry
- ii. Basic House Keeping
- iii. Cooking & Baking
- iv. Professional Cook/Chef
- v. Domestic Skilled Worker (DSW)
- vi. Front Office / Receptionist / Restaurant Manager
- vii. Tour Operator

NAVTTTC under its previously completed qualifications has harnessed the requisite competency skills of aforementioned trades / vocations.

Whereas, the left-over vocations are also being catered in the new qualification being prepared under NAVTTC's NVQF.

M & E Indicators

NAVTTC has prescribed a comprehensive Standard Operating Procedures (SoPs) for Monitoring and Evaluation for its funded skilled development programs, which are based on following three tools, by virtue of which feedback(s) from visiting Monitoring Officers, Course Instructors and the Enrolled Trainees are acquired and is utilized as yardstick for corrective actions and further corroborations to attain the desired objectives of the project. The tools along with the prescribed criteria of evaluation/indicators and the benchmarks are tabulated as below;

Level of Indicator	Frequency of Reporting	Mode of Data Collection
Input	3-4 M&E on-site visits of school / college per month	Primary data based on 3 M&E tools (as below)
Output	1500 Matric-Tech qualified and skilled youth of NAVTTC's NVQF skill level-4	Result gazettes of Boards and NAVTTC's Assessment / certification data
Outcome	1500 individuals qualified with blended education and training contents, capable of both the streams	Tracer study, telephonic surveys etc.
Impact	A new blended regime of general education and TVET alongwith vertical and horizontal progression for passed-outs	Socio-economic impact evaluation based on Household survey assessed through tracer studies

Monitoring Tools based on NAVTTC's prescribed Monitoring & Evaluation Regime:

S#	Tools based on Input from	Criteria of Evaluation	Benchmark
1	Monitoring Officer	<ul style="list-style-type: none"> - Previous record of an institute in terms of passed-out graduates / Success ratio based on past results from the published gazette etc. - Completion of past projects - detail of industrial linkages as per trades - On the job trainings mechanism -Satisfactory library facility available -Satisfactory implementation of time table -Implementation of safety & health precautions -satisfaction from the atmosphere of the class room -Satisfactory visits for field work -Satisfy from the knowledge and skills of instructor -Satisfy from the level of knowledge and skills provided -Satisfactory Teaching 	<ul style="list-style-type: none"> - A reputed public school / college highlighted by M/o FE&PT - Satisfactory record of an institute in terms of passed-out graduates / Success ratio based on past results from the published gazette etc. - Satisfactory Completion of past projects - detail of industrial linkages as per trades - On the job trainings mechanism -Satisfactory library facility available -Satisfactory implementation of time table - appropriate arrangement of safety & health precautions -conducive atmosphere of the class room -sufficient visits for field work -well qualified and experienced project staff -satisfactory provision of Teaching Learning Material/ Teaching

		Learning Material/ Teaching Learning References provided -satisfactory hygiene conditions taken care off	Learning References -satisfactory hygiene conditions taken care off
2	Course Instructor/ Visiting Faculty	- implementation of skills standard curriculum & qualification packages - provision of training material to the trainees - utilization of overheads - utilization of consumables - time allocation to classroom study - time allocation to practical work -student profiles / assessment record	- NAVTTC's prescribed qualification packages & skills standard curriculum - adequate provision of training material to the trainees - appropriate utilization of overheads - appropriate utilization of consumables - time allocation to classroom study / practical work in accordance with NAVTTC's prescribed credit hours for TVET subjects
3	Enrolled Trainees	- implementation of NAVTTC qualification packages & skills standard curriculum -implementation of attendance procedures -provision of training material - utilization of overheads	-Satisfactory implementation of NAVTTC qualification packages & skills standard curriculum -satisfactory implementation of attendance procedures -satisfactory provision of training material -Appropriate utilization of overheads

In addition to NAVTTC HQs in Islamabad Capital territory, NAVTTC has a Regional Office in ICT region alongwith sub-regional office in Gilgit- Baltistan headed by a Director General. Monitoring visits are conducted by NAVTTC visiting Officers deputed in Head-quarters and Regional Offices.

Success Indicators of the project

The success of the program is monitored and evaluated through monitoring visits. Below is the table representing the four success tool including fortnightly, quarterly, mid-success, and on program completion with their respective criteria;

S.	Goals / Targets	Criteria
1	Monthly Evaluation	After successful interview process every class should get; -an enrollment of 25-30 trainees in each class -two sections against each technology and two technologies institute -an overall enrolment of 1500 trainees under the project -Trainees equipped with sufficient training material -Training of trainees as per skill standard and curricula -Overheads are satisfactorily fulfilling needs of trainees -minimum 30 percent female enrollment -attendance register is maintained

2	Quarterly	<ul style="list-style-type: none"> -retention of 25-30 trainees in each class -Trainees equipped with sufficient training material -Training of trainees as per skill standard and curricula -Overheads are satisfactorily fulfilling needs of trainees -Minimum 30 percent female enrollment -Attendance register is maintained -First Assessment has been conducted -At least 25 percent of course content covered -Retention rate of 95 percent of trainees
3	Mid Success	<ul style="list-style-type: none"> -retention of 25-30 trainees in each class -Trainees equipped with sufficient training material -Training of trainees as per skill standard and curricula -Overheads are satisfactorily fulfilling needs of trainees -minimum 30 percent female enrollment -attendance register is maintained -First Assessment conducted -at least 50 percent course content completed -Retention rate of 95 percent of trainees
4	Program Completion	<ul style="list-style-type: none"> -Success ratio of at least 95 percent of enrolled trainees through Board's assessment and certification -Satisfactorily skilled workforce falling in NAVTTC-NVQF skill of appropriate level -International competitive skill level of pass-out graduates for better acceptability.

After the passage of 06 months of Matric-Tech program of passed out trainees, the tracer study of the skilled youth will be carried-out and the success of the programme will be determined on the basis of ensuring maximum employment and self-employment of youth.

Distribution Plan

S#	Region	Targeted Schools / Colleges	Target enrollment of Youth
1.	ICT	07	700
2.	Gilgit-Baltistan	04	400
3.	Azad Jammu & Kashmir	04	400
	G.TOTAL	15	1500

Justification for NAVTTC's Intervention:

National Vocational & Technical Training Commission under its **NAVTTC-Act 2011** has the mandate to:-

“Prepare National plans, programs and projects in coordination with stakeholders for the expansion of Technical Education & Vocational Training infrastructure in the country.”

&

Suggest innovative programs for promotion of technical education and vocational training among females, challenged and neglected sections of society”.

Accordingly, under this project, NAVTTC intends to establish labs /

		<p>workshops in public institutes of general education located in ICT, GB& AJK and introduce Technical education and Vocational Training (TVET) in these institutes, in the line of directions by the constituted task force by the prime Minister for technology based knowledge economy.</p> <p>Exit Strategy of the Project:</p> <p>After the completion of this project, the established facilities i.e. labs, workshops in general schooling system of public sector will be handed over to the concerned education directorates / authorities. These general education directorates / authorities will ensure the sustainability of operational activities and maintenance of the facilities by means of arranging recurring, development & non-development budgets through administrative channels. M/o Federal Education & Professional Training and NAVTTC, after completion of the project, will incorporate the recommendations for recurring, development & non-development budgets in PC-IV and transmit to the concerned regional authority and quarters concerned. Moreover, the project employment tenure of project staff will expire on the completion of project and the concerned Authorities / departments will engage the requisite technical and non-technical human resource either through new recruitment or by continuing their services, how so ever the laid procedures allows a concerned department</p>
	<p>Provide details of civil works, equipment, machinery and other physical facilities required for the project.</p>	<p>Civil work in shape of infra-structure modifications / up-gradations will be required while establishing / upgrading labs / workshops in Institutes of formal education. For establishing technical training facilities and provisions, the selected Schools / colleges will be expected to provide building space for establishing workshops and laboratories. Primarily, under this project public sector formal education institutes will be shortlisted, wherein, set of labs / workshops for 01 to 04 technologies in each institute will be established. 30 sets of technologies (02 - 04 labs / workshops for each technology) will be established in most demanded technologies. Accordingly, the number of public sector institutes may vary in accordance with number of technologies in each institute. For an instance labs to be established for Electrical, Electronic, Mechanical, Information Technology, Mechatronics, Textile Technology, Hotel Management & Food Technology in a school / college will be but not restricted to; Welding, Plumbing, Electrician, Auto Mechanic, Dress Making, Chef / Cooking, Computers, Solar / Ups, Ref & Air Conditioning, LTV/ HTV Driving, Electronic Lab, Beautician lab, Carpenter / Wood working, Plastic fiber furniture, Mobile Phone repairing, Food Technology labs, Textile Designing & Industrial Stitching labs etc.</p> <p>The trade-wise itemized details of equipment / machinery will be worked out after final scrutiny of trades by Assessment Committee of NAVTTC for establishment / upgradation of labs / workshops. However, costs will be finalized after acquiring the technical and financial bids for procurement o equipment, machinery by following the formal procedure prescribed under PPRA. At present the cost estimation is carried-out on the basis of Market surveys, lessons learnt (works carried-out in previous programs)</p>

		<p>and also acquired after comprehensive exercise. Whereas, for Skill Development projects, NAVTTC has prescribed its detailed financial Standard Operating Procedure containing all the technical details and various heads of expenditures through the lessons learnt in previous skill development programs</p>
	<p>Indicate governance issues of the sector relevant to the project and strategy to resolve them.</p>	<p>TVET sector issues contain low productivity, low skills, low enrollments, teacher shortage, quality of vocational training programs, lack of modern training equipment etc. These issues constrain the development of technically competent workforce in the country. It is generally felt that the existing TVET system has not been able to cater to the challenges posed by the new work environment and is unable to meet the modern TVET requirements of industry. This has resulted in skill shortage. Whereas, in this sector, NAVTTC intends to implement National Vocational Qualification Framework (NVQF), internationally set CBT based training standards (Skill Standards & Curricula, Teaching Learning Materials (TLMs), Teaching Learning References (TLRs), Competency Standards, Tutorials etc.) to bridge up the technological gap of industry.</p> <p>Whereas, in formal education sector, low recognition of Matric-TECH is the biggest issue. Federal Board of Intermediate and Secondary Education (FBISE) have been offering Matric with technical group but due to lack of technical education awareness and facilities only few students opt the stream. This project will be a tool for advocacy of technical and vocational education by encouraging private sector to invest in and creating facilities to make easy access to the students. Success stories of other developing countries like Philippines, Sri-Lanka, Bangladesh depict high investment towards integrating formal education and skills development sector and unfortunately Pakistan is lagging behind in this field therefore it is of great concern for the organizations working for education and TVET sector in country to come on same page to extract the best outcome in shape of skilled and educated youth.</p> <p>More than 120 million or 60% of Pakistan's rapidly growing population of 207.77 million is below the age of 35 years. If this demographic dividend is harnessed and skilled to meet domestic and international market requirements, the youth bulge would yield increased industrial productivity and higher foreign remittances. If left unskilled and not economically engaged, many of them may succumb to anti-social overtures with disastrous eventualities, in addition to being engulfed by poverty and deprivation.</p> <p>Technical and Vocational Education and Training (TVET) offers the shortest and swiftest path to productive youth engagement. Unfortunately, TVET sector in Pakistan suffers from chronic systemic ailments including limited training capacity, outdated workshops and laboratories, obsolete training equipment, archaic teaching methods and antiquated curricula and, therefore, is grossly incapacitated to meet the skill training needs of domestic and international markets, in terms of both quantity and quality. The sector has never been accorded due priority in Pakistan and therefore has attracted inadequate investment from both the public and private sectors. TVET sector in Pakistan suffers from abysmally low investment. Years of neglect has left the sector in dire</p>

		<p>need of urgent and immediate investment for the two-fold requirements of enhancing the capacity and quality of TVET system in Pakistan. There are an estimated 1.8 million new labour market entrants each year from the formal schooling system. Add to that an approximately 4.4 million youth who are not captured in the formal schooling, but nevertheless need to be trained if the nation is to fully exploit the demographic dividend. Therefore, additional skills development capacity for 5 million trainees is immediately required even if we exclude youth entering into other avenues of tertiary education. To cater for this youth bulge there are only an estimated 437,000 training places available in 3,740 training institutes with 18207 trained teachers in the formal TVET sector. If the entire cohort of 5 million youth were to be provided skills training based on present methodology, it would require at least 45,000 further training institutes and 200,000 more TVET teachers to be inducted into the system.</p> <p>To find a way out of the above conundrum, the government constituted a Task Force, "Skills for All" to analyze the prevailing situation and give recommendations for the development of TVET sector in Pakistan as the most potent instrument of enhancing youth employability and maximizing national productivity through higher industrial productivity and increased foreign remittances.</p> <p>This PC-1 provides an opportunity towards implementation framework for the recommendations of the Task Force, which will serve as a catalyst for kicking off the transformation of TVET system in the country by integrating both general / formal education and TVET. The scale of intervention required enabling the TVET sector of Pakistan to meet the requirements of its industry and huge youth population is much higher than the size of the projects included in the PC-1. However, it is expected that with the initiation of this projects, the long overdue process TVET sector reforms and transformation will initiate which increasingly attract other stakeholders- the provincial governments, industry and private sector, and the donors- to contribute their parts in bringing Pakistani TVET sector at par with international standards.</p>									
In Addition to Above, The Following Sector Specific Information be Provided											
	Give student-teacher ratio for the project / program and the national average for the proposed level of education	Keeping in view the available facilities, the average/proposed Teacher-Student Ratio for the program is 1:25 including lab work. This ratio may vary, depending on the capacity of the institute and from trade to trade. It would not be out of place to mention that national average in respect of TVET is 1:17 (<i>Source: NAVTTC census 2014-15</i>).									
	Year-wise proposed enrolment of the institution for 5 years.	<p>The estimated enrollment under Matric-TECH/Career Education programs and other NVQF skill levels for 05 years is tabulated as;</p> <table border="1" data-bbox="545 1629 1490 1917"> <thead> <tr> <th data-bbox="545 1629 621 1707">Sr</th> <th data-bbox="621 1629 1203 1707">Particulars</th> <th data-bbox="1203 1629 1490 1707">Est. Capacity of 01 Technology in 01 Institution</th> </tr> </thead> <tbody> <tr> <td data-bbox="545 1707 621 1818">1</td> <td data-bbox="621 1707 1203 1818">Enrollment in Matric-TECH/Career Education Program each institute (02-03 sections of 25-30 student each)</td> <td data-bbox="1203 1707 1490 1818">50</td> </tr> <tr> <td data-bbox="545 1818 621 1917">2</td> <td data-bbox="621 1818 1203 1917">Estimated enrollment in 30 technologies against 02-03 sections in each institute (50 students each technology)</td> <td data-bbox="1203 1818 1490 1917">1500</td> </tr> </tbody> </table>	Sr	Particulars	Est. Capacity of 01 Technology in 01 Institution	1	Enrollment in Matric-TECH/Career Education Program each institute (02-03 sections of 25-30 student each)	50	2	Estimated enrollment in 30 technologies against 02-03 sections in each institute (50 students each technology)	1500
Sr	Particulars	Est. Capacity of 01 Technology in 01 Institution									
1	Enrollment in Matric-TECH/Career Education Program each institute (02-03 sections of 25-30 student each)	50									
2	Estimated enrollment in 30 technologies against 02-03 sections in each institute (50 students each technology)	1500									

		In addition to regular Matric-TECH/Career Education programs only, the established facilities will also be utilized for skill development training of various levels under NVQF and assessment centers for Recognition of Prior Learning (RPL) Programs of NVQF by virtue of which the proposed enrollment capacity of 30 technologies may reach upto 2,000 in 02 years of this project.												
For scholarship projects, indicate the no of scholarships to be awarded each year along with selection criteria.		No such direct scholarships will be provided to the enrolled youth, however, education and training expenses/cost of consumables during implementation of this project will be borne by NAVTTC under the heads of this project. The selection of this youth will be carried-out on the basis of NAVTTC's criteria prescribed on the basis of evaluating the socio-economic condition of individuals. This criteria has been implemented in NAVTTC's regular skill development programs and envisage built-in features to underpin disadvantaged segments of society.												
Provide faculty strength in relevant discipline, in case of expansion of facilities.		No regular post will be created for this project. However, technical / non-technical, instructional / non-instructional staff will be hired on contract and visiting faculty will be engaged remuneration basis occasionally as per requirement of the trade/field from open market by the partner public sector schools / colleges and for the purpose and NAVTTC will assist the partner institutes to select and arrange the technical / non-technical staff for execution of this project.												
Provide details of support staff for operation of the program		NAVTTC will directly execute the program in ICT, GB, AJK through its HQs and Regional Office in Islamabad and sub-regional office in Gilgit-Baltistan.												
Indicate the extent of library and laboratory facilities available in case of secondary, college and university education.		Not Applicable												
Provide details of technical staff required for operation & maintenance of laboratories.		No regular post will be created for operation & maintenance of laboratories, however, technical / non-technical, instructional/ visiting faculty will be engaged remuneration basis occasionally as per requirement of the trade/field / non-instructional staff hired on contract basis or remuneration basis from open market will be responsible for the operations and maintenance of newly established labs / workshops.												
Course Outlines.		<p>NAVTTC, NTB, PVTC/schemes of studies approved by National/provincial curriculum bodies (NCC) and TEVTA's notified CBT curricula and the developed qualifications under NAVTTC's NVQF regime shall be adopted for the targeted technologies / trades /occupations / courses. NAVTTC is already working on preparing the qualifications of TVET regime and has developed numerous qualifications from Skill Level-01 to 05 under its NVQF. These qualifications are;</p> <table border="1"> <thead> <tr> <th>S#</th> <th>National Vocational Qualifications</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>National Qualification Level-5 diploma in Automobile Technology</td> </tr> <tr> <td>2.</td> <td>National Qualification Level-5 diploma in Civil Technology</td> </tr> <tr> <td>3.</td> <td>National Qualification Level-5 diploma in Construction Technology</td> </tr> <tr> <td>4.</td> <td>National Qualification Level-5 diploma in Information & Commutation Technology (ICT)</td> </tr> <tr> <td>5.</td> <td>National Qualification Level-5 diploma in Garment Manufacturing Technology</td> </tr> </tbody> </table>	S#	National Vocational Qualifications	1.	National Qualification Level-5 diploma in Automobile Technology	2.	National Qualification Level-5 diploma in Civil Technology	3.	National Qualification Level-5 diploma in Construction Technology	4.	National Qualification Level-5 diploma in Information & Commutation Technology (ICT)	5.	National Qualification Level-5 diploma in Garment Manufacturing Technology
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3.	National Qualification Level-5 diploma in Construction Technology													
4.	National Qualification Level-5 diploma in Information & Commutation Technology (ICT)													
5.	National Qualification Level-5 diploma in Garment Manufacturing Technology													

