



**NATIONAL BOARD
FOR
TECHNICAL EDUCATION (NBTE)**

PLOT B, BIDA ROAD,
P.M.B. 2239, KADUNA, NIGERIA

REPORT

OF THE

National Steering Committee

ON

**THE DEVELOPMENT OF NATIONAL
VOCATIONAL QUALIFICATIONS FRAMEWORK
(NVQF) FOR NIGERIA**

AUGUST, 2011

NATIONAL BOARD FOR TECHNICAL EDUCATION

VISION

To be a world Class Regulatory Body for the Promotion of Technical and Vocational Education and Training (TVET) in Nigeria

MISSION

To Promote the Production of Skilled Technical and Professional Manpower for the Development and Sustenance of the National Economy

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REFERENCES

Abbreviations and Acronyms

ANBC	Advanced National Business Certificate
ANTC	Advanced National Technical Certificate
APEL	Assessment of Prior Experiential Learning
COREN	Council for the Regulation of Engineering in Nigeria
CORBON	Council of Registered Builders of Nigeria
CPN	Computer Professions of Nigeria
ESSPIN	Education Sector Support Program in Nigeria
ETF	Education Trust Fund
FME	Federal Ministry of Education
FML&P	Federal Ministry of Labour and Productivity
FMCI	Federal Ministry of Commerce and Industry
GIZ	German International Cooperation
HND	Higher National Diploma
ICT	Information and Communication Technology
ICAN	Institute of Chartered Accountants of Nigeria
ILO	International Labour Organisation
IT	Information Technology
ITF	Industrial Training Fund
JAMB	Joint Admissions and Matriculation Board
LLL	Life Long Learning
MAN	Manufacturers Association of Nigeria
NABTEB	National Business and Technical Examinations Board
NAIVEIS	National Association of Innovation and Vocational Enterprise Institutions
NATE	Nigerian Association of Technologists in Engineering
NBC	National Business Certificate
NBTE	National Board for Technical Education
NCCE	National Commission for Colleges of Education
NCVE	National Commission for Vocational Education
ND	National Diploma
NDE	National Directorate of Employment
NECA	Nigeria Employers' Consultative Association
NEPAD	New Partnership for African Development
NERDC	National Education Research and Development Council
NID	National Innovation Diploma
NISER	National Institute for Social and Economic Research
NLNG	Nigeria Liquefied Natural Gas
NOS	National Occupational Standard

NTC	National Technical Certificate
NVC	National Vocational Certificate
NQF	National Qualifications Framework
NVQA	National Vocational Qualifications Authority
NVQF	National Vocational Qualifications Framework
NVQs	National Vocational Qualifications
NPE	National Policy on Education
OHCSF	Office of the Head of Civil Service of the Federation
OFQUAL	Office for qualification and Examination Regulations
OPS	Organised Private Sector
PTDF	Petroleum Technology Development Fund
QCA	Qualification and Curriculum Authority
QCDA	Qualification and Curriculum Development Agency
SON	Standard Organisation of Nigeria
SNEP	Strategic National Education Plan
SSC	Sector Skills Council
SQA	Scottish Qualifications Authority
STEP-B	Science Technology Education Post-Basic
TOR	Terms of Reference
TVE	Technical and Vocational Education
TVET	Technical and Vocational Education and Training
UBE	Universal Basic Education
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UTME	Unified Tertiary Matriculation Examination
WA	Workplace Assessment

ACKNOWLEDGEMENT

The National Steering Committee on National Vocational Qualifications Framework (NVQF) was set up by the Executive Secretary of the National Board for Technical Education (NBTE). The Committee was inaugurated by the Hon. Minister of Education, Prof. Ruqayyatu Ahmad Rufa'I, *OON*, on 16th December 2010.

The membership of the Committee was drawn from various Ministries, Departments and industry organizations.

The Committee wishes to acknowledge the contributions of Dr. Ahmed Acidah, Manager Human Resources (Talent Management), Nigeria Liquefied Natural Gas (NLNG) Lagos and Mr. Ron Tuck, the former Executive Secretary of Scottish Qualifications Authority (SQA) and now the Program Manager; Education Sector Support Programme in Nigeria (ESSPIN) who shared their experiences on the development and operations of NVQs, with the members of the committee.