6.	National Qualification Level-5 diploma in Electrical Technology	
7.	National Qualification Level-5 diploma in Electronics Technology	
8.	National Qualification Level-5 diploma in Instrumentation Technology	
9.	National Qualification Level-5 diploma in Computer Aided Design & Manufacturing (CAD /CAM)	
10.	National Qualification Level-5 diploma in Mechanical Technology	
11.	National Qualification Level-5 diploma in Graphics Designing	
12.	National Qualification Level-5 diploma in Heating, Ventilation, Air-conditioning & Refrigeration (HVACR) Technology	
13.	National Qualification Level-5 diploma in Media Production	
14.	National Qualification Level-5 diploma in Hotel Management	
15.	National Qualification Level-5 diploma in Professional Chef	
16.	National Qualification Level-5 diploma in Tourism Management	
17.	National Qualification Level-5 diploma in Hair & Beauty Services	
18.	National Qualification Level-5 diploma in Fashion Designing	
19.	National Qualification Level-5 diploma in Ceramics Technology	
20.	National Qualification Level-5 diploma in Telecom Technology	
21.	National Vocational Certificate level (2-4) Fan Manufacturing	
22.	National Vocational Certificate Level (2-4) Surgical Instrument Manufacturing Technician	
23.	National Vocational Certificate Level (1-4) Leather Products Development Technician	
24.	National Vocational Certificate level (2-4) Leather Processing Technologist	
25.	National Vocational Certificate Level (1-4) Furniture Technician	
26.	National Vocational Certificate level (1-4) Construction Sector	
27.	National Vocational Certificate level (2-4) Light Engineering Sector	
28.	National Vocational Certificate level (2-4) Plastic Processor	
29.	National Vocational Certificate Level (1-4) Pharmaceutical Manufacturing	
30.	National Vocational Certificate level (1-4) Artificial Intelligence Data Technician	
31.	National Vocational Certificate level (2-4) Automotive Mechatronics	
32.	National Vocational Certificate level (2-4) Dies & Mold Maker	
33.	National Vocational Certificate Level (1-4) Helper in Food Processing and Packaging	
34.	National Vocational Certificate Level (1-4) Generator Operator	
35.	National Vocational Certificate Level (1-4) Industrial Merchandiser	
36.	National Vocational Certificate Level (2-4) Android Application Developer	
37.	National Vocational Certificate level (1-4) Electronics Sector Mobile Phone Technician	
38.	National Vocational Certificate level (3-4) Automotive parts production machine operator	
39.	National Vocational Certificate Level (1-4) Robotics Technician	
40.	National Vocational Certificate level (1-4) Electronics Sector Satellite Dish Installer	
41.	National Vocational Certificate level (2-3) Textile Sector Textile Wet Processing	
42.	National Vocational Certificate level (1-4) Electrical Sector Electrical Machine Winding Technician	

Qualification of High-End and High-TECH Technologies

S#	National Vocational Qualifications
43.	National Qualification Level-5 diploma in Artificial Intelligence

		44. National Qualification Level-5 diploma in Robotics Technology
		45. National Qualification Level-5 diploma in Automation & Process Control
		46. National Qualification Level-5 diploma in Mechatronics Technology
		47. National Qualification Level-5 diploma in Water Quality & Resource Management
		48. National Qualification Level-5 diploma in Retail and Merchandize Management
		49. National Qualification Level-5 diploma in Printing & Publishing Technology
	Accounting Procedure.	As per Standard Operating Procedure (SoPs) devised by NAVTTC. Disbursement of funds to the Institutes will be made through NBP bank Accounts as prescribed by Finance Division. All the Institutes/schools and Trainees will operate their Account in NBP branches most preferably in their nearby vicinities. All the expenditure will be carried out prior approval of the respective DGs of the NAVTTC on the recommendation of Headmaster/principal of the schools/institutes. However accounts would be maintained by the respective schools and principals/headmasters.
	Whether the cost of Certificates of Accreditation/affiliation status has been incorporated in PC-I?	Not Applicable
	Has the Employability opportunity of the proposed trades been specified in the PC-I with respect to location and relevant industries, where ever the demand is?	NVTTC has shortlisted the proposed disciplines / technologies / courses / trades keeping in view geographical market demands. To acquire the local skill demands NAVTTC contact all its stakeholders like Provincial TEVTAs, SMEDA, National Training Bureau (NTB), Provincial Industries & Labor departments, Business Community /forums, commercial Welfare Attaches through M/o Overseas Pakistanis and HRD, M/o Planning Development & Reforms Division and other relevant Federal Ministries and Divisions.
	Has the tracer study of already employed of already trained persons in the proposed trades been carried out if so, the same may be carried out in PC-I?	The tracer study or Impact Analysis is a regular feature of any skill development program. NAVTTC has previously outsourced tracer studies of Prime Minister's Youth Skill Development Programs (PMYSDP) to third party evaluation firms on the direction of Prime Minister's Office, which portrays satisfactory outcomes in terms of socio-economic empowerment of society. A consolidated socio-economic impact analysis will be presented to relevant forums as prepared for this project also after completion of the project. Highlights of Impact Evaluation Reports of previous programs: The impact evaluation reports of the previous NAVTTC's skill development program revealed that NAVTTC followed comprehensive institutional assessment criteria to select training institutes (<i>Impact Evaluation Report, Phase-III: COMSATS institute, 2018</i>). The trainees' selection was jointly done by NAVTTC and the training institutes where

		<p>the focus was to select the most deserving and suitable candidates. NAVTTC regional offices also made active effort to engage women and youth from marginalized groups. Almost 30% of the trainees enrolled in all phases of programs were females. Women participation in the trainings wasn't only limited to the traditional trades but females were also given due priority for enrollment in Business & IT, Hospitality, Hotel Management & Tourisms. In relation to the training venues and other facilities, some 90% of the respondents considered that these were adequate. Further, 89% of the respondents either agreed or strongly agreed that the training was as per their needs. From the perspective of impact on employment, based on the survey findings, 59% of the PMYSDP trainees enrolled under PMYSDP (Phase-III) were employed. Of the 59% of respondents who were employed, 54% had salaried employment, 41% were self-employed, and 5% had other types of employment such as working with family or friends (Impact Evaluation Report, Phase-III: COMSATS institute).</p>
Has the details of syllabi/ Curricula been undertaken of each proposed trades and incorporated in PC-I?	<p>Courses for the subject program will be launched keeping in view the latest sectoral and demographic demands of following sectors;</p> <ol style="list-style-type: none"> i. Construction ii. Energy & Renewable energy iii. Textile Sector including garments technology iv. Agriculture, Horticulture, Livestock, Dairy, Poultry & Fisheries v. Manufacturing (Small, Medium & large Industry) vi. Domestic Services vii. Hospitality, Tourism& Hotel Management viii. Transportation& Logistics ix. Business & Information Technology Skills x. Fashion Designing / Stitching xi. Beautician xii. Creative Arts xiii. Electronic & Print Media xiv. Regional / Traditional Trades <p>As mentioned above, NAVTTC has already prepared competency based qualifications falling under NAVTTC's NVQF criteria (skill level 1-5) for 27 technologies comprising of numerous occupations. These qualifications are also available on its website.</p>	
Do you recommend further demand driven training cadres in the PC-I for future Training	Not Applicable	
On job training/apprenticeship provision for the program	On job Training will be imparted in relevant trades during specific vocations as suggested by the industry.	
7. Capital Cost Estimates		
Indicate date of estimation of Project cost.	<p style="text-align: center;">01/11/2019</p> <p>Public schools / colleges for this project will be shortlisted / selected on the basis of their technical competency to provide space / infra-structure for establishing labs / workshops to impart skill development training to youth as per requirements of NVQF and Matric-TECH in addition to teaching general / formal education subjects. For the purpose the</p>	

concerned formal Education Authority like FDE and M/o Federal Education and Professional Training, Islamabad will be approached to shortlist the institutes. After establishing the labs/ workshops by NAVTTC following the formal procedure of PPRA, Training Cost {comprising of cost heads i.e. Instructional staff, Non-instructional Staff, Pay of Lab Attendant, Overheads, Consumables, Signboards and related costs etc.} will be provided to partner schools, colleges directly by NAVTTC. Training cost will directly be released to the Institutes / Industry (Public & Private) as per prescribed procedure by M/o Finance. The above portion shall also be depicted in the MoU to be signed with Executing Agencies / Institutes. All Executing Agencies will ensure proper management of the whole training program conducted in institutes under their jurisdictions and NAVTTC will overlook and monitor the performance of schools / colleges. So, the estimated capital cost of the project is;

Local Cost	Rs. 315.0 Million
Foreign Exchange Cost	Nil
Total Cost	Rs. 315.0 Million

Further, NAVTTC will conduct centralized final assessment of the enrolled trainees after completion of training program. The services of members of Chambers of Commerce, representatives from the local industry in addition to the subject experts will be taken for the final assessment / evaluation. The Assessors will be provided Travelling & Daily Allowance and Lodging charges as per provision of Govt. of Pakistan equivalent to BPS-17-18 (not for local Assessors). The Assessors will be paid remuneration @ Rs 3,000 to 8,000 in purview of seniority / qualification level as recommended by Director General, Regional Office and approved by ED / Principle Accounting Officer, NAVTTC. The funds will be released by Govt. of Pakistan, Finance Division as a special arrangement out of PSDP.

Rs (Million)

Major Items	Financial details / Unit Cost Rs.	2019-20	2020-21	2021-22	Total cost for 03 F.Y (s)
Cost of establishing labs / workshops in 30 technologies of public sector schools / colleges of ICT / AK / GB	Rs 2.5 M /Technology / Institute	75	0	0	75
Costs of Civil works (Customization / Up-gradation) for deployment of equipment / machinery	Rs 1.0 M / institute	28	0	0	28
Cost of training consumables / materials etc. (estimated enrollment each institute each year as 50 students)	Rs1,200/ trainee / month	2.5	20	22.5	45
Cost of Overheads (Receipt-able bills charges against utilities etc.)	Rs 500 / trainee / month	3	9	9	21

	Cost of assessment & Certification to be provided to concerned agencies for formal education and TVET committees of NAVTTC	1500 target graduates to be passed-out	1	2	3	6
	Salaries of 03 Instructors/technical staff on monthly basis including visiting faculty/support staff on remuneration/project allowance basis as per requirement and non-technical support staff to be hired on remuneration	Details of salary / remuneration/ project allowance depicted at Annexure F	6	40	40	86
	TA/DA for Monitoring & Evaluation to be carried-out by executing agencies; NAVTTC, M/o FE&PT, FDE etc.	as per Govt approved rates	4	4	4	12
	Procurement of IT Equipment / Hardware / software etc.	Rs 0.5 M / Institute	8	5	0	13
	Admission campaign & seminars	-	3	2	2	7
	Teaching Learning Material(TLMs) / Books / Curricula etc.	Rs 500 / student	2	2	2	6
	Contingency Expenditure	-	2	2	2	6
	Pay of Project Staff (03 Asstt. Coordinators) equiv. –BPS-17	Details of salary at Annexure F	2	4	4	10
	Grand Total of the project Rs (Million)		136.5	90	88.5	315

After completion of the project, the facilities will be handed over to the concerned schools through Federal Directorate of Education who will be responsible for their subsequent operations through their own mechanism. Accordingly, the selection of schools for the project will be made as per the recommendations of the Federal Directorate of Education and M/o of Federal Education and Professional Training.

Basis of determining the capital cost be provided. It includes market survey, schedule rates, estimation on the basis of previous work done etc.	Capital Cost are determined based on cost estimations acquired from market surveys, previous financial demands received from TVET Institutes, lessons learnt from the previous phases of NAVTTC's skill Development programmes.
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Provide year-wise estimation of Physical activities by main components as per following: (i.e. opposite tabulation)	Major Items		Unit	2019-20				2020-21				2021-22			
	Quarters of Year			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Approval of the project PC-1 from CDWP														
	Tendering / hiring agencies for establishing labs		01												
	Recruitment of the contractual / ad-hoc staff of Labs workshops		90												
	Civil Works for deployment of machinery in		30												

		institutes																		
		Establishing set of labs / workshops of target 30 technologies	30																	
		Advertisement for enrollment of students	01																	
		Operationalization / Initiation of Matric-Tech program / NVQF																		
		Monitoring & Evaluation of project																		
		Assessment & Certification of youth																		10
	Phasing of Capital cost be worked out on the basis of each item of work as stated above and provide information as per following: (i.e. opposite tabulation)	As provided above in capital Cost estimation.																		
	In Case of Revised Projects, Provide																			
	Project approval history, year-wise PSDP allocation, releases and expenditure.	Not Applicable																		
	Items-wise year wise actual expenditure and physical progress.	Not Applicable																		
	Justification for Modification of PC-1 and variation in scope of the project if applicable.	Not Applicable																		
	Item-wise comparison of revised cost with the approved cost and give reasons for variation.	Not Applicable.																		
	Indicate exchange rate used to work out FEC in the original and revised PC-1	Not Applicable																		
	8. Annual Operating & Maintenance Cost after completion of the project																			
	Item-wise annual operating cost for 5-years and sources of financing	Not Applicable																		
	9. Demand & Supply Analysis																			
	Existing capacity of services and its supply.	Demand of skills and nature of work are changing at global level and employment opportunities are shifting across sectors and occupations.																		

Projected demand for ten years		<p>Since 2000, a shift in labour force priorities could also be observed due to rapid urbanization. Likewise: annually 5 percent labour force engaged by Agriculture sector moves towards manufacturing, construction and services sector (MTDF 2005-2010).</p> <p>Several studies highlight the importance of technical and vocational training in Pakistan. As per NAVTTC's Survey 2006 of the annual requirement of manpower, the Medium-term Development Framework (MTDF- 2005-10) fixed the target capacity of technical and vocational training institutions at 0.95 million trainees per annum by the year 2010 by utilizing the existing and new network of training institutes/facilities to meet the upcoming skilled workforce demand. As explained in question 5 above, enrollment in the technical and vocational training institutions in both public & private sector reached 320,167 trainees per annum (NAVTTC, NSIS census 2014-15) and is now tentatively around 400,000. Now, after the emergence of CPEC and other national mega projects per annum demand of skilled workforce in Pakistan is being considered to be more than 2.4 Million. So to effectively meet all the challenges of skilled workforce especially to bridge gap between demand and supply of manpower, the enrollment of TVET sector is to be enhanced atleast upto 1.0 Million each year. And for the purpose versatile approached like the instant project to integrate formal and TVET education will have to be undertaken.</p>
Capacity of projects being implemented both in the public & private sector.		Detail is at Annex- E Source: (NAVTTC-NSIS census 2017-18)
Supply-demand gap		<p>As evident from the above explanation, the present demand supply gap of skilled work force in the country is required to be filled through innovative training programs.</p> <p>Whereas, supply is 320,167 and per annum demand is estimated to be more than 1.8 Million annual (LFS-2017). This demand has further aggravated after the emergence of CPEC and other national mega projects upto an estimated number of 2.5 million per annum.</p>
Designed capacity & output of the proposed project		Based on the designed capacity per shift, the output of the proposed program is 1,500 Matric-TECH qualified Youth and 2,500 trained youth (Males & females) in short-TERM Skill Development courses.
10	Financial plan and mode of Financing	
a. Equity: <i>(Indicate the amount of equity to be financed from each source)</i>	Nil	
Sponsors	Federal Government	
Provincial Government	Nil	
DFI's/banks	Nil	
General Public	Nil	
Foreign equity (indicate partner agency)	Nil	
NGO's/beneficiaries	Nil	
Others	Nil	
b. Debt		
Indicate the Local &	Not Applicable	

	Foreign debt, interest rate, Grace period and repayment period for each loan separately. The loan repayment schedule is also annexed.									
c.	Grants along-with sources	Not Applicable								
d.	Weighted cost of capital	Nil								
11. a.	Project Benefits and Analysis									
	Financial: (Income to the project along with assumptions).	No such financial benefits (income) are envisaged in case of the proposed project. However, employability of the Pass-outs, economic activity and entrepreneurship will be enhanced, which will directly contribute to the financial strength/ income of the passed-out trainees and their families. This will contribute in poverty alleviation. However, its quantification is not ascertainable at this stage.								
	Social: (Quantify benefit to the target group)	<p>➤ The socio-economic status of 28,575 community members belonging to ICT, GB, AJK regions will be up-lifted through increased income and earning hands. Household Statistics revealed that average Household size (2013-14) is 6.35 people(<i>Source: Household Integrated Economic Survey, 2013-14, Statistics Division, and Pakistan Bureau of Statistics</i>)</p> <p>➤ The salient features envisaging the social factors are;</p> <p>➤ The workforce with positive aptitude and professional accumulation produced in-line with local and international needs and the quality of TVET sector improved at all levels by making it responsive to the needs of the labour market.</p> <p>➤ NAVTTC's previous skill development programs provided an equal access of training for women all across the country, empowering them to utilize their acquired hand-on skill to meet up their household expenditures through entrepreneurship. NAVTTC allocated more than 33% quota for women and female specific trades were also catered and emphasized in all regions for this purpose.</p> <p>➤ Special persons (physically disabled), eunuchs were given high weight-age in specific training courses (in view of their physical disability), in which they can acquire and utilize skill for economic empowerment.</p> <p>➤ Disadvantaged sectors of society i.e. Orphans, widows, unemployed, less educated, minorities and senior-age persons (up-to 40 years) were prioritized for the training courses for their economic empowerment, to make them an important pillar of the economy of country</p> <p>➤ Pakistan is 10th largest country in the world according to the size of the labour force. The employment statistics quoted in Pakistan Economic Survey 2014-15 reveals:</p> <table border="1" data-bbox="600 1806 1347 1917"> <thead> <tr> <th>Year</th> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>Laour Force</td> <td>59.74</td> <td>60.10</td> <td>61.04</td> </tr> </tbody> </table>	Year	2012-13	2013-14	2014-15	Laour Force	59.74	60.10	61.04
Year	2012-13	2013-14	2014-15							
Laour Force	59.74	60.10	61.04							

Employed	56.01	56.52	57.42
Unemployed	3.73	3.58	3.62

Labour Force Participation rate (Indicators):

Gender	Crude Activity Participation (%) Rate	Refined Activity Participation (%) Rate
Male	48.1	67.8
Female	15.8	22.0
Total	32.3	45.2

- As is evident from above table that labour force participation rate has slightly decreased from 32.9 percent in 2012 32.3 percent in 2014-15. Female labour force participation rate increased from 15.6 percent in 2012-13 to 15.8 percent in 2014 labour force participation rate decreased from 49.3 percent in 2012-13 to 48.1 percent in 2014 15. Women in the workforce can be a major driver of the economic growth. This increasing participation of women in paid work shows the sincere and committed efforts by the government to reduce the gender gap in labour force participation rate. It also shows that women are getting better opportunities of obtaining technical and professional education a more jobs
- Enterprises will have access to qualified manpower. It will increase their productivity and capacity for innovation. This will make enterprises more competitive and will have positive influence on the investment climate in the entire country.
- The Vocational & Technical training will target the less educated/unemployed youth of the country, enhance their employability and will drastically improve their inclination towards positive activities.
- The project envisages a strong public-private partnership for its implementation by executing the project in private industry and institutes, the public sector will ensure interest and ownership of private sector in TVET. This will provide an opportunity to evolve a coordinated training mechanism to chalk out skill needs, job market analysis, industrial / TVET institute updations, capacity building of Human Resource, keeping in view demands of local Chamber of Commerce & Industries.
- Government is striving to arrest social unrest induced by poverty, inequality and poor economic development.