The Committee appreciates that after the submission of the Draft report to NBTE in March 2011, the Board had considered report and organised an NVQF Zonal Industry Consultation Meetings at Lagos, Abuja, Port Harcourt and Kano to enable industry leaders/operators and various categories of skills training providers receive and critique the Draft Framework. The comments and

suggestions of the participants had partly informed the final recommendations of the Committee and the proposed Roadmap for introducing and institutionalisation of NVQF in Nigeria.

In addition, the Committee wishes to acknowledge the support given by the Hon. Minister of Education, Chairman/Members of the Board of NBTE and the Executive Secretary. The members also wish to thank the Hon. Minister of Education for giving them the opportunity to serve.

The members of the Committee listed below hereby forward the report to the Executive Secretary, NBTE, for further appropriate action;

S/No.	NAME OF ORGANISATION	SIGNATURE
1.	Dr. M.S. Abubakar Immediate Past Director of Programmes, NBTE Kaduna	
2.	Mrs. Chukwuemeka Ezi Federal Ministry of Education, Abuja	
3.	Bukar Shariff Konduga Federal Ministry of Labour & Productivity, Abuja	
4.	Aminu Mohammed Industrial Training Fund (ITF), Jos	
5.	Engr. Chukwuemeka Nzewi Manufacturers Association of Nigeria (MAN), Lagos	

6.	Mrs. Helen I. Jemerigbe Nigeria Employers' Consultative Association (NECA), Lagos	
7.	Engr. Bisi Adebayo National Universities Commission (NUC), Abuja	
8.	Engr. Bright G. C Ejiofor Nigeria Association of Technologists in Engineering (NATE), Abuja	
9.	Dr. Bappah Mohammed Dukku NNPC Hqrs, Abuja	
10.	Mrs. Ekosanmi Femi Office of the Head of Civil Service of the Federation, Abuja	
11.	Mr. Joseph O. Odum Special Adviser to the President on Informal Sector, Abuja	
12.	Mr. Ilesanmi Ibidapo NABTEB, Benin City	
13.	Dr. Ahmed Acidah Nigeria LNG Limited, Lagos	
14.	Shakirat A. Oriyomi National Association of Innovation and Vocational Enterprise Institutions, Abuja	
15.	Mr. J.S. Aboi Director of Programmes NBTE, Kaduna	
16.	Mr. Fayemi E.O.	

	Tertiary Department Federal Ministry of Education, Abuja.	
17.	Mr. Kenneth Uwah Education Sector Support Program in Nigeria/DFID, Abuja	
18.	Engr. S.M. Yusuf NBTE, Kaduna.	
19	Dr. M.A. Kazaure, mni Executive Secretary, NBTE, Kaduna	

Executive Summary

Background and Rationale

1. The National Steering Committee on National Vocational Qualifications Framework (NVQF) was set up by the Executive Secretary of the National Board for Technical Education (NBTE), Dr. Masa' udu A. Kazaure, and was inaugurated by the Hon. Minister of Education, Prof. Ruqayyatu Ahmad Rufa'I, *OON*, on 16th December 2010. The membership of the Committee was drawn from various Ministries, Departments and industry organisations. The Committee was charged with the responsibility to draw up a draft National Vocational Qualifications Framework for Nigeria, with terms of reference (TORs) including; specification of the Framework indicating levels of attainment, level descriptors, quality assurance of qualifications, registration of training centres, as well as required legal framework and involvement of the industry.
2. This report proposes a National Vocational Qualifications Framework (NVQF) for the recognition of skills and competence acquired on the job, or from formal or informal training organisations, based on nationally-validated assessment and certification system.