Environmental: (Environmental impact assessment negative/positive)	<i>As per decision of the ECNEC (Case No. ECNEC-6/1/2007 dated 07-03-2007), there is no environmental hazard i.e. solid/liquid waste and air pollution /impact of the project in the area.</i>
b. Project Analysis	
Quantifiable output of the project	1500 Matric-TECH qualified youth and 2500 skilled workers indifferent short term skill development courses / trades.
Unit cost analysis	By incurring total estimated project cost of Rs 315.0 Million and getting an output of 2500 skilled student will result an average estimated per trainee per course cost of Rs 96,833 during the project, however, a permanent asset in shape of 30 sets of technologies (02 -03 labs /workshops for each technology) in general / formal education

		schooling system will be established which will further be utilized to carry-out Matric-TECH and NVQF skill program and the per trainee cost will reduce in upcoming years.
	Employment generation (direct and indirect)	In-direct employment opportunities are not quantifiable at the moment.
	Impact of delays on project cost and viability	<ul style="list-style-type: none"> ▪ In case of delay in implementation of the project, the cost pertaining to consumable training materials and remuneration of instructional / non-instructional staff will escalate at the prevailing CPI inflation rate i.e. 7.8% percent (Source: Pakistan Economic Survey, 2016-17). ▪ Delay in implementation of the project will further widen the existing demand – supply gap of skilled manpower in the country. ▪ Global GDP is forecasted to accelerate as compared to the last year with a pickup in high income economies alongwith some improvements in developing countries. The comparison of Pakistan with its neighboring countries in terms of GDP growth trajectory is given below: ▪ Increase in GDP growth is directly correlated to the increase in demand for skilled workforce. Delays on project will, therefore, further increase the gap between supply & demand for skilled workforce in the economy. (This indicative inflation in the cost is for the purpose of project analysis and executing agency will not demand more than approved cost). ▪ Delays can be caused incase, if approval by the competent forum is not ascertained timely w.r.t. various requisite program activities (i.e. financial & managerial etc.) and the estimated cost of the project will certainly change as the cost is accumulated in purview of current economic position of the country. ▪ Bottlenecks in timely release of required money may delay timely completion of project deliverables.
12.	Implementation of the project.	
(a)	Implementation Schedule.	Implementation schedule is provided in the annexure
	Indicate starting and completion date of the project.	i) Proposed commencement date of project: 1stof January, 2020 to 30thof June, 2022
	Item-wise / year-wise implementation schedule in line chart co-related with the phasing of physical activities.	Timeline /implementation schedule is provided above
Management Structure and Manpower Requirements		
	Administrative arrangements for Implementation of project.	NAVTTTC will execute the subject project through its available manpower placed in Headquarters, Regional Offices and new hiring of 03 Asstt. Coordinators (equi. BPS-17) from open market will be undertaken only for the duration of this project and placed at NAVTTTC HQs and Regional Office, ICT
	Manpower requirements during execution and operation of the project are provided by skills/profession.	NAVTTTC will execute the subject project through its available manpower placed in Headquarters, Regional Offices and new hiring of 03 Asstt. Coordinators (equi. BPS-17) from open market will be undertaken only for the duration of this project and placed at NAVTTTC HQs and Regional Office, ICT

Job description, qualification, age and salary of each job be provided.	Not applicable
Additional Projects/ Decisions required	
Indicate additional projects/ decisions required to optimize investment being undertaken	<p>CONSTITUTION OF A STEERING COMMITTEE The project will have a steering committee with the following composition.</p> <p>Composition of Committee</p> <ul style="list-style-type: none"> a. Federal Secretary, M/o Federal Education & Professional Training, Islamabad – Chairman of the Committee ii. Executive Director, NAVTTC – Secretary iii. Director General (SS&C) iv. Deputy Chief (Dev.), M/o FE&PT – Member b. A Nominee from Federal Directorate of Education – Member vi. A Nominee from Federal Board of Intermediate and Secondary Education (FBISE) – Member c. 02 Nominees from AJK Board and education directorates (01 from each) – Member viii. A nominee from AJK – TEVTA d. A nominee from Gilgit-Baltistan Deptt. Of Education – Member <p>ToRs of the Steering Committee</p> <p>The Steering Committee will be responsible for the following;</p> <ul style="list-style-type: none"> e. Overseeing Selection process of public schools / colleges for the project in light of assessed capacity and recommendations of M/o FE&PT f. Overseeing Selection process Selection of technologies and process of establishing labs for introduction of Matric-TECH in public schools of general education g. Overseeing Selection process Selection of university/ organization for conducting impact study c. Policy decision related to the project and quality assurance d. For any issue or unforeseen activity not mentioned in the PC-I e. The committee will meet as per need or twice a year to discuss the progress
1	Certificate
5. The name, designation and phone # of officer responsible for preparing and checking be provided. It may also be confirmed that PC-1 has been	It is confirmed that this PC-1 has been prepared as per instructions for the preparation of PC-I for Social Sector Projects.

	prepared as per instructions for preparation of PC-I for Social Sector Projects.	
	The PC-I along with certificate must be signed by the Principal Accounting Officer to ensure its ownership.	Signed by the Competent Authority.

Prepared by: Name: **(Naeem Yaqoob)**
Designation: Deputy Director (P&D)
Phone: 051-9044402

Checked by: Name: **(Asmat Ullah Khan)**
Designation: Director (PD&A)

Recommended by: Name: **(Muqeeem Islam)**
Director General (P&D)

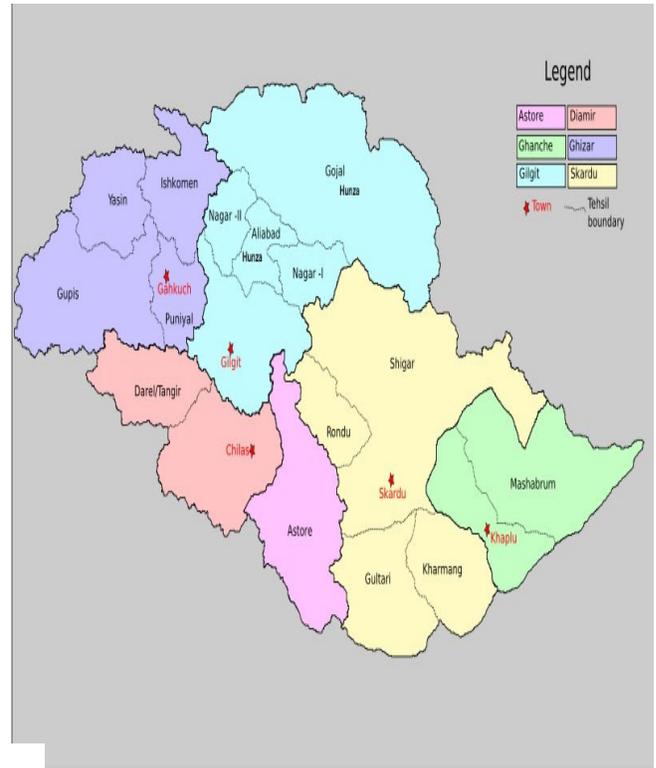
Recommended /
Approved by: Name: **(Dr. Nasir Khan)**
Designation: Executive Director,
National Vocational &
Technical Training
Commission (NAVTTTC)

Approved &
Countersigned by: Name: **(Dr. Usman Yousafani)**
Federal Secretary,
M/o Federal education &
Professional Training,
Islamabad

LIST OF ANNEXURES

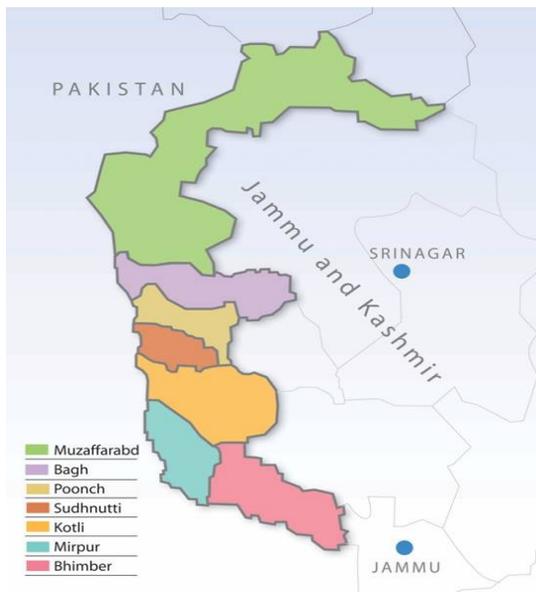
Sr.#	Annexure No.	Description
	Annexure-A	Map of Area indicating the Project Location
	Annexure-B	Estimated Training Cost and other Charges
	Annexure -C	Visits report of Schools / Colleges of Federal Directorate of Education (FDE) for Introducing Matric-TECH Pathways in General Education
	Annexure -D	Indicative List of Consumables
	Annexure-E	Minutes of meetings with Federal Directorate of Education, Federal Board of Intermediate & Secondary Education (FBISE), National Curriculum Council
	Annexure-F	Schedule of charges
	Annexure-G	Inter Board Committee of Chairmen (IBCC) meeting held on 17-18 of July, 2018 vide Resolution No.18 has declared National Vocational Qualification Framework (NVQF) Skill Level-04 equivalent to Matric-TECH (TSC) offered by Technical Board in Pakistan
	Annexure-H	NAVTTTC's developed NVQF
	Annexure-I	NAVTTTC's developed 27 Qualifications (to date)
	Annexure-J	TVET Institutes and Enrolment in Pakistan (NAVTTTC-NSIS 2017-18)
	Annexure-K	Existing Matric-TECH Scheme of Studies of Federal Board for Intermediate & Secondary Education
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Annex-A



Islamabad Capital Territory

Gilgit-Baltistan



Azad Jammu & Kashmir

Detailed financial Cost estimations of the Project					
Introducing Matric-TECH Pathways for Integrating Technical and Vocational Education and Training and Formal Education					
Major Items	Financial details / Unit Cost Rs.	2019-20	2020-21	2021-22	Total cost for 03 F.Y (s)
Cost of establishing labs / workshops in 30 technologies of public sector schools / colleges of ICT / AK / GB	Rs 2.5 M /Technology / Institute	75	0	0	75
Costs of Civil works (Customization / Up-gradation) for deployment of equipment / machinery	Rs 1.0 M / institute	28	0	0	28
Cost of training consumables / materials etc. (estimated enrollment each institute each year as 50 students)	Rs1,200/ trainee / month	2.5	20	22.5	45
Cost of Overheads (Receipt-able bills charges against utilities etc.)	Rs 500 / trainee / month	3	9	9	21
Cost of assessment & Certification to be provided to concerned agencies for formal education and TVET committees of NAVTTC	1500 target graduates to be passed-out	1	2	3	6
Salaries of 03 Instructors/technical staff on monthly basis including visiting faculty/support staff on remuneration/project allowance basis as per requirement and non-technical support staff to be hired on remuneration	Details of salary / remuneration/ project allowance at Annexure F	6	40	40	86
TA/DA for Monitoring & Evaluation to be carried-out by executing agencies; NAVTTC, M/o FE&PT, FDE etc.	as per Govt approved rates	4	4	4	12
Procurement of IT Equipment / Hardware / software etc.	Rs 0.5 M / Institute	8	5	0	13
Admission campaign & seminars	-	3	2	2	7
Teaching Learning Material(TLMs) / Books / Curricula etc.	Rs 500 / student	2	2	2	6
Contingency Expenditure	-	2	2	2	6
Pay of Project Staff (03 Asstt. Coordinators) equiv. –BPS-17	Details of salary Annexure F	2	4	4	10
Grand Total of the project Rs (Million)		136.5	90	88.5	315

National Vocational & Technical Training Commission

**Visits report of Schools / Colleges of
Federal Directorate of Education (FDE) for
Introducing Matric-TECH Pathways in General Education**

A detailed visit by Director General (SS&C / P&D) and Deputy Director (SS&C) was paid to 11 schools and colleges working under Federal Directorate of Education (FDE), Islamabad on 5th and 6th of September, 2019. The purpose of visits was to assess the infra-structure and technical capacity of schools / colleges of FDE to initiate the Matric-TECH programs therein, after establishing the technical labs / workshops in these institutes. Moreover, meetings were also carried-out with Ms. Sadia Adnan, Director (Academia) and Ms. Samina, Deputy Director (Innovation), FDE and the Principals of 11 Model Schools/Colleges of Islamabad on 5th September, 2019 for initiating Matric Tech scheme in Islamabad as a Pilot Project. All of the principals and the officers of FDE appreciated and agreed to start the Matric-TECH scheme in their schools / colleges, however with the following observations;

Observations

Following are the several observations that have been indicated by the Principals during the meetings;

- Lack of Technical Human Resource: Most of the Model colleges lack Technical trained staff in their schools for teaching;
 - Tools and equipments: Mostly the schools lack the equipments and tools for technical studies;
 - Moreover all the model schools have already sent their student's board registration either in Science or Humanities Group. If NAVTTC intends to start the project at this stage we have to cancel the board registration of some students and register them again in Technical Group with double fee;
 - Affiliation of some non Technical Schools with Technical board or NTB: Some of the model colleges are not affiliated with any Technical Board. Before initiating Matric Tech Scheme in that particular School that school has to get affiliated with any technical board or NTB;
 - Motivate students to enroll in Technical Group: As most of the model colleges lack Human Resource and equipments students feel insecure to get them enroll in Technical subjects. Motivation and acceptance of the students is necessary before starting this project;
2. As per plan, the following Colleges were visited on 6th of Sept, 2019
- ❖ Islamabad Model College for Boys, Chak Shahzad, Islamabad
 - ❖ Islamabad Model College for Girls, NHC, FA, NIH, Islamabad
 - ❖ Islamabad Model College for Boys, G/11-2, Islamabad

- ❖ Islamabad Model School for girls, I-14, Islamabad
 - ❖ Islamabad Model College for Boys-Humak, Islamabad
3. Out of five three colleges are recommended for initiating Matric Tech scheme in Islamabad as a pilot project namely,
- ❖ IMCB, Chak Shahzad
 - ❖ IMCG, NHC, FA, NIH
 - ❖ IMCB, G/11-2
4. As per the approved scheme of Federal Board of Intermediate and Secondary Education for SSC (CLASSES IX-X) (scheme enclosed), the principals of the schools recommended different trades highlighted against the names of schools in the following table along with their requirements for initiating this pilot project.

S. No	School Name	Rooms available	Trades Proposed	Proposed students
1	IMCB, Chak Shahzad	03 rooms	Electrical Wiring Motor Winding Computer Hardware	25
2	IMCG, NHC, FA, NIH	01 room	Dress making and fashion designing Computer Hardware	25
3	IMCB, G/11-2	02 rooms	Electrical Wiring Motor Winding Computer Hardware	25

5. The details of the requirements as per the proposed trades to be furnished by NAVTTC in the model colleges are listed below in the table.

S. No	School Name	HR	Equipments
1	IMCB, Chak Shahzad	01 teacher	List attached (For Motor Winding + Electrician)
2	IMCG, NHC, FA, NIH	01 teacher	i. 20 Sewing Machines with stand ii. Chairs 20 iii. Tables 20 iv. Consumables
3	IMCB, G/11-2	01 Teacher 01 attendant	List attached (For Motor Winding + Electrician)

TENTATIVE & INDICATIVE LIST OF CONSUMABLE SUPPLIES FOR GENERAL ELECTRICIAN

Sr. No.	Name of Tools / Equipment	Quantity
1.	Bearing puller(3 &4 inches)	(5+5) Nos
2.	Bench Vice 5"	05 Nos
3.	Center punch	20 Nos
4.	Circuit Breaker (Single, double, three pole)	20 Nos
5.	Drum Switch ON / OFF, REV / FOR, Star / Delta	10 Nos. Each
6.	Dust brush / File brush	20 Nos each
7.	Earth Resistance Tester	5 Nos
8.	Electric soldering iron 150 watt	10 Nos
9.	Farmer chisels 8".	10 Nos
10.	Filer set	4-5 Nos
11.	Fuse (15A, 25-30A)	20 Nos
12.	Hack saws	20 Nos
13.	Hammers Rubber +Iron	20 Nos
14.	Hand Electric Drill Machine with hammering (Variable)	02)Nos
15.	High insulation rubber hand gloves	20 Nos
16.	Insulated long nose pliers with side cutter	20 Nos
17.	Insulated with cutter	20 Nos
18.	Insulated wire cutter + Stripper	20 Nos
19.	Knife(6 inches)	20 Nos
20.	Magnetic Contactors 2 + 2 220 Volts / 10 A 50Hz	10 Nos.
21.	Measuring tap 3m	20 Nos
22.	Motor Protection Switch Three Phase	10 Nos.
23.	Multi-meter (Analog)	06 Nos
24.	Multi-meter (Digital)	10 Nos
25.	Neon phase tester light duty pocket size	25 Nos
26.	Overload Relay 0.5 - 3.0 Amp	20 Nos.
27.	Power factor meter	2 Nos

Sr. No.	Name of Tools / Equipment	Quantity
28.	Push Button Single Way / Two Way / Three Way	20 Nos. Each
29.	Scissor 6	5 Nos
30.	Screw Driver all sizes	25 Nos each
31.	Pliers set with cutter +Scriber	20 Nos
32.	Single phase energy meter 220V /10-20A	5 Nos
33.	Single Phase Motor 220 Volts 50Hz ½ HP	5 Nos.
34.	Steel pliers foot rule.	20 Nos
35.	Three phase energy meter 30 A	5 Nos
36.	Three Phase Motor 380 Volts 50Hz 2 HP	5 Nos.
37.	Tong tester meter	20 Nos
38.	Variable Power Supply 0-24V, 5A	5 Nos
39.	Vernier caliper 150 mm	20 Nos
40.	Vice Clamps	20 Nos

LIST OF CONSUMABLE SUPPLIES FOR MOTOR WINDING

Sr. No.	Name of Tools / Equipment	Quantity
1.	Insulation Paper	(5+5) Nos
2.	Combination Plier 6"	25 Nos
3.	Screw Driver Set (Assorted Size)	25 Nos.
4.	Scissors	25 Nos
5.	Tweeter	25 Nos.
6.	Hammer Rubber +Iron	25 Nos
7.	Flat Chisel	25 Nos.
8.	Scriber	25 Nos.
9.	Center Punch	25 Nos.
10.	Vernier Caliper.	25 Nos.
11.	Standard Wire Gauge	25 Nos.
12.	Micrometer (mm)	02 Nos.
13.	Micrometer Inch size	25 Nos.
14.	Steel rule 300 mm	25 Nos.
15.	Try Square 150 mm	06 Nos.
16.	Vernier Caliper	25 Nos.
17.	Standard Wire Gauge	25 Nos.

18.	Bearing Puller (Assorted Size)	02 Nos
19.	Grease Gun	02 Nos.
20.	Oil Gun	02 Nos.
21.	Spanner Set Assorted Size	02 Nos.
22.	Adjustable screw wrench	04 Nos.
23.	Pedestal Drill Machine	01 Nos.
24.	Drill Set (Assorted Size)	01 Nos.
25.	Adjustable screw wrench	04 Nos.
26.	Tape Set (Assorted Size)	05 Nos.
27.	Motor without Winding 48 Slots	12 Nos.
28.	Ceiling Fan Motor (Assorted No of Slots)	15 Nos
29.	Motor without Winding 24 Slots	12 Nos.
30.	Pedestal Drill Machine	01 Nos.
31.	Pedestal Fan Motor (Assorted No of Slots)	15 Nos.
32.	Pliers set with cutter +Scriber	20 Nos
Sr. No.	Name of Tools / Equipment	Quantity
33.	Exhaust fan motor	15 Nos.
34.	Soldering Iron (Assorted Wattage)	10 Nos
35.	Regulator Core Laminations	15 Set
36.	MEM Starter (Star-Delta)	04 Nos.
37.	Transformer (single phase, three phase)	02 Nos.
38.	Choke Core Laminations	15 Set

Minutes of the Meeting

NAVTTC and Federal Board of Intermediate and Secondary Education for Introducing Matric-TECH Pathways in General Education

A meeting was convened in the office of Chairman, FBISE, **Dr. Ikram Ali Malik** during last week of August, 2019. This meeting was participated by the following;

- a. Dr. Ikram Ali Malik (Chairman), FBISE
- b. Mr. Muqem Isam, DG (Skill Standards & Curricula), NAVTTC
- c. Mr. Rao Atiq, Secretary, FBISE
- d. Mr. Fayyaz A. Soomro, Deputy Director (SS&C), NAVTTC
- e. Ms. Maliha Nishan Iqbal, Deputy Director (SS&C), NAVTTC

The matter of implementation of Matric-TECH in jurisdiction of FBISE was discussed thoroughly with **Dr. Ikram** and his team members. Chairman, FBISE apprised the participants that many schools are already implementing Matric-TECH scheme in-line with approved scheme of study. If NAVTTC is interested to introduce Matric-TECH in more schools, federal board will certainly cooperate in this regard. He further stated that FBISE is an implementing agency for approved curricula / scheme of studies by the national Curriculum Council, hence any scheme of study approved by NCC will be our duty to implement.