3. This report contains the decisions of the Steering Committee in respect of the TORs based on review of available literature relating to National Vocational qualifications framework development internationally, as well as an analysis of information on vocational qualification system in Nigeria.
4. A vocational qualifications framework is a hierarchical system for arranging generic skills to be demonstrated and assessed on the job. The framework is a specification of competencies expected of a skilled worker who is gainfully employed in an occupational area at the appropriate level. Such arrangement will provide descriptions of the occupational competences to be demonstrated, as well as a common grid of skill levels for all qualifications included. The main objective of NVQF is to enhance quality, accountability, transparency, access, progression, and comparability of qualifications in relation to existing and future labour market human capital needs.

5. Committee's Procedure and Methodology

The Committee held six (6) general meetings and several sub-committee sessions to deliberate on its TORs. The Committee also reviewed available literature on national qualifications frameworks of different countries. Members also collected and reviewed useful data and reference materials which serve as a guide in reaching decision pertaining to every issue on the TORs. Some knowledgeable experts were also invited/consulted to make inputs during the deliberations of the Committee.

The Committee also organised consultation meetings with industry operators, training providers and professional associations in Lagos, Abuja, Port Harcourt and Kano. Valuable inputs were received during the consultation. A total of 425 participants from industries, training institutions and professional associations attended the meeting as shown in the table below;

Table 1: Breakdown of Participants at the Industry Meetings

DATE	Centre	No. of participants
6 th July, 2011	Lagos	121
9 th July, 2011	Abuja	99
13 th July,2011	Port Harcourt	97
16 th July,2011	Kano	108
Total		425

6. Proposed NVQF and Levels of Attainment on the Framework

A six (6) level system of qualifications is proposed at different levels of skill, autonomy and responsibility corresponding to levels of employment in the Nigerian labour market. The grid begins with level 1, which describes the competence for entry level worker, through to level 6 which describes the characteristics of professional worker. The Framework, indicating levels of attainment, is appended herewith as *figure 2*

7. Definition of level descriptors

The Level Descriptors set out the characteristic generic outcomes of each level. They are intended to provide a general, shared understanding of each level and to allow broad comparisons to be made between qualifications and learning at different levels. The descriptors are appended herewith as *table9*

8. Mode of Articulation from one Level to Another

For effectiveness, It is recommended that the entry level characteristics of candidates, and their subsequent progression from one NVQ level to another should consist of the relevant units taken from the National Occupational Standards (NOS) developed by the appropriate sector skills body and approved by the proposed NVQA.

9. Procedure for Approval of Qualifications

To be registered on the NQF, a qualification should:

1. Have clearly stated objectives.
2. Be fit for the purpose.
3. Have adequate standards appropriate to meet user expectations.
4. Apply required standards consistently.
5. Have contents and outcomes that match purpose.

10. Registration of Training/Assessment Centres

Registration confirms that a training provider has satisfied the minimum criteria to offer training. It is based upon:

1. Submission and satisfactory assessment of application.
2. Inspection and verification of facilities at the training/learning or assessment centres
3. Availability of adequate human and material resources
4. Evidence of satisfactory internal organisation/structure
5. Payment of stipulated registration fees

11. Identification of Funding Sources

Funding for the NVQF Project is expected to come from the following sources:

1. Federal Government: Budgetary allocations to the proposed NVQA and in the meantime, through NBTE.
2. Support from Development Partners: World Bank, ETF, UNESCO, PTDF, GIZ, etc.
3. Training/Learning Organisations: Registration fees.
4. Special Grants (private and public)
5. Training/Learning and Assessment Fees Paid by Beneficiaries

12. Legal Framework for Operation of the NVQF

The Federal Government should promulgate an Act to establish a NVQA. Alternately, the NVQF may be categorically structured in the functions of the proposed National Commission for Vocational Education and Training (NCOVET). In the meantime, and in order to keep the momentum, the regulation of the scheme should be done by NBTE.

13. Continuous engagement of the industry (public and private)

The Industry should be fully engaged in the development and implementation of the NVQF through the following measures:

1. Involvement of the Industry in the development and application of the Framework and National Occupational Standards (NOS)

2. Ensure adequate industry representation on the Governing Council of the regulatory body and its various committees/skills sectors
3. Continuous sensitization and advocacy to stakeholders/industry to have their full buy-in and participation

CHAPTER I

1. INTRODUCTION

1.1 Establishment of National Steering Committee on National Vocational Qualifications Framework (NVQF)

The Executive Secretary of the National Board for Technical Education (NBTE) through a letter Ref. C/TEB.447/Vol.T1/151 of 22nd November 2010, appointed the Steering Committee on National Vocational Qualifications Framework (NVQF). As the NVQF project is inter-ministerial and interdepartmental in nature, the membership of the committee was drawn from various Ministries, Departments and industry organisations. The Committee was inaugurated by the Hon. Minister of Education, Prof. Ruqayyatu Ahmad Rufa'I OON, on 16th December 2010, with the following membership:

1.2 Membership of the Committee

Table 2: NVQ Framework National Steering Committee members

S/No	MEMBER	RESPONSIBILITY
1	Dr. M.S. Abubakar Immediate Past Director of Programmes, NBTE	Chairman
2	Mr. Fayemi E,O Federal Ministry of Education Abuja	Member

3	Mrs Chukwuemeka Ezi, F.N Federal Ministry of Education (FME), Abuja	Member
4	Bukar Shariff Konduga Federal Ministry of Labour & Productivity (FML&P), Abuja	Member
5	Mal. Aminu Mohammed Industrial Training Fund (ITF), Jos	Member
6	Engr. Chukwuemeka Nzewi, Manufacturers Association of Nigeria (MAN), Lagos	Member
7	Mrs. Helen I. Jemerigbe Nigeria Employers' Consultative Association (NECA), Lagos	Member
8	Engr. Bisi Adebayo National Universities Commission (NUC), Abuja	Member
9	Engr. Bright Ejiofor Nigerian Association of Technologists in Engineering (NATE)	Member
10	Dr. Bappah M. Dukku Nigerian National Petroleum Corporation (NNPC), Abuja	Member
11	Mrs. Ekosanmi Femi Office of the Head of Civil Service of the Federation (OHCSF), Abuja	Member
12	Mr. Joseph O. Odum Special Adviser to the President on Informal Sector, Abuja	Member
13	Mr. Ilesami Ibidapo National Business and Technical Examinations Board (NABTEB), Benin	Member
14	Dr. Ahmed Acidah, Human Resources Manager (Talent Management), Nigerian Liquefied Natural Gas Limited (NLNG), Lagos	Member
15	Mrs. Shakirat A. Oriyomi National Association of Innovation and Vocational Enterprise	Member

	Institutions (NAIVEIS)	
16	Mr Kenneth Uwah Education Sector Support Program in Nigeria/DFID, Abuja	Member
17	Mr. J. S. Aboi, Director of Programmes, NBTE, Kaduna	Member
18	Dr Masa'udu Adamu Kazaure, mni Executive Secretary, NBTE, Kaduna	Member
19	Engr. S. M. Yusuf Desk Officer, NVQF, NBTE, Kaduna	Member/Secretary

1.3 Terms of Reference (T.O.R) of the Committee

The Committee was charged with the responsibility to draw up a draft National Vocational Qualifications Framework for Nigeria, and to specifically:

1. Outline the Levels of Attainment on the Framework;
2. Define the Levels Descriptors;
3. Outline the Mode of Articulation From One Level to Another;
4. Develop Criteria and Procedures for Approval and Registration of Qualifications;
5. Determine the Criteria for Registration of (Training) Centres;
6. Determine the Procedures for Approval of Training Centres;

7. Identify Sources of Funding;
8. Develop the Legal and Regulatory Framework;
9. Develop Strategy for Industry Buy-In; and
10. Undertake any Other Activities That Will Facilitate The Development and Institutionalisation of NVQF in Nigeria.

The Steering Committee was given a time frame of 45 working days to deliver a draft Framework covering items 1-6 of the Terms of Reference(T.O.R) to the Honourable Minister of Education through the National Board for Technical Education (NBTE). The effective date of the Committee's deliberation commenced 3rd January, 2011.