2. This issue with the approval of DG (SSC), NAVTTC

Deputy Director (SS&C)

NAVTTC

Circulation:

- All concerned(s)

Annexure-F

Schedule of Charges of Remuneration Regarding Teaching and related human resource

	Item	Unit	Rs. Rates per Unit (Maximum)
1	Teaching rates for Visiting faculty (Technician /Diploma holders with at least 5 years of experience	per hour	600
2	Teaching rates for Visiting faculty (having 16 years schooling degree in the required field/Engineer) with five years of experience	per hour	900
3	Teaching rates for Visiting faculty (having MPhil /MS degree in the required field/Engineer) with five years of experience	per hour	1,200
4	Teaching rates for Visiting faculty (having PhD degree in the required field/Engineer) with two years of experience	per hour	1,500
5	Assessments fee per student	per student	500
6	Consumable for assessment (as per actual cost or maximum)	per student	1,000
7	Project Allowance for Headmaster /Principal	per month	8,000
8	Project Allowance for vice Principal	per month	7,000
9	Project Allowance for admin staff (one person for each school)	per month	5,000
10	Project Allowance for accounts staff (one person for each school)	per month	5,000
11	Project Allowance for chowkidar (two person for each school)	per month	3,000
12	Project Allowance for cleaning staff (two person for each school)	per month	3,000
13	Instructors three in each school (as per requirement of the trades)	Per month	50,000
14	Assistant Coordinators (to be posted in Project management unit)	Per month	70,000

IBCCC Inter Board Committee of Chairmen (IBCC) meeting held on 17-18 of July, 2018 vide Resolution No.18 has declared **National Vocational Qualification Framework (NVQF)** Skill Level-04 equivalent to Matric-TECH (TSC) offered by Technical Board in Pakistan



SINDH BOARD OF TECHNICAL EDUCATION

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NO. SBTE/CH-PA/2019-42

Dated: March 13, 2019

NOTIFICATION

In pursuance to the Resolution No. 6 of 53rd meeting of the Committee of Chairmen & Directors Technical Education (CCDTE) held on 22nd March, 2018 at Hotel Ramada Islamabad and confirmed by 160th Inter Board Committee of Chairmen (IBCC) meeting held on 17-18 July, 2018 at Abbottabad vide Resolution No.18, the National Vocational Qualification Framework (NVQF) level-4 has been declared equivalent to Matric Technical (TSC) offered by the Technical Board in Pakistan.

(DR. MASROOR A. SHAIKH)
FORMER CHAIRMAN CCDTE

Copy for information to:-

1. The Secretary, Inter Provincial Division, Govt. of Pakistan, Islamabad.
2. The Secretary, Ministry of Federal Education and Professional Training, Islamabad.
3. The Secretary, IBCC, Islamabad.
4. The Secretary, Universities & Boards Department, Govt. of Sindh, Karachi
5. The Secretary, Education, Education, Sindh/Punjab/ Khyber Pakhtunkhwa,/Baluchistan.
6. The Managing Director, TEVTA Sindh/TEVTA Khyber Pakhtunkhwa,/Baluchistan.
7. The General Manager (Academic), TEVTA Punjab, Lahore.
8. The Chairman, CCDTE/PBTE, Lahore.
9. The Chairmen, Board of Technical Education, Pakistan.
10. The Chairmen, BISE, Pakistan/BIE, Karachi/BSE, Karachi.
11. The Chairmen, Text Book Board, Sindh/Punjab/ Khyber Pakhtunkhwa,/Baluchistan.
12. The Directors, Curriculum Wing, Sindh/ Punjab/ Khyber Pakhtunkhwa,/Baluchistan.
13. The Secretary, Board of Technical Education, Sindh/ Punjab/ Khyber Pakhtunkhwa,/Baluchistan .
14. The Controller of Examinations, BTE, Sindh/ Punjab/ Khyber Pakhtunkhwa,/Baluchistan.
15. The Director (Research), BTE, Sindh/ Punjab/ Khyber Pakhtunkhwa,/Baluchistan.
16. Mr. Raja Saad Program Coordinator (QA), TRSP-III GIZ, Islamabad.
17. Mr. M. Naeem Akhtar Senior Technical Advisor (QA), TRSP-III GIZ, Islamabad.
18. The Director, Information Department, Govt. of Sindh, Karachi with request to get the same published in the newspapers as news item.
19. The News Editor, PTV, GEO, ARY, AAJ, INDUS, HUM, ATV, TV ONE with the request to broadcast the same in News & Educational Programmes.
20. News Editor, Pakistan Broadcasting Corporation, Karachi/Lahore/Quetta/Peshawar/Islamabad with a request to broadcast the same in the news and Education Program
21. Master file.
22. Office copy.


FORMER CHAIRMAN CCDTE

**National Vocational
Qualification
Framework version 2**

NVQF



To deliver a skilled and qualified workforce in Pakistan

Version 2
October 2017

National Vocational and Technical Training Commission

National Vocational Qualification Framework

Version 2

October 2017

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ABBREVIATIONS

B.	Bachelor of Technology
Tech	Competency Based Training
CBT	Committee of Chairmen and Directors of Technical Education
CCDT	Competency Standards
E CSs	Competency Units
CUs	Diploma of Associate Engineer
DAE	European Qualification Framework
EQF	Higher Education Commission
HEC	Inter Board Committee of Chairmen
IBCC	Learning Outcomes
LOs	Monitoring & Evaluation
M&E	Master of Technology
M. Tech	National Vocational and Technical Training Commission
NAVTTTC	NVQF Management Committee
NMC	National Skill Information System
NSIS	National Skill Strategy
NSS	NVQF Support Units
NSUs	National Vocational Certificate
NVC	National Vocational Qualifications
NVQs	National Vocational Qualifications Framework
NVQF	Punjab Vocational Training Council
PVTC	Quality Assurance
QA	Qualification Awarding Bodies
QABs	Qualification Development Committee
QDC	Recognition of Prior Learning
RPL	Technical Education and Vocational Training Authorities
TEVTAs	Terms of References
ToRsSSC	Sector Skills Councils
TLM	Teaching and Learning Material
TVET-SSP	TVET Sector Support Programme
UAE	United Arab Emirates
VET	Vocational Education & Training

PREFACE

Pakistan's first National Vocational Qualification Framework (NVQF) was launched in March 2015 after series of consultations with all TVET stakeholders. It facilitated in introducing competency-based courses in TVET institutions, which were developed by NAVTTC under the TVET Sector Support Program (SSP) in collaboration with European Union, the Embassy of the Kingdom of Netherlands, the Federal Republic of Germany and the Royal Norwegian Embassy. The program was commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and was implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in close collaboration with NAVTTC.

The two years pilot and experimental introduction of National Vocational Qualifications (NVQs) across the country gathered lot of experience and feedback from TVET service providers and institutions which brought forward the need to revise the main NVQF document and its support manuals so as to further streamline the procedures and processes for development, assessment and management of NVQs. In a joint workshop of all stakeholders in November 2016, it was decided to review the existing 11 operational manuals and merge them in to 3 operational manuals each on, "Development of NVQs", "Assessment of NVQs" and "Management of NVQs" and also revise the main NVQF document.

The second phase of TVET SSP plans for development of new NVQs and also review already developed qualifications so as to comprehensively package them from level 1 to 4. It also includes human resource development component to develop capacity of management and assessment bodies and training institutions and thus preparing them to efficiently and smoothly implement NVQs.

The main document of NVQF and its supported operational manuals will remain a dynamic document and procedures and processes prescribed in the revised operational manuals will be kept updated upon input and suggestions received from the TVET service providers.

Zulfiqar Ahmad Cheema

Executive Director NAVTTC,

Islamabad

Islamabad September 2017

MESSAGE FROM FEDERAL MINISTER FOR EDUCATION & PROFESSIONAL TRAINING

Pakistan is blessed with a tremendous human resource potential where around 60% of the population is below 30 years of age. This energetic youth is available for employable skills under a credible, reliable and internationally recognized TVET system for converting them into a demographic dividend for Pakistan's economy.

The presenter marks resurgence of TVET in Pakistan. Several reform-based initiatives are being taken for development of the technical and vocational education system, in collaboration with private sector participation and with technical assistance of four valued development partners from the international community. One of the important components of these reforms has been the development and implementation of this National Vocational Qualifications Framework, which aims at bringing a paradigm shift by making TVET delivery credible, marketable and consistent with international demands.

I am pleased to present this outcome of an extensive consultation process with all TVET stakeholders in the form of the second version of the Pakistan National Vocational Qualification Framework (NVQF) supported with three operational manuals. I am sure these will help in the establishment of a coherent national system of TVET qualifications, promote demand-based training through an efficient assessment mechanism and lead to improvement in the overall quality of TVET in conformity with the National Skill Strategy and in pursuance of the National TVET Policy.

Muhammad Baligh Ur

Rehman Minister for Federal

Education and Professional Training

Islamabad

EXECUTIVE SUMMARY

This framework is an overarching document, which is supported with three operational manuals; Manual 1 on “Development of NVQs”, Manual 2 on “Assessment of NVQs” and Manual 3 on “Management of NVQs”. Each manual describes in detail, procedures and processes in development of NVQs, in conduct of NVQs assessment and in management of NVQs. This main NVQF document consists of five sections on which policy guidelines have been given for efficient and smooth development, assessment and management of National Vocational Qualifications.

Structure of NVQs

The revised NVQF contains levels 1 to 8 qualifications with levels 1 to 4 for National Vocation Certificates, Level 5 for Diploma and Level 6 to 8 leading to graduate and postgraduate level degree qualifications assuring the upward mobility within TVET sector. NVQs certification for level 1 to 5 falls within the purview of the Qualification Awarding Bodies (QABs) while certification of qualifications for level 6 to 8 falls within the purview of universities. Each level of the qualification is defined by a set of approved Level Descriptors, describing the broad outcomes expected of achievers and the complexity of skills and knowledge at that level.

Development of NVQs

NVQs will be developed in response to demands of the labour market and national priorities with involvement of academia and industry at key stages in the development process. The procedures and processes thus involve development of competency standards derived from the DACUM or Functional Analysis approaches with participation of industry experts, development of assessment evidence guides for each single competency standard as well as for integrated assessment in collaboration and development of competency-based curriculum with participation of both industry and academia. It further specifies the procedure for registration and notification of NVQs under the NVQF system.

Assessment of NVQs

NVQs assessment will be conducted through a well-defined system of assessment. The procedures and processes involved are training of sufficient and competent assessors, ensuring minimum essential standards for quality assurance through accreditation of Qualification Awarding Bodies and the Assessment Centers and providing pathways for formal, non-formal and in-formal candidates' entry and to gain NVQs certification after passing through the integrated assessment. It also facilitates students to achieve either a full qualification or a record of achievement if he/she doesn't further want to pursue for full qualification. Procedures to keep record of successful candidates, a moderation system to ensure fair, valid and consistent assessment across the country and an opportunity for appeals and re-assessment have also been described.

Management of NVQs

NVQF management system has been made efficient, effective and smooth with prescribing a well-defined management structure at the national and provincial levels with clear role and responsibilities of management bodies. NVQF support units (NSUs) established by the management bodies will manage implementation of NVQF at the national and provincial levels. An “NVQF Management Committee” (NMC) has been constituted at the national level to overall manage and give policy directions on management and implementation of NVQs.

Quality Assurance of NVQs

The NVQF Quality Assurance (QA) system consists of five major interrelated and interconnected systems;

- a) Quality assurance of NVQF qualifications
- b) Quality assurance of the delivery and conduct of training
- c) Quality assurance of assessment and certification
- d) Quality assurance of the NVQF management system and
- e) Monitoring and evaluation of the NVQF.

The three NVQF support manuals cover all these 5 quality aspects.

INTRODUCTION

This second version of National Vocational Qualifications Framework (NVQF) has been developed on the basis of experience gained and feedback received from TVET service providers and individual TVET experts from the academia and industry after implementation of NVQs in selected TVET institutions throughout the country. The revised NVQF version 2 is thus more aligned with the functions, roles and responsibilities of TVET service providers at the national and provincial levels. This NVQF document is supported with the three operational manuals; Manual-1 on Development of NVQs, Manual-2 on Assessment of NVQs and Manual-3 on Management of NVQs, which describe guidelines and procedures on each aspect.

This NVQF document describes NVQF levels and level descriptors and brief description of procedures and policy guidelines for development, assessment and management of NVQs.

The Chapter on "Development of NVQs" provides policy guidelines, procedures and processes for development of qualification and registration under the NVQF system. Each qualification will have a specific date of review and hence criteria and procedure for review of the qualification has also been prescribed. Detail is given in the Manual-1 on "Development of NVQs".

The Chapter on "Assessment of NVQs" provides policy guidelines, procedures and processes for undertaking assessment of NVQs by the QABs and Assessment Centers including assessment for Recognition of Prior Learning (RPL). Moderations system to ensure fair, valid and consistent assessment and opportunity for appeal and re-assessment has also been prescribed. Detail is given in the Manual-2 on "Assessment of NVQs".

The Chapter on "Management of NVQs" provides policy guidelines, procedures and processes for managing implementation of NVQs by the national and provincial TVET bodies in the public and private sectors. It also describes management of equivalences of NVQs at four areas; equivalences within NVQs, Equivalence of NVQs with existing (traditional TVET qualifications, with qualification of general and higher education and equivalence with foreign qualifications. Detail is given in Manual-3 on "Management of NVQs".

Glossary has been added to understand the terms used in this document.

STRUCTURE OF NVQF

The revised structure of NVQF contains eight levels. National Vocational Certificates for level 1 to 4 and Diploma for Level 5 will be assessed and certified by QABs and graduate and postgraduate qualifications i.e. Level 6 to 8 will be assessed and degrees awarded by universities accredited by HEC. The Figure 1 below shows structure of the NVQF.



Figure 1: The National Vocational Qualification Structure

The present version of NVQF is covering levels 1 to 4 only. Qualifications from level 5 to 8 will evolve gradually.

Each Level of the qualification framework is defined by a set of approved level descriptors (Appendix 1). They describe the broad outcomes expected of pass-outs under three categories of "Knowledge & Understanding", "Skills" and "Responsibilities". The level descriptors are used as guidelines for levelling competency standards, development of assessment guides, curricula and trainers and learner's guides.

The National Vocational Certificate (NVC) level 1 to 4 prepares students from a semi-skilled person to a professional who possess necessary knowledge of an area of work or study from elementary to comprehensive knowledge as per level requirements, skills required to carry out and complete the tasks as per level complexity and take the responsibility from limited supervision (level 1) to full autonomy (level 4). The Diploma (Level 5) prepares students to become specialist having advanced theoretical knowledge of an area of work or study, possess mental, technical and practical skills to complete tasks, carry out planning and development with complete accountability.

2 Management of the NVQF

DEVELOPMENT OF NVQs

The process for development of a new National Vocational Qualification (NVQ) shall start with undertaking a labour market demand analysis, which shall provide justification and rationale for development of the qualification. A Qualification Development Committee (QDC) shall then be constituted in consultations and approval with NAVTTC and respective TEVTAs to develop and finalize the Competency Standards (CS) and Assessment Evidence Guides for that qualification. The Figure-1 below shows processes for development and finalization of competency standards and assessment evidence guides for a new national vocational qualification.

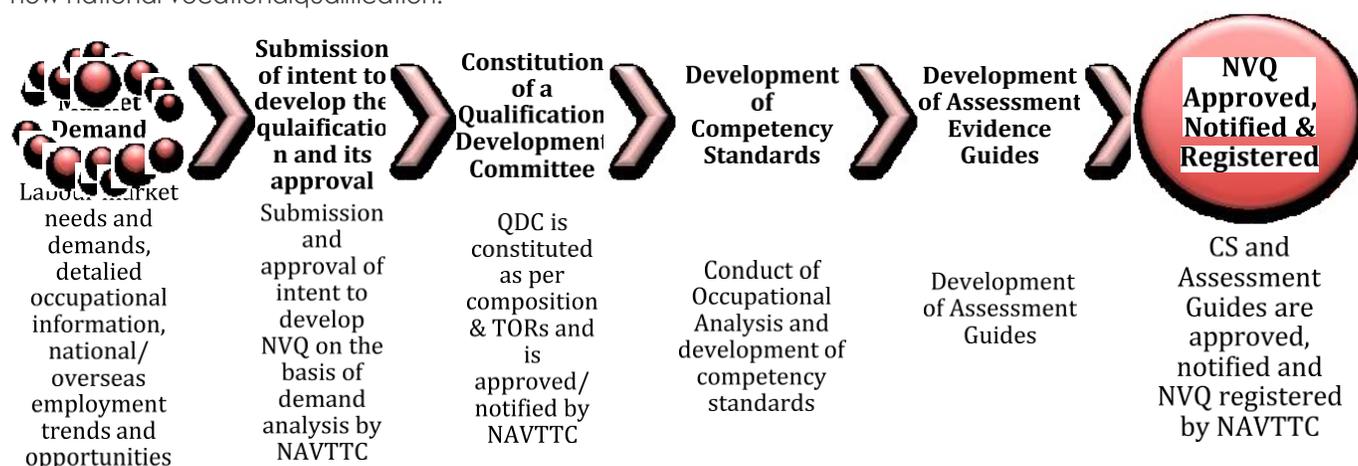


Figure 2: Process for development of NVQ

Competency Standards approved and notified will make the NVQ eligible for its registration in the NVQ Registry System.

All NVQs will be levelled as per NVQF level descriptors and thus each NVQ will have competency standards (generic, functional and technical) from level 1 to 5. A qualification summary sheet shall also be developed that will provide necessary details e.g. title, level, date of development, version number, time in credit hours, competency standards, code and other requirements.

Development of Competency Standards

NVQs shall be developed on the basis of skill demand analysis using the labour market information system, labour force survey and statistics of skilled workforce yearly published by the Government of Pakistan. It will be based on evidence of support from relevant industry and sector skills councils. Public and private sector TVET service providers will submit their intent to NAVTTC to develop NVQs according to the laid down procedures and processes described in the Manual-1 on "Development of NVQs".

NAVTTC shall verify the rationale/skill demand analysis and documents provided and will give go-ahead to develop the qualification or may indicate missing information/documents.

Once the intent to develop the NVQ is cleared by NAVTTC, the NAVTTC will constitute a Qualification Development Committee (QDC) in consultation with industry and applicant, which will be approved and notified by NAVTTC. The

composition and terms of reference of QDC are given below.

Composition of QDC

- Representative from NAVTTC
- Six members with wide experience in occupations within the industry sector who are recurrent practitioners (nominated by industry, SSC, CCIs, Trade Association etc.)
- Six representatives from private and public training providers (from TEVTAs, PVTC, QABs, and private training institutions as appropriate)
- A Certified CBT Assessor of the same sector (Allied sector)

Terms of Reference of QDC

- Identify and nominate Occupational Analysis Panel and Facilitators for occupational profiling
- Conduct workshops and finalize the chart(s)
- Identify suitable practitioners to take part in competency standards development and the development of assessment guides
- Conduct competency standards and assessment guides development workshops.
- Undertake industry validation of competency standards and assessment guides and finalized documents for submission and notification of NAVTTC

The Qualification Development Committee (QDC) will be responsible for occupational profiling. Since it involves high-performing incumbent workers to analyse their own job and identify the duties & tasks that make up their jobs, the QDC will constitute a panel, appoint a competent facilitator, and get an occupational profile prepared in a chart format, which describes various levels of an occupation in terms of specific jobs, duties and tasks that competent workers must perform.

The QDC on the basis of occupational profiling chart will develop and finalize Competency Standards (CSs) and Competency Units (CUs) on the basis of major duties and tasks listed in the chart and develop the full package of the competency standard document including performance criteria, underpinning knowledge and understanding, level, requirements for progress and achievement, pathways, equivalences and other conditions.

The competency standards developed shall be validated by the relevant industries/Sector Skills Councils to confirm the accuracy of the competency standards and get their feedback and endorsement.

Categorization and Levelling Competency Standards

All competency standards in the NVQ shall be categorized into "Generic", "Functional" and "Technical" and be levelled according to NVQ level descriptors. Each qualification shall include competency standards for level 1 to 4.

Review of NVQs

Review of NVQs

QDC/NAVTTTC shall assign a review date to each qualification to ensure its relevance and validity. The review dates shall be three-years from the date of industry validation, but in areas where technologies are advancing rapidly or where major changes are expected it can also be less than 3 years.

Coding of NVQs

Coding of NVQs

Each NVQ and its competency standards shall be assigned unique codes by the National Vocational Registry System as a national vocational qualification identifier. This shall be based on International Standards of Classification of Education (ISCED).

The NVQ once approved by NAVTTC will be registered and notified for information of all stakeholders.

DEVELOPMENT OF COMPETENCY BASED CURRICULUM

Competency-based curriculum shall provide overall course guidelines in relation to teaching and learning and act as the key instrument in supporting standardized formal, non-formal and informal training. Curriculum development thus aims at providing a bridge between competency standards and actual delivery of the training/teaching program and hence is an important source in the development of trainers and learner's guides.

NAVTC or TEVTAs or any other agency may constitute a Curriculum Development Committee (CDC) with the following composition and TORs (optional).

Composition of CDC

- Representative of NAVTC
- Industry representatives/SSCs
- Experts from private and public training providers
- Instructors from TVET institutions with experience, knowledge and writing skills from the relevant sector
- Certified CBT Assessor of the same sector (Allied sector)

Terms of Reference of CDC

- Examine the qualification, competency standards and level to identify requirements for curriculum
- Devise the curriculum that will support the achievement of the competency standards and the qualification
- Define the credit value of the qualification after assigning credit value to each learning unit.
- Provide supportive notes on trainers and learner's guides' writers, assessment context, critical aspects, assessment conditions and resources required for assessment.
- Ensure industry validation of the curriculum.

Crediting NVQ

The credit value of the whole qualification shall be defined by estimating the amount of time/instruction hours required to complete each competency unit and competency standard. The NVQ uses a standard credit value of 1 credit = 10 hours of learning (following Higher Education Commission (HEC) guidelines). For example:

Table 1: Assigning Credit Value to the Competency Standards

Competency Standards	Estimate of hours	Credit
Identify Design Tools	100	10
Conceive a Design Concept	200	20
Analyse Cost Effective Solutions	100	10
Edit Photos and Development of Graphics	50	5
Prepare Pre-Press Job	200	20
Perform basic Hardware Maintenance	200	20
Communicate with Others	100	10
Describe rights at the workplace	50	5

	1000	100
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The CDC shall finalize the curriculum on the basis of industry feedback and submit it to NAVTTC for approval, notification and uploading on the website for information

DEVELOPMENT OF TRAINERS AND LEARNER'S GUIDES

The Qualification Development Committee (QDC) may assign for development of Trainers and Learner's guides to any relevant institution/organization/group of professional writers/individual(s) through a contract giving them a fixed timeline.

Once the draft Trainers and Learner's Guides are developed, the CDC in consultations with NAVTTC and TEVTA shall constitute a T&L guides review committee with the following composition and TORs.

Composition

- Subject matter experts
- Trainers and instructors from the training institutions who possess relevant academic background and teaching experience
- 2-3 industry representatives for that trade,

Terms of Reference

The T&L guides review committee will check that guides don't have spelling, grammatical and technical mistakes and ensure:

- The compliance of T&L with CBTC Curriculum
- T&L supports the Learning Outcomes of the curriculum
- That the images used are proper and legally allowed
- Learning activities are aligned with learning outcomes
- Learning activities reflect the performance criteria/skills identified in the competency standards
- Learning activities support the knowledge & understanding specified against those skills
- That the trainees have adequate time to practice or apply the desired learning
- That it facilitates in getting/providing feedback on the T&L guides

6 Management of the NVQF

ASSESSMENT OF NVQS

Assessment is the key to achieve the NVQF qualification through whatever the pathway an individual is coming from. A comprehensive assessment system shall be designed that caters for the needs of all individuals whether they are coming from formal system or informal/non-formal systems. The three main objectives of NVQs assessment system shall be to:

- Provide evidence that the candidate is capable of performing the competencies being assessed according to the national competency standards through whichever the pathway an individual is coming from;
- Assure that assessment is fair, valid and consistent across the board; and
- Issue a national certificate of vocational qualification or record of achievement to individuals declared "Competent" for a full/complete qualification or in certain numbers of competency standards, respectively.

NVQs assessments are conducted to assess candidate's skills, knowledge and attitudes against set industry standards through various modes such as demonstrations, simulations, presentations, assignments, projects, creations, and scenarios. The Figure 4 shows different pathways that individuals may take to acquire a national vocational qualification.

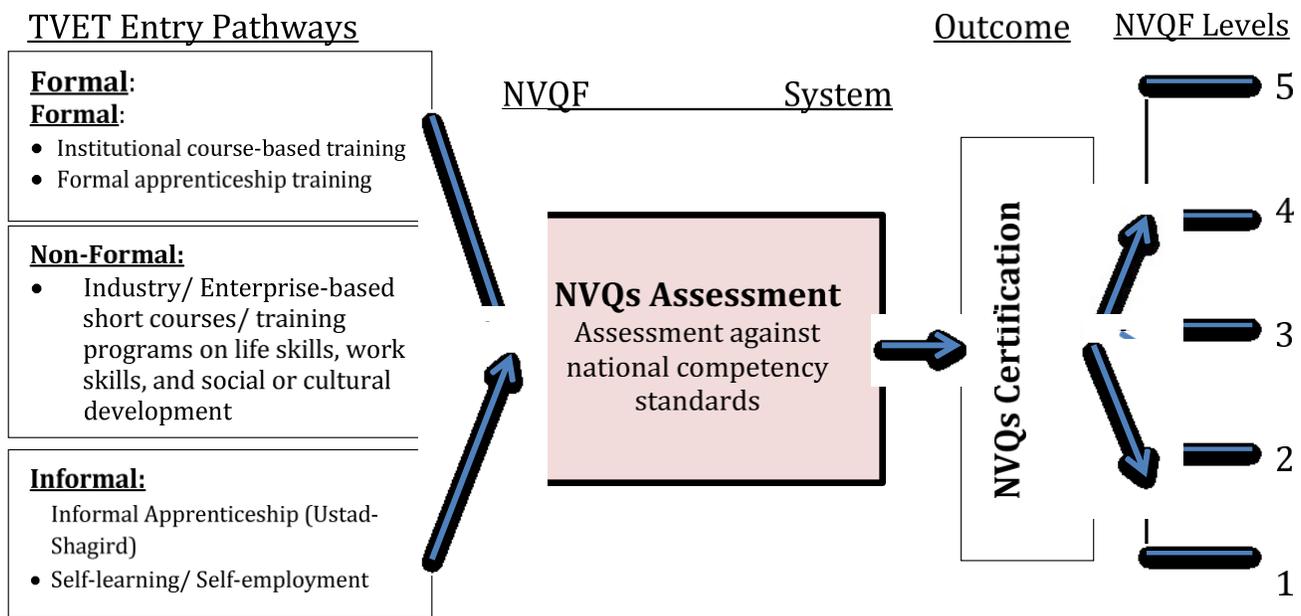


Figure 3: Pathways to achieve NVQ

Development of Assessment Guides

The process for development of assessment evidence guides shall include:

- Development of the assessment package based on the competency standards by the Qualification Development Committee (QDC) in line with national templates and guidelines provided in the Manual-1 on "Development of NVQs".

b) Review of assessment guides by NAVTTC to ensure that they are consistent with prescribed knowledge and

understanding, specific skills and performance criteria described against each competency standard. Validate the assessment guides after gaps & deficiencies, if found, are removed.

- c) Notification of the assessment guides and uploading it on the NAVTTC website for use by QABs/Assessment Centers/Assessors.

Training and Certification of Assessors

Only certified competency assessors registered with NAVTTC can conduct NVQ assessment. The process for training, certification and registration of assessors is given below:

a) Three categories of assessors will be trained, certified and registered;

- Certified Assessor (Level 2) authorized to conduct assessment
- Advanced Assessors (Level 3) authorized to conduct NVQ assessments and design assessment material
- Lead/Master Assessors (Level 4) authorized to conduct NVQ assessment, conduct Assessor's training, coaching and mentoring

Criteria for selection of instructors and trade experts from the industry to select and train the assessors under the above-mentioned categories have been described in the NVQ Operational manual 2 on "Assessment of NVQs". Training of assessors will be done by QABs and the Assessment Centers. NAVTTC will register the certified assessors in NVQ Registry system.

Accreditation of QABs and Assessment Centers

In order to ensure quality of assessment of NVQs, the Qualification Awarding bodies, the assessment centres and the TVET institutions offering NVQs, shall be accredited according to the nationally agreed criteria, guidelines and processes. The accreditation will be conducted at the following three levels.

- a) Accreditation of Qualification Awarding Bodies by NAVTTC
b) Accreditation of Assessment Centers by QABs
c) Accreditation of TVET institutions/programmes offering NVQs by NAVTTC

Separate manual on accreditation describe the procedures and processes for accreditation at the all above-mentioned three levels.

The public and private sector training institutes and industrial units having training facilities, requisite equipment and materials will approach respective QABs for accreditation as NVQ assessment centres.

Conduct of Assessment

The assessment centres shall ensure availability of all necessary pre-requisites prior to the conduct of final assessment by the certified assessors appointed by the respective QABs. It will involve preparation of information of trainees who have completed all the requirements for integrated assessment. The detail is given in the Manual-2 on "Assessment of NVQs".

QABs will prepare schedule of assessment and disseminate it to all concerned institutes. Number or panel of assessors will be determined according to the number of candidates and it will be dependent upon the type of trade being assessed and facilities available. To ensure industry involvement, relevant technical representative from the specific industry will be assigned as an observer in the assessment panel.

The assessors will provide briefing/instructions to each candidate on assessment in accordance with assessment evidence guide, conduct assessment as per instructions given in the integrated assessment evidence guide and fully observe the professional code of conduct. They will also check folders of modular/ formative assessment in case some further information and evidence is needed during the integrated assessment. Finally, the assessors will summarize assessment and record final decision about the candidate as per format provided to them in the integrated assessment evidence guide.

The assessors will submit the result of the assessment to the respective QAB.

Certification of NVQs and Record Keeping

NAVTC as per its Act 2011 shall devise a system for award of NVQ certification to the successful candidates in collaboration with QABs.

The QABs and the Assessment Centers will follow the system devised by NAVTC and use only nationally agreed/approved NVQs certificate template for award of full qualifications and for award of record of achievement respectively.

The "Record of Achievement" will be issued by the assessment centres to those candidates who have been declared "Competent" in few competency standards during modular assessment done by the trained instructors and who don't want to continue further to pursue for full qualification.

Re-assessment and Appeals against Assessment

The candidates declared "Not-yet-Competent" would be informed by the assessors, that they can appear for re-assessment without participating in any further obligatory training. However, they may benefit from further training or practice before applying for re-assessment but re-assessment will not be restricted by a requirement of re-training.

Candidates may file an appeal against assessment along with evidence to the respective QAB.

Moderation of Assessment

The QABs will conduct moderation of assessment after an integrated assessment using assessment evidence guides. This post-assessment moderation shall ensure that the assessment that took place and the evidence collected on which the judgment was made, met the principles of moderation, the requirements of the competency standard and the expectations of the industry.

The principles of moderation will include checking and verifying that evidences collected were:

- a) **Sufficient** as a proof that candidate met with all requirements;
- b) **Valid** that matched the requirements of the competency standards being assessed;
- c) **Reliable** for repeatedly use in an unchanging situation to produce constant results;
- d) **Fair** irrespective of working environments, language barrier, poor instructions, special needs etc. and
- e) **Consistent** that provides different assessor to make consistent decisions about candidates' competence at different times, and on different occasions.

The moderators in QABs will conduct moderation meetings of selected assessors who were involved in those assessments and will use prescribed guidelines and checklist for preparation of summary of moderation meetings findings. NAVTC will also organize a moderation meeting for all QABs at national level to ensure fair, valid and consistent NVQs assessment across the country.

Recognition of Prior Learning (RPL)

The NVQs assessment is not limited to just the formal pathway. However, there are informal and non-formal pathways that individuals may follow for assessment for NVQs. The NVQF provides following pathways and progression for RPL entry to acquire NVQs certification at different levels (Figure 5).

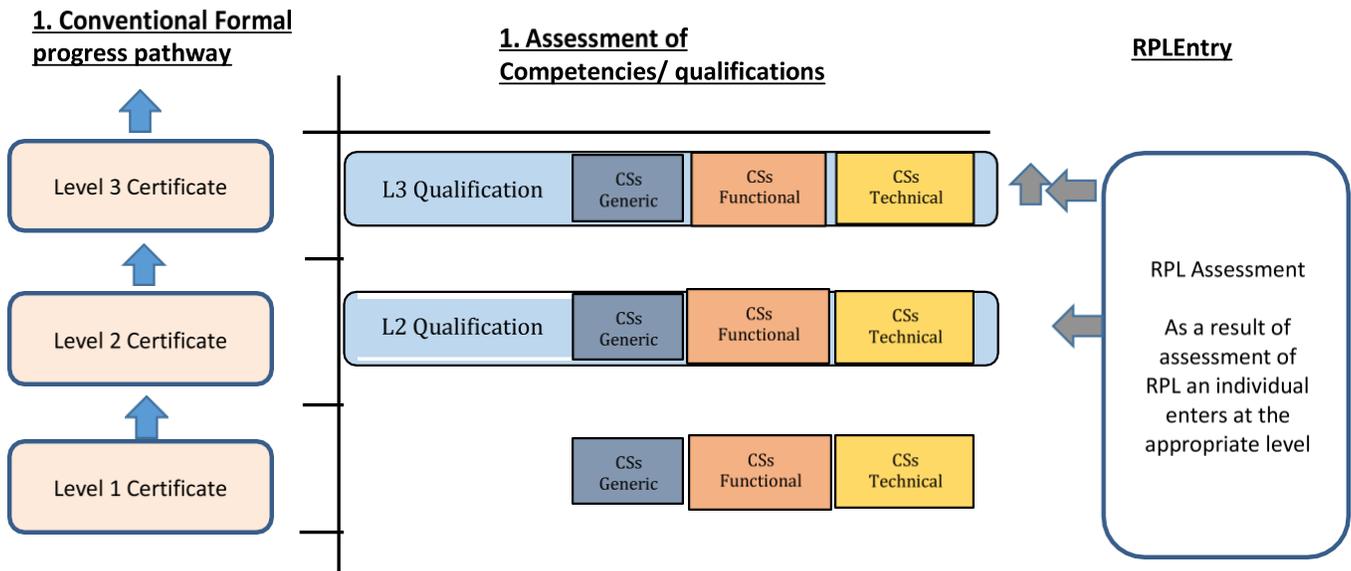


Figure 4: RPL Entry and progression in the NVQF

All NVQs will be composed of Competency Standards, which are combination of Generic, Functional and Technical.

Candidates entering through RPL system shall be assessed for their skills against those standards and may qualify for either national vocational certificate or full qualification if they are declared "Competent" or "Record of Achievement" if they are declared competent in certain numbers of competency standards.

RPL assessments will be carried out and managed by NAVTTC and the NVQF Support Units (NSUs) of TEVTAs, Qualification Awarding Bodies (QABs) and by the trained supervisors of the Assessment Centers.

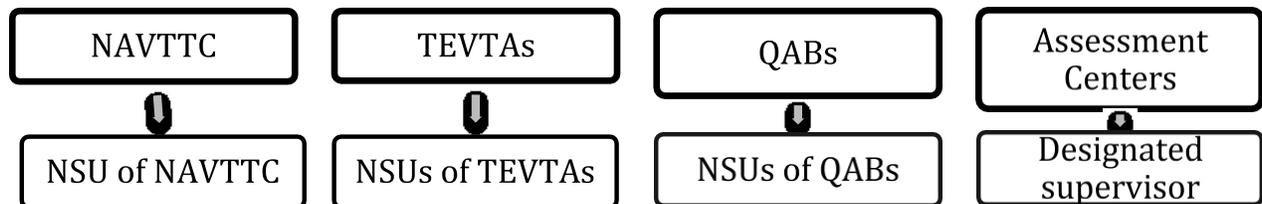


Figure 5: Management of RPL

Operational Manual-2 describes in detail the processes and associated guidelines for conducting NVQs assessment, moderation of NVQs assessment to ensure fairness, validity and consistency of assessment and recognition of prior learning for NVQ certification.

10 Management of the NVQF

MANAGEMENT OF NVQF

The national and provincial TVET service providers will jointly manage implementation of NVQs through a well-defined structure. An "NVQF Management Committee" (NMC) at the national level will overall manage NVQF implementation and provide policy directions to ensure that NVQ level structure is appropriate, objectives are being met, management of the NVQ system is effective and efficient and employers are satisfied with the quality of NVQ graduates.

Management Structure

The NVQF will be managed through the following structure (Figure 7).

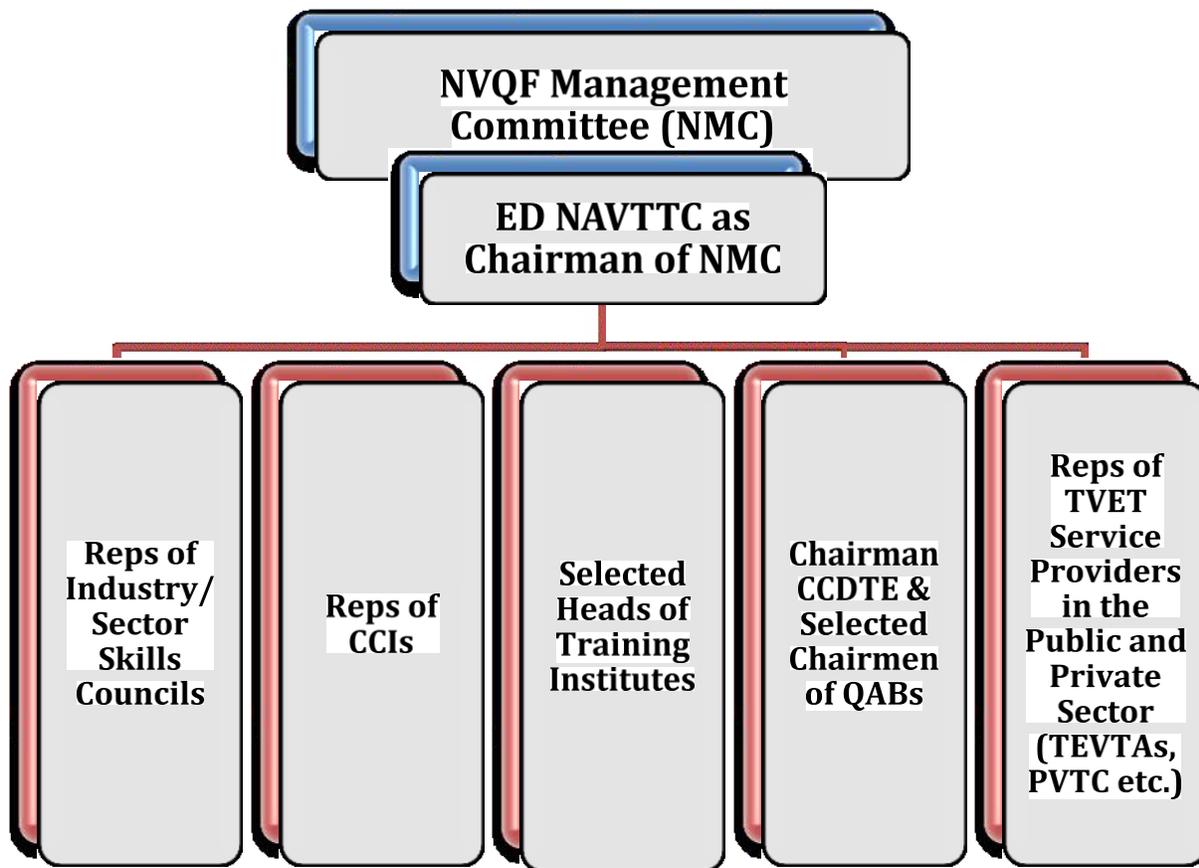


Figure 6: Management Structure of the NVQF

NAVTTCA at the national level responsible for facilitation, coordination and regulation of technical education and vocational training in the country under the NAVTTC Act of 2011 will act as secretariat of the NVQF Management.

The composition and terms of reference of NMC have been given in the Manual-3 on "Management of NVQs", which will be

notified by NAVTTC in consultations with allstakeholders.

Management of the NVQF 11

The NMC will provide overall management and policy directions on management and implementation of NVQF, oversee that NVQF objectives are appropriately being met and employers are satisfied with quality of NVQs graduates, ensure efficiency, consistency and integrity of the NVQF operations as per guidelines prescribed in the operational manuals and align NVQs development and introduction as per national skill demand and trends of the international labour markets.

The NVQF management bodies i.e. NAVTTC at the national level, TEVTAs and QABs at the provincial levels, Punjab Vocational Training Council, Lahore and TVET service providers in the private sector will establish NVQF Support Units (NSUs) to manage and coordinate implementation of national vocational qualifications in the institution under their jurisdiction. NSU of NAVTTC will coordinate with NSUs of all provincial TVET service providers (TEVTAs, QABs and Private Sector TVET bodies) and lead all activities related to management, implementation and monitoring of the NVQs.

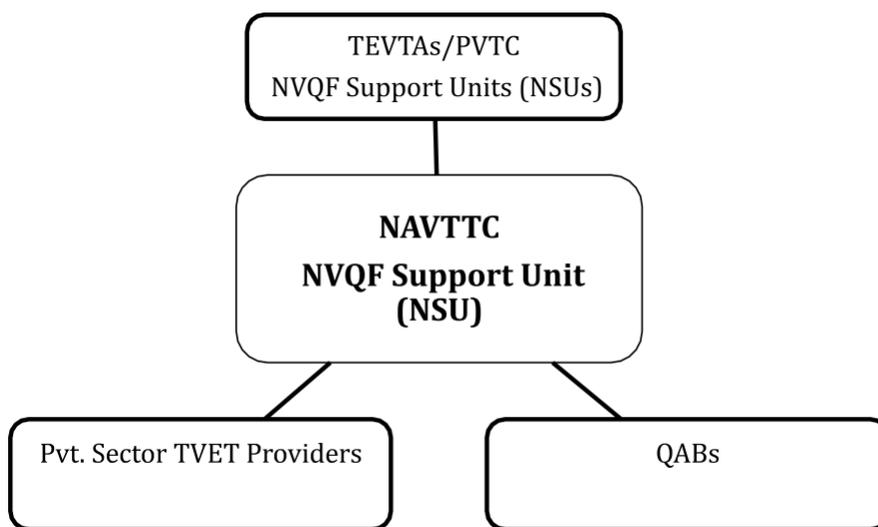


Figure 7: NVQF management bodies

Provincial TVET authorities in the public and private sectors such as TEVTAs and PVTC, Lahore will play an important role in management of the NVQF. While they will participate in policy discussions in NMC meetings; they also have a particular role in supplying the resources needed by the institutions introducing NVQs. Manual-3 on "Management of NVQs" describes roles and responsibilities of NSUs.

Managing NVQs Equivalences

The equivalence of national vocational qualifications will be managed for the following four Equivalence Areas.

- a) Area-1: Equivalence within the national vocational qualifications.
- b) Area-2: Equivalences of national vocational qualifications with qualifications acquired on qualification frameworks of other countries
- c) Area-3: Equivalence of national vocational qualifications with traditional on-going VET courses.
- d) Area-4: Equivalence of national vocational qualifications with General and Higher Education Qualifications/Levels. Considering equivalences within the NVQs (Area-1) and with qualifications acquired on qualification frameworks of other countries (Area-2) is comparatively easy to handle and start with. Granting equivalences of NVQs with existing (Traditional) vocational qualifications such as DAE, G-III, G-II and G-I (Area-3) and with general and higher education qualifications (Area-4) will evolve gradually with time at later stages.

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NAVTTChasbeenmandatedunderitsAct2011(Clause7(g))tomanageanddetermineequivalencesandrecognitionof diplomas,certificatesawardedbytheinstitutionswithinthecountryandabroad.TheCommitteeofChairmenandDirectors ofTechnicalEducation(CCDTE),whichalreadyexists,willbestrengthenedandactivatedtomanage,decideandgrant equivalencesatallthefourareasmentionedabove.TheInterBoardCommitteeofChairmen(IBCC)andHECwillbe consultedforpreparationofrules,criteriaortableofequivalencesforequatingNVQswithgeneralandhighereducation respectively.

Following is the structure of NVQs equivalence management by CCDTE.

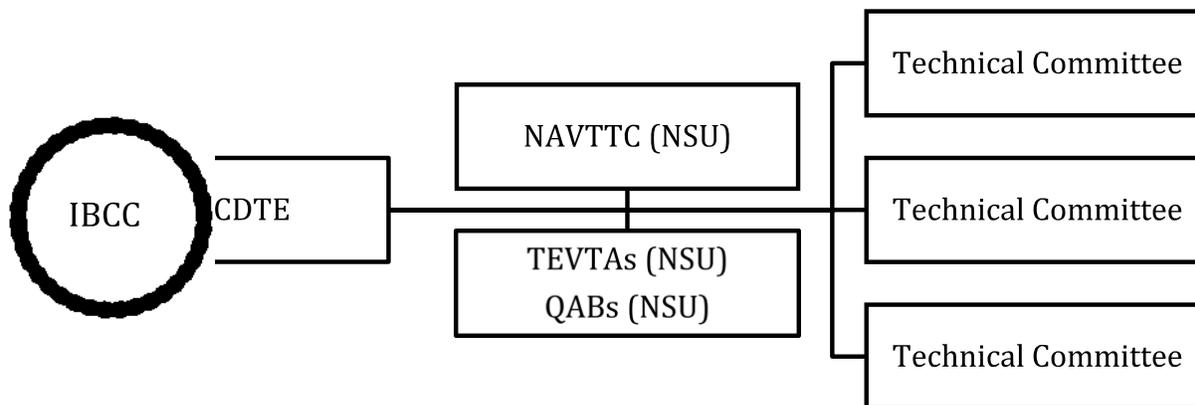


Figure 8: NVQs equivalence management by CCDTE

The CCDTE will:

- a) Preparerules,criteriaortableofequivalenceforequatingNVQsatallfour equivalenceareasmentionedabove;
- b) Developandapproveallproceduresforprocessingofequivalenceapplications,developmentofapplicationformsand instructions for submission of applications;
- c) Grant equivalence of NVQF qualifications on all four areas mentioned above;and
- d) Coordinate among QABs and Sector Skill Councils/TEVTAs/PVTC/Private TVET service providers and with IBCC on matters related to NVQsequivalences.

Manual-3 describes procedures and processes for grant of NVQ equivalences.

Monitoring and Evaluation of NVQs

TheNationalSkillsStrategy(NSS)placesimportanceonM&Easawaytomeasureprogressandevaluateperformancein theTVETsector.Inadedicatedsection,NSSdefinesanumberofkeyperformanceindicatorstowardsachievingthe objectivesofprovidingrelevantskillsforindustrialandeconomicdevelopment.M&Ewillthusbeacomponentamongthe five major interrelated and interconnected systems for quality assurance in the National Vocational QualificationsFramework.

SinceintroductionofNVQsisamajorparadigmshifffromtheexistingtraditionalTVETqualifications,itentailsbasic changesandmind-setforwhichanappropriateMonitoring&Evaluationsystemwillbein-placetogetfeedbackand accordingly take appropriate steps for adjustment andimprovement.

The scope of M&E is shown in the Figure 10 below.

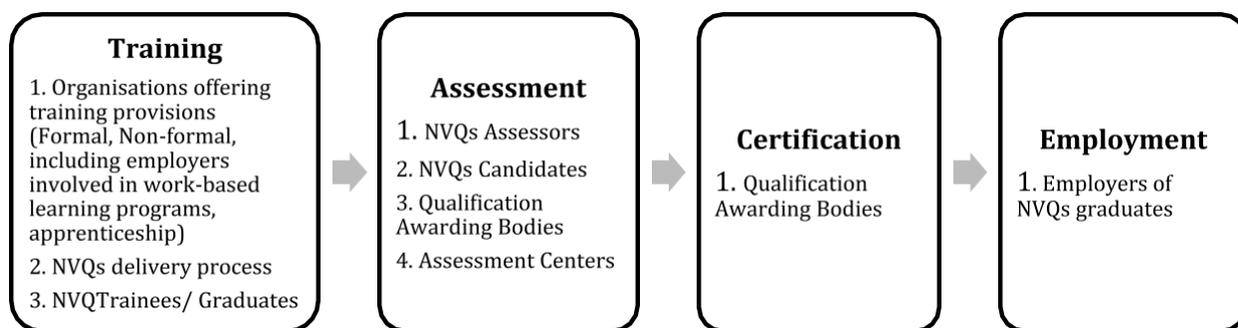


Figure 9: Scope of M&E – Collection of Feedback from Stakeholders

The major players in undertaking M&E activities will be NAVTTC at the national level and provincial TEVTAs and QABs at the provincial levels. Key indicators will be chalked out on the basis of which these bodies will devise instruments/tools to collect the data and analyse it for reporting and making decision at the level of NVQF Management Committee.

Managing NVQF Review and Improvement

To ensure that operational procedures are working efficiently and smoothly, they are effective in meeting the skill demand defined by the stakeholders and that related operations are consistent with accepted international practices, following three systematic NVQF reviews will be conducted over a 5-year cycle (Table 1):

- a) NVQF Operational System Review to be conducted annually
- b) NVQF Effectiveness Review to be conducted every 2-years
- c) NVQF International Review to be conducted every 5-years

Table 2: NVQF review cycle

	Year 1	Year 2	Year 3	Year 4	Year 5
NVQF Operational Review					
NVQF Effectiveness Review					
NVQF International Review					

Managing NVQ Registry

The National Vocational Qualification registry system will be designed to provide information for institutions, TVET agencies and students on the following areas;

- a) Overall information on national vocational qualifications (the qualification summary sheet).
- b) Registered assessor's pool and their profile
- c) Competency standards and curriculum.
- d) Information of students declared "Competent" with certification status.
- e) E-forms for requesting NVQs development or review for downloading and online submission to NAVTTC

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- f) Information of QABs assessing and certifying NVQs
- g) Students registered for NVQs
- h) Status of formative assessment
- i) Schedule of integrated assessments

The National Vocational Qualifications Registry will be accessible to the following groups with different scope of access and usages.

- a) NAVTTC, provincial TVET organizations (TEVTAs, PVTC, Directorates etc.)
- b) Qualification Awarding Bodies
- c) Students
- d) TVET institutes

The National Vocational Qualification Registry System will complement the National Skill Information System, which additionally provides information on TVET system of Pakistan, TVET institutions, their existing qualifications and enrolment capacity, job placement services and labour market information system.

QUALITY ASSURANCE

The NVQF Quality Assurance (QA) system shall consist of five major interrelated and interconnected systems; 1) Quality assurance of NVQF qualifications 2) Quality assurance of the delivery and conduct of training 3) Quality assurance of assessment, 4) Quality assurance of the NVQF management system and 5) Monitoring and evaluation of the NVQF (Figure 11).

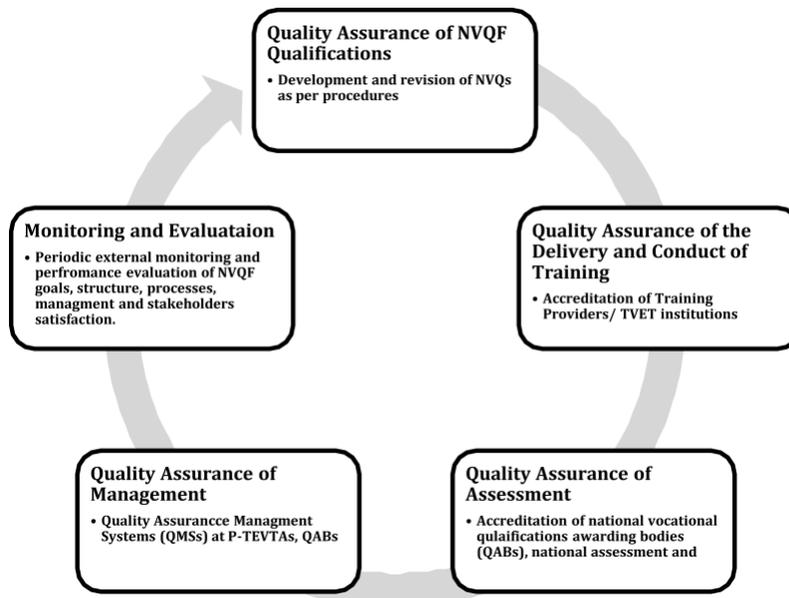


Figure 11: Five Components of the NVQF Quality Assurance System

Quality assurance of NVQF qualifications

All qualifications will be developed and/or revised through the prescribed processes as stipulated in the operational Manual-1. These processes shall ensure they meet the skill demand of the employer and that competency standards and curricula are developed with built assessment plans and finally levelled and registered on NVQF. The summary sheet will be prepared for each qualification that contains title, level, total credit, competency units and level and credit hours allocated etc. for ready reference of the stakeholders/ users. NAVTTC will coordinate and manage the development and revision of qualification in collaboration with provincial stakeholders.

Quality assurance of the delivery and conduct of training

QABs responsible for undertaking NVQs assessment will be accredited by NAVTTC in collaboration with TEVTAs. QABs will further accredit the assessment centres to ensure they have requisite infrastructure and resources to meet the assessment requirements. The maintenance of accreditation status of QABs and assessment centres will be through the periodic surveillance audit done by the team of NAVTTC and QAB's certified auditors respectively. In addition, NAVTTC will also accredit TVET institutions responsible for delivering NVQs to ensure they have proper resources and facilities in delivering NVQs. The certificate of accreditation will be withdrawn if the accredited institution fails to abide by the prescribed accreditation requirements and the minimum standards.

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Quality assurance of assessment

QABs will be the major assessment and certification bodies for NVQs. The requirements for accreditation i.e. performance criteria and procedures for accreditation will be set out by NAVTTC in their accreditation manual and will be circulated to QABs. Similarly QABs will also set out performance criteria and procedures for accreditation of assessment centres. Besides, NAVTTC and QABs will ensure that a pool of trained and qualified assessors is maintained who, while assessing students, use standardized tools to document performance. All QABs will follow assessment procedures and national certification system developed mutually in consultations with NAVTTC.

Quality assurance of the management

NAVTTC, at the national level, and TVET service providers at the provincial levels are responsible bodies for management of the operation of NVQF. These bodies will require having a coherent organizational quality management system comprising policies, procedures and processes to ensure the continued relevance, appropriateness and effectiveness of the education, training and assessment services are offered. They will establish NVQF support cells manned by the professional trained staff. To ensure international comparability of NVQs, NAVTTC will join appropriate international education and training quality assurance networks and participate in the peer review processes of the international quality assurance associations through a cyclic review system.

Monitoring & Evaluation

NAVTTC, through periodic external monitoring and evaluation in collaboration with stakeholder institutions, will evaluate the performance of the NVQF and ensure that:

- a) The NVQF goals are still appropriate;
- b) The goals are being met;
- c) The structure of the NVQF is still appropriate;
- d) The quality criteria for registering qualifications, accrediting training providers and delivering assessment are still relevant;
- e) The management of the NVQF system is effective and efficient; and
- f) Employers are satisfied with the quality of the graduates with NVQF qualifications.

PROVISIONS OF FOREIGN QUALIFICATIONS IN PAKISTAN

There is a need to ensure portability and mobility of foreign qualifications in Pakistan and their equivalence with NVQs. It will not only create a healthy competitive environment with NVQs but also will contribute towards up-skilling of Pakistan NVQs.

However, organisations marketing or providing training that leads to foreign qualifications must not make claims that the foreign qualification is equivalent to any level of the NVQ. Equivalent to any particular qualification on the NVQF without having had the foreign qualification reviewed by the NAVTTC against the standards of the NVQF.

The organisations that are providing foreign qualifications must provide documentary evidence to NAVTTC that:

- a. The foreign qualification is legitimately recognised under the qualifications framework of the source country, and
- b. The organisation providing training for the foreign qualification in Pakistan is actively linked to the quality assurance system of the foreign qualification. This can be either;
 - In the case of a franchised provider being under the quality assurance system of the partner organisation in the source country, or;
 - As a member or associate member of an international association of specialist TVET providers where the association has been accredited by an internationally recognised quality assurance body specialising in multi-state cross-border provision, or;
 - As a stand-alone organisation with independent accreditation through the quality assurance system of the source country

NAVTTC will assist the process through developing dialogue with qualifications authorities and bodies in key foreign countries to clarify and notify the appropriate foreign quality assurance bodies related to key international qualifications.

RELATIONSHIP WITH INTERNATIONAL NVQS

The Pakistan National Qualifications Framework, including the NVQF, has been developed on the pattern of the European Qualifications Framework (EQF) to facilitate alignment with the EQF and other key national and regional qualifications frameworks.

NAVTC, as the TVET apex body in Pakistan, is the contact point for negotiations with national and regional qualifications frameworks to establish recognition of NVQF qualifications, to establish equivalencies, and to move towards mutual recognition of qualifications. Representatives of provincial authorities and relevant industry sector groups will also participate at relevant points.

Priority will be given to establishing links with the EQF and the frameworks of key individual member states, SAARC regional framework and with the individual member countries, the qualifications frameworks of the UAE and other Middle Eastern countries.

APPENDICES

Appendix-1: NVQF Level Descriptors

Level	Knowledge and understanding	Descriptors Skills	Responsibility	Qualification type
Level 1	Elementary knowledge of an area of work or study with safety procedures	Limited practical skills required to carry out single-process tasks and solve routine problems using simple rules and tools	Work or study under direct supervision with limited autonomy	National Vocational Certificate Level 1
Level 2	Basic knowledge of readily available facts, processes and general theory of an area of work or study	Basic practical skills required to complete tasks and solve problems by selecting and applying basic methods, tools, materials and information	Take responsibility for prioritising and completing tasks in work or study under indirect supervision with some autonomy and adapt own abilities when solving problems	National Vocational Certificate Level 2
Level 3	Broad theoretical knowledge and interpretation of available information in relevant contexts within an area of work or study	Broad range of well-developed mental and practical skills required to plan and complete multi-stage tasks and generate optimum solutions to specific problems in a field of work or study	Plan and manage own work and/or supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities	National Vocational Certificate Level 3
Level 4	Comprehensive theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	Comprehensive range of mental, technical and practical skills required to complete complex tasks and develop creative solutions to abstract problems	Exercise full responsibility for management and supervision in contexts of work or study activities within well-defined boundaries and where there is unpredictable change Provide inputs to review and develop performance of self and others	National Vocational Certificate Level 4
Level 5	Advanced theoretical knowledge with analytical interpretation of an area of work or study and an awareness of the boundaries of that knowledge	Specialist level of mental, technical and practical skills required to complete variable complex tasks and develop innovative solutions to abstract and complex problems in an advanced field of work or study	Carry out planning and development of courses of action with complete accountability Exercise management and supervision in work or study activities where there is unpredictable change Review and develop performance of self and others	Diploma of Associate Engineer (DAE)

1 The Pakistan National Vocational Qualifications Framework has been developed on the pattern of the European Qualifications Framework (EQF) to facilitate alignment with the EQF and other key national and regional qualifications frameworks. The eight reference levels are described in terms of learning outcomes (LOs) under "Knowledge & understanding", "Skills", and "Responsibilities". They define the complexity of LOs from

basic knowledge, basic skills and working under the direct supervision (level 1) to advanced knowledge, specialist technical skills and supervision & management responsibilities (level5).

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GLOSSARY

Term	NVQF Meaning
Accreditation	Procedures and processes observed to ensure that the institutes/ organizations meet minimum criteria to manage and conduct NVQ training and assessment
Assessment Evidence Guide	Guide prepared at the national level for use by the assessors for modular and integrated assessment. It consists of summary of assessment outcomes and list of tasks to be performed by the trainees
Assessment System	Procedure, processes and guidelines for undertaking NVQ assessment.
Assessment Task	A problem, a project or an activity to be performed by the individual under the prescribed competency standard
Certified Assessors	Assessors who qualified Level-4 qualification, which has been developed, approved and notified by NAVTTC.
Competency Standards/ Competency Standard Package	A statement specifying the required performance to a defined standard at which is determined by industry and specifies the performance required to be able to work effectively. In DACUM table, these are the major "Duties". They are further divided in to "Generic", functional" and "Technical".
Competency Units	A sub-component of the competency standard containing the group of related competent performances to perform a particular function or task in An individual who have been declared successful through an integrated
Competent	QABs and qualify for NVQ certificate assessment organized by
Consistent Assessment	An assessment based on evidence that provide different assessors to make consistent decisions about candidates' competence at different times, and on different occasions
Credit hours	A measure of the volume or amount of learning time needed to achieve the competency. In the NVQF, one credit is equivalent to 10 hours of learning.
Curriculum	A systematic plan, based on the competency standards and competency units that sequence learning and assessment activities to enable trainees to gain the competencies required to achieve the qualification.
DACUM (Developing A Curriculum)	A method of analysing jobs and occupations that results in the production of a chart listing the duties, tasks, and related information about the job. The chart provides a basis for developing competency standards and competency units
Equivalence	Refers to equivalence between and within the qualifications which allows learners to accelerate the acquisition of qualifications within the same qualifications framework or can be used in facilitating international cross recognition.
Fair Assessment	gathered fairly irrespective of working environments, language barrier, poor instructions, special needs etc.
Formal Pathway	Learning or achievement acquired by an individual through a structured curriculum, which was offered in a formal technical and vocational institute
Formative Assessment	Assessment performed by the trainer after teaching each module of the TLM or competency standard.
Generic skills	Competencies common to industry sectors and often form the core of several related qualifications. It includes, communication skills, teamwork skills, interpersonal skills, lifelong learning skills, ability to apply skills etc.

Horizontal Progression	Refers to horizontal progression of individual to acquire further education in the same level qualifications
Informal Pathway	Learning or achievement acquired by an individual through work place/

Management of the NVQF 21

	labour market experience or traditionally called “Ustad-Shagird” system
Knowledge and Understanding	Component of the competency standard and a NVQF level descriptor that describe what an individual knows and understands (the body of facts, principles, theories, practices) related to the particular qualification at that level.
Learning Elements	Learning elements are derived from “knowledge and understanding” part of the competency standards which reflect the underpinning knowledge required to achieve the learning units specified in the curriculum
Learning Outcomes	A unique statement that describes knowledge, skills/competencies and an individual has acquired and/or is able to demonstrate after completion of a learning process, either through formal or non-formal/informal means.
Learning Units	A sub-component of a Module describing a specific grouping of learning outcomes relating to one or more related competencies
Lesson Plan	A plan prepared by the trainer to teach complete modules with detail of teaching and learning activities to be conducted, methodologies to be used and undertaking formative assessment to ensure learning has taken place.
Levels (NVQF Levels)	Levels means NVQF level qualification (semi-skilled worker) and successively progress up to level 8.
Lead Assessors	Assessors who qualify Level-5 qualification, which has been developed, approved and notified by NAVTTC. They are to be used as trainers of level-4 certified assessors
Moderation Checklist	Checklist that provides areas and indicators to ensure that the assessment made was valid, reliable and consistent and that the correct processes were followed to arrive at the assessment outcome.
Moderation Summary	Summary of moderation meeting outcomes for future reference and use by the assessors and QABs
Moderation System	A system that provides a mechanism to judge and ensure that the assessment made is valid, reliable and consistent across the country
Module	A sub-component of the curriculum that defines a sequence of related learning experiences related to one or more Competency Units. They are derived from the Competency Standards.
Monitoring and evaluation system	System that provides processes and guidelines for undertaking NVQF monitoring and evaluation for efficient and smooth management and implementation at national and provincial levels
National Management System	System/ structure of management of NVQF at national and provincial levels to ensure quality
National Skill Information System	System that provides information about the whole TVET system encompassing TVET qualifications, institutions offering TVET qualifications, enrolment, instructors, facilities, pass outs, employment opportunities, job placement etc.
National Vocational Qualifications	Qualifications approved and notified at the national level by NAVTTC and are registered under the National Vocational Qualification Framework
Not-yet-Competent	An individual who have not been declared successful through an integrated assessment organized by QABs and didn't qualify for NVQ certificate
NVQF Equivalence System	System of providing a framework, processes and guidelines for granting equivalence of NVQ at the four prescribed levels
NVQF operational system	System that contains manuals with guidelines and processes for management of NVQF, Development of NVQs and assessments of NVQs
Non-formal Pathway	Learning or achievement acquired by an individual through an un-structured curriculum, which was offered at work place or enterprise that didn't lead to an officially accredited qualification
NVQ Registry	System of maintaining and updating information about NVQs,

	Management Bodies at the national and provincial levels, NVQs assessment and assessor information and students graduated with NVQs
Monitoring & Evaluation system	System that provides processes, guidelines and indicators for undertaking NVQF monitoring and evaluation for efficient and smooth management and implementation at national and provincial levels
Organizational Management System	System that shows national and provincial organizations involved in management of NVQF and their role and responsibilities in managing the development and assessment of NVQs
NVQF Level Descriptors	A statement that describes the main learning outcome under “Knowledge & understanding”, “skills”, and “responsibility” relevant to the qualification at that particular level.
NVQF Level	Level describes the pathway for horizontal and vertical progression under a set of descriptors that indicate the complexity of the skills and knowledge that the learner will have achieved.
Pathway	Indicate path to the students to move through qualification levels with full or partial recognition for the qualifications and/ or learning outcomes they already have.
Performance Criteria	Component of competency standard and NVQF level descriptor which specify the critical evidence for the purpose of assessment to ascertain that the individual has acquired and is able to do, to meet the requirement of particular competency unit.
Portfolios	Documentary evidences such as certificates of trainings, reference letters, projects/ products, photos, videos as proof of acquired skills for NVQ certification
Quality Assurance Management System or Quality Management System	One of the Quality management component to assure NVQF is managed through well-planned procedures and processes consistent with international standards
Qualification Awarding Bodies	Bodies which are responsible for assessment and certification of NVQs as mandated under their Act/Functions
Qualification Summary Sheet (Qsheet)	A summary of qualification that describe the title, level, total credit hours, competency standards with level and credit hours and other necessary information in a standardized format as a quick reference for all stakeholders.
Qualification Registration	Refers to registration of Qualification on NVQF to make it credible and acceptable within the employment market with the backing of both the relevant industry and Government of Pakistan.
Recognition of Prior Learning (RPL)	Process of recognition of already gained skills of the individuals (with or without portfolios) to enable them to acquire NVQ after going through NVQ assessment system
Reliable Assessment	Assessment based on evidences that can be used repeatedly in an unchanging situation to produce constant results
Technical Committees	Committee constituted by NAVTTC on case-to-case basis to finalize findings and recommendations on equivalences cases for submission in CCQAB meeting for final decisions
TLM	Teaching and Learning Materials. A package of materials that support the teaching programme and the learning activities that are aimed at helping the learner achieve the competencies. It includes trainer and learner’s guides
TVET Service Providers	National and provincial TVET bodies in the public and private sector that are responsible for management, development and assessment of NVQs. They include NAVTTC, provincial TEVTAs, QABs in the public sector and bodies like PVTTC, SDC, SSC and other private sector institutions providing NVQs across the country
Valid Assessment	Assessment based on evidences that match the requirements of the competency standards being assessed

National Vocational & Technical Training Commission (NAVTTTC)
5th Floor, Evacuee Trust Complex, Sector F-5/1, Islamabad
Tel: +92 51 904404, Fax: +92 51 904404, Email: info@navttc.org
Website: www.navttc.org



NATIONAL VOCATIONAL & TECHNICAL TRAINING COMMISSION
Govt of Pakistan

NAVTTTC HQrs, (Skill Standards & Curricula) Wing
5th floor, Evacuee Trust Complex, F-5/1, Islamabad, 051-9044255, Fax: 051-9044251



Islamabad 3rd September, 2019

NOTIFICATION

No. F. 5(13)/2018-DD (TE): In pursuance of sub-section (d) of section-6" Functions of the Commission" National Vocational & Technical Training Commission (NAVTTTC) Act-2011, NAVTTTC is pleased to approve and notify following qualifications in seven (07) trades for Level 1-5 under National Vocational Qualification Framework (NVQF), which have been developed in compatibility with latest global trends in the fields and fulfilling requirements of competency based training and assessment (CBT&A) system. The qualifications have been developed and validated in collaboration with TEVTAs, QABs, industry and other relevant stakeholders:-

S#	National Vocational Qualifications
1.	National Qualification Level-5 diploma in Artificial Intelligence
2.	National Qualification Level-5 diploma in Robotics Technology
3.	National Qualification Level-5 diploma in Automation & Process Control
4.	National Qualification Level-5 diploma in Mechatronics Technology
5.	National Qualification Level-5 diploma in Water Quality & Resource Management
6.	National Qualification Level-5 diploma in Retail and Merchandize Management
7.	National Qualification Level-5 diploma in Printing & Publishing Technology

2. All the TVET related institutions / organizations are required to implement aforementioned qualifications so that a uniform and standardized TVET qualification system is established in Pakistan and efforts are made for international equivalence / recognition of these qualifications.
3. Competency Standards of the above-enlisted qualifications can be accessed at NAVTTTC's website (www.navttc.org).

(Muqem Islam)

Director General (Skill Standards & Curricula)

Phone: 051-9215385

Distribution:

1. Federal Secretary, Ministry of Federal Education & Professional Training, Govt of Pakistan
2. Federal Secretary, Ministry of Overseas Pakistanis and Human Resource Development, Govt of Pakistan, Islamabad
3. Federal Secretary, Ministry of Industry and Production, Govt of Pakistan, Islamabad
4. Federal Secretary, Ministry of Textile Industry, Govt of Pakistan, Islamabad
5. Federal Secretary, Ministry of Commerce, Govt of Pakistan, Islamabad
6. Federal Secretary, Ministry of Railway, Govt of Pakistan, Islamabad
7. Federal Secretary, Ministry of Climate Change, Govt of Pakistan, Islamabad
8. Federal Secretary, Ministry of Religious Affairs, Govt of Pakistan, Islamabad
9. Federal Secretary, Ministry of Communication, Govt of Pakistan, Islamabad
10. Federal Secretary, Ministry of Aviation Division, Govt of Pakistan, Islamabad
11. Federal Secretary, Ministry of Science & Technology, Govt of Pakistan, Islamabad
12. Chairperson, Punjab Technical Education and Vocational Training Authority (P-TEVTA), Lahore



NATIONAL VOCATIONAL & TECHNICAL TRAINING COMMISSION
Govt of Pakistan

NAVTTTC HQrs, (Skill Standards & Curricula) Wing
5th floor, Evacuee Trust Complex, F-5/1, Islamabad, 051-9044255, Fax: 051-9044251



Islamabad 31st May, 2019

NOTIFICATION

No. F. 5(13)/2018-DD (TE): In pursuance of sub-section (d) of section-6" Functions of the Commission" National Vocational & Technical Training Commission (NAVTTTC) Act-2011, NAVTTTC is pleased to approve and notify following qualifications in twenty (20) trades for Level 1-5 under National Vocational Qualification Framework (NVQF), which have been developed in compatibility with latest global trends in the fields and fulfilling requirements of competency based training and assessment (CBT&A) system. The qualifications have been developed and validated in collaboration with TEVTAs, QABs, industry and other relevant stakeholders:-

S#	National Vocational Qualifications
1.	National Qualification Level-5 diploma in Automobile Technology
2.	National Qualification Level-5 diploma in Civil Technology
3.	National Qualification Level-5 diploma in Construction Technology
4.	National Qualification Level-5 diploma in Information & Commutation Technology (ICT)
5.	National Qualification Level-5 diploma in Garment Manufacturing Technology
6.	National Qualification Level-5 diploma in Electrical Technology
7.	National Qualification Level-5 diploma in Electronics Technology
8.	National Qualification Level-5 diploma in Instrumentation Technology
9.	National Qualification Level-5 diploma in Computer Aided Design & Manufacturing (CAD /CAM)
10.	National Qualification Level-5 diploma in Mechanical Technology
11.	National Qualification Level-5 diploma in Graphics Designing
12.	National Qualification Level-5 diploma in Heating, Ventilation, Air-conditioning & Refrigeration (HVACR) Technology
13.	National Qualification Level-5 diploma in Media Production
14.	National Qualification Level-5 diploma in Hotel Management
15.	National Qualification Level-5 diploma in Professional Chef
16.	National Qualification Level-5 diploma in Tourism Management
17.	National Qualification Level-5 diploma in Hair & Beauty Services
18.	National Qualification Level-5 diploma in Fashion Designing
19.	National Qualification Level-5 diploma in Ceramics Technology
20.	National Qualification Level-5 diploma in Telecom Technology

2. All the TVET related institutions / organizations are required to implement aforementioned qualifications so that a uniform and standardized TVET qualification system is established in Pakistan and efforts are made for international equivalence / recognition of these qualifications.

3. Competency Standards of the above enlisted qualifications can be accessed at NAVTTTC's website (www.navttc.org).

(Muqem Islam)

Director General (Skill Standards & Curricula)

Phone: 051-9215385

Distribution:

1. Federal Secretary, Ministry of Federal Education & Professional Training, Govt of Pakistan
2. Federal Secretary, Ministry of Overseas Pakistanis and Human Resource Development, Govt of Pakistan, Islamabad
3. Federal Secretary, Ministry of Industry and Production, Govt of Pakistan, Islamabad
4. Federal Secretary, Ministry of Textile Industry, Govt of Pakistan, Islamabad



**NATIONAL VOCATIONAL AND
TECHNICAL TRAINING COMMISSION
GOVT OF PAKISTAN**

5th Floor, Evacuee Trust Building, F/5-1
Islamabad, Ph: 051-9215385 Fax : 051-9206638



Dated: 27th September 2019

NOTIFICATION

No.F.2(1)/2016-AD /VT: In pursuance of sub-section(d) of Section 6 “Functions of the Commission” of National Vocational and Technical Training Commission (NAVTTTC) Act, 2011, and National Vocational Qualifications Framework (NVQF) Version-II under “Development of NVQs”, the NAVTTTC has approved the following twenty two National Vocational Qualifications:

#	Qualification Title
1.	National Vocational Certificate level (2-4) Fan Manufacturing
2.	National Vocational Certificate Level (2-4) Surgical Instrument Manufacturing Technician
3.	National Vocational Certificate Level (1-4) Leather Products Development Technician
4.	National Vocational Certificate level (2-4) Leather Processing Technologist
5.	National Vocational Certificate Level (1-4) Furniture Technician
6.	National Vocational Certificate level (1-4) Construction Sector
7.	National Vocational Certificate level (2-4) Light Engineering Sector
8.	National Vocational Certificate level (2-4) Plastic Processor
9.	National Vocational Certificate Level (1-4) Pharmaceutical Manufacturing
10.	National Vocational Certificate level (1-4) Artificial Intelligence Data Technician
11.	National Vocational Certificate level (2-4) Automotive Mechatronics
12.	National Vocational Certificate level (2-4) Dies & Mold Maker
13.	National Vocational Certificate Level (1-4) Helper in Food Processing and Packaging
14.	National Vocational Certificate Level (1-4) Generator Operator
15.	National Vocational Certificate Level (1-4) Industrial Merchandiser
16.	National Vocational Certificate Level (2-4) Android Application Developer
17.	National Vocational Certificate level (1-4) Electronics Sector Mobile Phone Technician
18.	National Vocational Certificate level (3-4) Automotive parts production machine operator
19.	National Vocational Certificate Level (1-4) Robotics Technician
20.	National Vocational Certificate level (1-4) Electronics Sector Satellite Dish Installer
21.	National Vocational Certificate level (2-3) Textile Sector Textile Wet Processing
22.	National Vocational Certificate level (1-4) Electrical Sector Electrical Machine Winding Technician

2. All the TVET related institutions / organizations are required to implement aforementioned qualifications so that a uniform and standardized TVET qualification system is established in Pakistan and efforts are made for international equivalence / recognition of these qualifications.

3. Competency Standards for above enlisted qualifications can be accessed at NAVTTTC’s website (www.navttc.org).

(Muqem Islam)

Director General (Skills Standards & Curricula)

Distribution:

- 1) Chairperson, Technical Education and Vocational Training Authority (TEVTA), Punjab, Lahore.

TVET Institutes and Enrolment in Pakistan (NAVTTTC-NSIS 2017-18)

Public / Private	Province / Region	Type	Institution				Enrollment			
			Male	Female	Co	Total	Male	Female	Co	Total
Public	Punjab	Technical	210	111	16	337	21,435	1,145	1,282	23,862
		Vocational	173	90	20	283	32,673	32,943	3,216	68,832
		Total	383	201	36	620	54,108	34,088	4,498	92,694
Private		Technical	44	136	145	325	24,367	1,245	3,122	28,734
		Vocational	235	456	181	872	21,345	22,348	4,367	48,060
		Total	279	592	326	1,197	45,712	23,593	7,489	76,794
Public	Sindh	Technical	42	7	16	65	19,165	998	700	20,863
		Vocational	35	91	1	127	472	769	233	1,474
		Total	77	98	132	307	19,637	1,767	933	22,337
Private		Technical	12	10	99	121	8,634	11,932	4,312	24,878
		Vocational	42	42	73	157	9,425	6,734	2,580	18,739
		Total	54	52	172	278	18,059	18,666	6,892	43,617
Public	KP	Technical	21	5	-	26	15,421	647	-	16,068
		Vocational	27	17	-	44	4,123	941	-	5,064
		Total	48	22	-	70	19,544	1,588	-	21,132
Private		Technical	2	1	1	4	8,673	1,234	296	10,203
		Vocational	376	118	31	525	17,654	7,659	456	25,769
		Total	378	119	32	529	26,327	8,893	752	35,972
Public	Balochistan	Technical	1	1	-	2	122	12	-	134
		Vocational	21	13	-	34	276	156	-	432
		Total	22	14	-	36	398	168	-	566
Private		Technical	6	2	-	8	472	254	-	726
		Vocational	23	44	14	81	236	144	-	380
		Total	29	46	14	89	708	398	-	1,106
Public	GB	Technical	1	-	-	1	358	-	-	358
		Vocational	2	18	5	25	235	432	-	667
		Total	3	18	5	26	593	432	-	1,025
Private		Technical	4	-	3	7	980	18	-	998
		Vocational	21	103	18	142	1,780	5,781	650	8,211

		Total	25	103	21	149	2,760	5,799	650	9,209
Public / Private	Province / Region	Type	Institution				Enrollment			
			Male	Female	Co	Total	Male	Female	Co	Total
Public	AJK	Technical	4	-	-	4	752	-	-	752
		Vocational	15	26	3	44	672	-	-	672
		Total	19	26	3	48	1,424	-	-	1,424
Private		Technical	4	-	4	8	1,352	-	-	1,352
		Vocational	12	41	5	58	2,390	3,405	-	5,795
		Total	16	41	9	66	3,742	3,405	-	7,147
Public	FATA	Technical	7	-	-	7	600	-	-	600
		Vocational	8	18	-	26	951	861	-	1,812
		Total	15	18	-	33	1,551	861	-	2,412
Private		Technical	2	-	-	2	230	-	-	230
		Vocational	5	21	-	26	412	367	-	779
		Total	7	21	-	28	890	367	-	1,257
Public	ICT	Technical	2	1	-	3	123	45	-	168
		Vocational	6	28	-	34	342	1,267	-	1,609
		Total	8	29	-	37	465	1,312	-	1,777
Private		Technical	4	7	5	16	136	213	232	581
		Vocational	15	27	8	50	225	569	341	1,135
		Total	19	34	13	66	361	782	573	1,716
Public	Pakistan	Technical	288	125	32	445	57,976	2,847	1,982	62,805
		Vocational	287	301	29	617	39,744	37,369	3,449	80,562
		Total	575	426	176	1,177	97,720	40,216	5,431	143,367
Private		Technical	80	156	257	493	45,074	14,896	7,962	67,932
		Vocational	729	852	330	1,911	53,467	47,007	8,394	108,868
		Total	809	1,008	587	2,404	98,541	61,903	16,356	176,800
Grand Total			1,384	1,434	763	3,581	196,261	102,119	21,787	320.0 ,167

SCHEME OF STUDIES
FOR SSC (CLASSES IX–X)

COMPULSORY SUBJECTS FOR ALL STUDENTS (500 marks)

1.	English (Compulsory)	2 papers	150 marks
2.	Urdu (Compulsory)	2 papers	150 marks
3.	Islamic Education/Ethics (for Non-Muslims)	2 paper	100 marks
4.	Pakistan Studies	2 paper	100 marks

OPTIONAL GROUPS (600 marks)

The students will choose one of the following (A), (B) and (C) Groups carrying 600 marks:

(A) Science Group:

Physics, Chemistry, Mathematics, Biology/Computer Science/Technical Subject

(B) Humanities Group:

General Science, General Mathematics, Two Social Science Subjects/One Social Science Subject and One Technical Subject

(C) Technical Group:

General Science, General Mathematics, Two Technical Subjects

LIST OF SOCIAL SCIENCE SUBJECTS

1. Computer Science	9. Elements of Home Economics
2. Islamic Studies	10. Food and Nutrition
3. Islamic History	11. English Literature
4. Economics	12. Arabic
5. Education	13. Art and Model Drawing
6. Civics	14. Geography
7. Clothing & Textile	15. Commercial Geography
8. Health & Physical Education	

LIST OF TECHNICAL SUBJECTS

1. Electrical Wiring	2. Computer Hardware(Orientation)
3. Wood Working & Furniture Making	4. Food Processing and Preservation
5. Welding (ARC & GAS)	6. Motor Winding
7. Dress Making & Fashion Designing	

Note: The question paper will comprise three sections:

- Section-A 20% MCQs. It will be compulsory and collected after prescribed time.
- Section-B 50% short answers questions.
- Section-C 30% long/essay type questions.

-10

Proposed Scheme of Studies for Matric-Tech to be Presented for approval in NCC for Implementation through BISE throughout Pakistan for adoption by Govt & Private Schools

AREA OF		SUBJECTS		Proposed COMPETENCIES	MARKS
A	Linguistic Skills	1	Functional English	(Reading, Listening, Speaking, Writing) + (Technology related Terminologies and their usage in English)	100
		2	Functional Urdu	(Reading, Listening, Speaking, Writing) + Applied Urdu	100
			Any one Foreign Language (Basic Conversation only)	Chinese, German, Arabic, Korean, Japanese, Russian, Turkish, Malaysian, Swedish, Norwegian, Persian, Azeri, Italian, Spanish	25
		Total (1+2)			
B	Skills for National Curriculum Requirement	1	Islamiyat	(Revelation, Aqida, Ibadat, tazkiah & Character Building, Seerat of Prophet (PBUH)	75
		2	Pak Studies	(History, Ideology, Geography, Social harmony & patriotism)	75
		Total (1+2)			
C	Soft/ Life Long learning Skills	1	Information & Communication Technology (Digital Skills)	(MS Office, Internet, trade related software and concepts of E-commerce ,IR 4.0)	20
		2	Entrepreneurship/ Managing Small Business	(Basics of Business, negotiation, innovation, problem solving, Managing money, Marketing and Trading)	20
		3	Team & Quality Management Skills	(Leadership ,Coaching, Team and Quality Management)	20
		4	Green/Environment Skills	(Environment Protection concepts and its applications in work place)	15
		5	Communication Skills and Work Ethics	(Communication with customers and workers)	20
		6	Health, Safety and Hygiene Rules and Trade related Laws	(Understanding and application of Rights and duties)	15
		7	Interview Skills & Personal Branding	(job hunting, Career Development , Professional career and networking , Skills)	15
		Total (1+2+3+4+5+6+7)			
D	Applied Scientific Skills relevant to the Trade adopted	1	Applied Mathematics & Technical Drawing (Concepts, Formulae & Application)	(Common calculations and Trade related formulae, Technical Drawing and their usage during technical work)	100
		2	Applied Science (Concepts, Formulae & Application)	(Applying scientific knowledge and its usage in the technical work)	100
		Total (1+2)			
E	Trade specific Technical skills	1	NAVTTTC Technical Training Level 1	(Introductory level skills/ helper/know-how of tools)	50
		2	NAVTTTC Technical Training Level 2	(Operation and basic repair)	100
		3	NAVTTTC Technical Training Level 3	(Essential trouble shooting and repair jobs)	100
		4	NAVTTTC Technical Training Level 4	(Advanced trouble shooting and assembling)	150
		Total (1+2+3+4)			
Grand Total (A+B+C+D+E)					1100
Note:	1) Available trades include Civil, Mechanical, HAVCR, ICT, Hotel Management, Tourism, Automotive, Culinary, Fashion Design, Artificial Intelligence, Robotics etc. (Scheme of studies would be developed for more than 20 trades)				
	2) The Curricula will be supported by MobileApps, Training Videos, 3-D Simulators , Virtual & Augmented Reality and Books in PDF in Urdu & English in order to make the Knowledge delivery interesting, easy and free of tuition requirement. Teacher will work as mentor and guide to facilitate usage of Digital learning material.				
	3. The technical training will be delivered on the most modern and internationally recognized technique of Competency Based Training and Assessment System (CBT & A)				
	4. Question bank and self assessment packages will also be included digital learning resources as per internationally recognized methodology for assisting the students to achieve the learning goals				

**Result Based Matrix Framework
Introducing Matric-TECH Pathways
for Integrating Technical and
Vocational Education and Training and Formal Education**

Sr No	Input	Output	Outcome		Targeted impact
			Baseline Indicator	Target after completion of project	
1.	Project namely "Introducing Matric-TECH Pathways for Integrating Technical and Vocational Education and Training and Formal Education" for the F.Ys 2019-22 with an estimated cost of Rs. 315.0 million	1500 Matric-Tech qualified and NVQF skill level 4 qualified youth with multiple options of career progression in general education, TVET sector or job market	Currently, an obsolete Matric-Tech scheme under the respective Boards of general education with no recognition, vertical & horizontal progression.	Vertical & Horizontal progression of 1500 qualified Matric-Tech graduates into general education or TVET under NVQF.	Integration of general education with the TVET and socio-economic impact will be experienced significantly after ingestion of 1500 properly trained youth in local & job market. Availability of the certified trained youth will cater to the demands of skilled labour force in local projects like CPEC and other energy related projects and manufacturing industry alongwith international market.
ii.	30 newly established technologies (90 labs / workshops in 15 schools / colleges of general education of ICT, GB and AJ&K	30 newly established technologies in general schooling system	Currently, no state of the art labs / workshops or demand driven facilities are existing in our current TVET system	Newly established Labs / workshops will continue to cater to the needs of TVET Sector in general schooling system in future.	A permanently established public asset in shape of TVET labs / workshops for general schools / colleges.
iii.	Hiring of 75 project based staff including 60 trade instructors and 15 institute coordinators	Engagement of qualified staff under the instant project	Currently, no qualified staff for TVET related technologies / courses / trades is available in our current TVET system	The recruited staff will serve for Matric-Tech programs on the basis of PPP model or as prescribed by the institute.	Positive engagement of the qualified youth under National / International projects

**Criteria for Selection of Candidates/Trainees
under Matric-TECH Program**

		Form No:	
Name:		CNIC	
Trade Applied for		Cell #	
Sr #	Attributes		Score Obtained
1	Age		
	a. 13-20	04	
2	Qualification		
	a. Middle pass (final aggregate of middle examination will be considered)	04	
3	Others	03	
	a. Sportsman	01	
	b. Hafiz-e- Quran/Language (Certificate)	02	
Sub Total		11	

4. Other (Maximum Rating 05)

Sr.#	Attributes	Yes/No	Write 1 for YES and 0 for NO
1	Not availed any vocational training		
2	Orphan, Eunuch, Disabled, Minorities		
3	Cannot continue the studies due to economic conditions		
4	Aptitude of applicant for the desired course & Basic question replied or not(02 Marks)		
5	Selection committee overall assessment (04 Marks)		
Sub Total		5+4= 09	
Grand-Total		20	

- Note:**
- Availability of valid CNIC is mandatory.
 - Passing/Qualifying points will be 07 out of 20.
 - Merit will be according to the highest points obtained by the applicants.
 - In case of candidate obtained equal points, the senior in age will be given preference.
 - Certificate of Qualification is Mandatory.

Selection Committee	Name/Designation	Signature
Member 1		
Member 2		
Member 3		

**Trade Instructor(s)
Terms of Reference(s)**

No of Positions	60-Trade Instructors
Pay Package	Fixed Salary of Rs. 40,000/- inclusive of all per month or Rs 600 per hour for visiting Faculty (Trade Instructors)
Report to	Director General, Regional Office, NAVTTC (ICT)
Minimum qualification	Bachelors Degree in relevant Discipline/ Technology or 14 years of education career in relevant discipline.
Experience	Preferably 2-years professional experience of teaching in TVET sector in relevant discipline / Technology along with comprehensive knowledge of lab, Practical work to be covered under skill level-I to IV of NVQF for Matric-TECH
Tenure	Post for project duration only
Maximum Age	45 years
Place or Posting	Islamabad Capital Territory, Azad Jammu Kashmir , Gilgit Baltistan

Job Descriptions

- I. To create self-awareness regarding various skill levels of National Vocational; Qualification Framework (NVQF) and the concept of integration of General and TVET qualifications alongwith vertical / horizontal progression;
- II. Teach students in accordance with NAVTTC's prescribed skill standards, curricula and qualification package under NVQF by using in a systematic plan of lectures, demonstrations, discussion groups, laboratory work, shop sessions, seminars, case studies, field assignments and independent or group projects;
- III. Prepare teaching materials and outlines for courses;
- IV. Prepare students for assessment (Board Examination) of 9th and 10th standard under Matric-TECH Scheme;
- V. Prepare, administer and mark tests and papers to evaluate students' progress;
- VI. Supervise independent or group projects, field placements, laboratory work or hands-on training;
- VII. May serve on committees concerned with matters such as budgets, curriculum revision, and course and diploma requirements;
- VIII. Any other task assigned by the project management time to time;

Institute Coordinator(s)
Terms of Reference(s)

No of Positions	15 – Institute Coordinator(s)
Pay Package	Fixed Salary of Rs. 50,000/- inclusive of all per month
Report to	Director General, Regional Office, NAVTTC (ICT)
Minimum qualification	Bachelors Degree in relevant Discipline/ Technology or 14 years of education career in relevant discipline.
Experience	At least 2 years of Public sector experience in education and training sector with comprehensive knowledge and skills of Project Execution/Financial Management / Administration.
Tenure	Post for project duration only
Maximum Age	Maximum 45 Years
Place of Posting	Islamabad Capital Territory, Azad Jammu Kashmir , Gilgit Baltistan

Job Descriptions

- I. To look after / supervise all project related activities in his / her designated school / collage and ensure implementation of the project from start to end;
- II. 24/7 monitoring of the project sites with sole custody of public assets;
- III. To ensure appropriate utilization of newly established labs / workshops for training activates and Matric-TECH scheme;
- IV. To ensure the daily attendance of Course Instructors as well as enrolled students and convey to the authorities;
- V. To coordinate with all concerned stakeholders;
- VI. To timely submission of progress reports to authority;
- VII. To ensure timely appraisal, documentation and reporting of project as per policy guidelines;
- VIII. Review existing / ongoing training Scheme of Matric-TECH and suggest ways & means for effective implementation of the project / scheme;
- IX. Advise students on program curricula and career decisions;
- X. Any other task assigned by the project management time to time;

Assistant Coordinator(s) Program Terms of Reference(s)

Positions	03– Assistant Coordinator-Program (Equivalent to BPS-17)
Salary	<p>Standard Pay Package for Project Staff notified and revised by Government from time to time shall be applicable for project staff OR on deputation basis against standard terms and conditions.</p> <p>In case of new recruitment from open market, salary package as prescribed under Finance Division's Office Memorandum of 19th of July, 2017 for Standard Pay package for Project staff directly recruited for Development Projects funded from PSDP (or will be replaced with any other notification issued on the subject matter later on) OR on deputation basis against standard terms and conditions</p>
Tenure	Temporary posts on contract basis (for project duration only). Performance based 06 months renewal policy will be followed till the completion of the project period.
Report to	Director General (P&D)
Minimum qualification	16 Years schooling degree (in any core Engineering fields or relevant profession or Project Management or Accounting & Finance)
Experience	At least 03-year post-qualification experience preferably in Development / industrial sector in project planning, development, and execution including project preparation and implementation in general education, technical education, and/or training sector
Maximum Age	Maximum 40 Years
Place of Posting	NAVTTTC HQs or Regional Offices
Job Descriptions	<ul style="list-style-type: none"> ▪ Day-to-day activities of the project or any other assignment. ▪ Chalking out of new training schemes and other initiatives and in reviewing the existing development schemes. ▪ Financial and physical progress review ▪ Preparation of periodical reports monthly, quarterly, mid-term, annual, and completion reports or as and when required. ▪ Timely submission of necessary documentation and reports ▪ Coordination with forums and stakeholders ▪ Record keeping, data analysis, data-filtration of institutes-trainees ▪ Task and functions of other inter-related skill development project ▪ Field visits as and when assigned ▪ Any other job assigned

FEDERAL EDUCATION & PROFESSIONAL TRAINING DIVISION

G.Sl. No.	Name of Project	Approval Status	Estimated Cost		Expenditure upto 30.06.2019	Throw-forward 01.07.2019	Allocation 2019-20		
			Total	Foreign Aid			Foreign Aid	Rupees	Total
1	2	3	4	5	6	7	8	9	10
163	Establishment of Islamabad Model School (I-V), Ghora Shahan (FA), Islamabad	DDWP 06.02.2019	57.418	0.000	0.000	57.418	0.000	15.000	57.418
164	Modernization & Standardization of Examination System	Un-Approved	1000.000	0.000	0.000	1000.000	0.000	100.000	1000.000
165	Provision of Quality Education to the Students of Baluchistan and Merged Areas of Khyber Pakhtunkhwa in Cadet Colleges, Polytechnic, Vocational and other Institutions (Phase-II)	CDWP 19.03.2018	2186.156	0.000	0.000	2186.156	0.000	100.000	2186.156
166	Reconstruction of Building of Islamabad Model School for Girls (I-V) No.1, Tarlai (FA), Islamabad	DDWP 06.02.2019	36.300	0.000	0.000	36.300	0.000	10.000	36.300
167	Reconstruction of Islamabad Model School for Girls (I-VIII), Bian Nullah (FA), Islamabad	DDWP 06.02.2019	52.964	0.000	0.000	52.964	0.000	15.000	52.964
168	School Based Deworming Programme in ICT	Un-Approved	21.000	0.000	0.000	21.000	0.000	7.000	21.000
169	Up-gradation of Govt. Polytechnic Institute for Women, H-8/1, Islamabad	DDWP 06.02.2019	59.500	0.000	0.000	59.500	0.000	15.000	59.500
170	Up-gradation of Islamabad Model College for Girls, Bhara Kahu, Islamabad	Under Process	173.710	0.000	0.000	173.710	0.000	50.000	173.710
171	Up-gradation of National College of Arts, Lahore and Related Facilities	CDWP 19.03.2018	542.141	0.000	0.000	542.141	0.000	152.000	542.141
172	Vocational Schools through Public Private Partnership	Under Process	456.257	0.000	0.000	456.257	0.000	100.000	456.257
173	Pilot Project for Blended E-Learning in 500 X Schools of Federal Capital and KPK (Grades 1 - 12) (Knowledge Economy Initiative)	Under Process	130.400	0.000	0.000	130.400	0.000	130.400	130.400
174	Pilot Project for STEM Teaching Grades 8 - 12 (Knowledge Economy Initiative)	Under Process	205.000	0.000	0.000	205.000	0.000	205.000	205.000
175	TVET Sector Development Project through Technology Transfer (Knowledge Economy Initiative)	Under Process	12480.000	0.000	0.000	12480.000	0.000	1000.000	12480.000
Total (New):			19891.576	0.000	0.000	19891.576	0.000	2425.101	2425.101
Total (FE&PT):			38388.378	607.500	4464.101	33924.277	250.000	4546.762	4798.762