The committee submitted the first draft to the Executive Secretary, NBTE on the 23rd of March, 2011, covering items 1 to 9 on the T.O.R. However, due to some financial challenges, the post election disturbances and the need to consult with industry operators and training providers, the final document could not be realised within the given time frame which led to the committee requesting for an extension.

1.4 **Methodology**

In the conduct of its assignment, the Committee gathered relevant data and reference materials helpful in reaching decision pertaining to every issue on its Terms of Reference.

Some recognised experts were also invited to make inputs during the deliberations of the Committee. The Committee also gathered input from industry operators and training providers during the industry consultation meetings held in Lagos, Abuja, Port Harcourt and Kano. The following documents were also studied and used as reference materials by the Committee:

- (i) Paper presentation by Dr. Ahmed Acidah, Human Resources Manager (Talent Management), Nigeria LNG Ltd Lagos On **“Practical Approach to Introducing NVQF: NLNG Perspective”**
- (ii) Paper presentation by Ron Tuck, Former Executive Secretary, Scottish Qualifications Authority and currently the Project Manager, Education Sector Support Program in Nigeria (ESSPIN): Titled **“NVQF: International Experience”**
- (iii) Presentation to Nigerian delegation by National Vocational Training Council (NVTC) of Malaysia
- (iv) Presentation by Paulette Dunn-Smith, Secretary Caribbean Association of National Training Authority
- (v) An Introductory Guide to National Qualifications Framework: Conceptual and Practical Issues for Policy Makers. By Ron Tuck
- (vi) ILO Skills and Employability Department: NQF Country Study, the Australian Qualifications Framework
- (vii) The Implementation and Impact of National Qualifications Framework: Report of a study in 16 countries
- (viii) The Implementation of NQF/RQF in ECOWAS Countries by Anne-Marie Charraud.

- (ix) Transnational Qualifications Framework for the Virtual Universities for small states of the commonwealth.
- (x) Proposed TVET Structure for Formal and Non formal Sector in Nigeria private communication from NBTE Governing Board
- (xi) Employment Sector: ILO Employment Working Paper 44
- (xii) Employment Sector: ILO Employment Working Paper 45
- (xiii) the CVQ: The Regional Qualifications of the Caribbeans

1.5 **Structure of the Report**

The first chapter is an introduction describing the constitution of the Committee, inauguration, Terms of Reference and its Methods of Operations. The second chapter gives a situation report on Nigeria's Technical and Vocational Education & Training (TVET) drawing attention to the challenges that may be addressed by NVQF. The third chapter is dedicated to a description of operation of NVQs in different countries, identifying the essential operational features, while the fourth chapter deals with observations, findings and recommendations. Finally, the fifth chapter proposes an implementation framework.

CHAPTER II

2.0 OVERVIEW OF CURRENT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) SITUATION IN NIGERIA

2.1 The Need for Skills Framework

Nigeria aspires to become a major player in the world economy in line with her Vision 20-2020. It is very clear that the most crucial vehicle for attaining such ambitious goal, apart from power infrastructure, is a skilled and competent workforce. This is necessary for the effective implementation of national development projects and for attracting necessary international investment by especially hi-tech industries. While the challenges are fairly well appreciated, and even the Vision 20-2020 Blueprint and other national policy documents are unequivocal in respect of this challenge, there is no definitive strategy to address it effectively.

In spite of the existence of over 100 universities and over 120 polytechnics and similar institutions, in addition to hundreds of technical/vocational colleges, educational institutions has been largely disconnected from industrial and socio-economic needs by consistent neglect of competence and undue emphasis on 'paper qualification'. This trend is further compounded by poor capacity utilisation of industries.

The following are some of the obstacles to skills development in Nigeria:

- As a result of lack of awareness on the imperative of Technical and Vocational Education and Training (TVET), prospective learners and their guardians tend to have preference for university education.
- Educational institutions tend to place less emphasis on the manpower need of the industry resulting in proliferation of mainly academic programmes.
- Poor national manpower planning and implementation resulting in insufficient data on skill gaps, and type of curriculum educational institutions should focus on. This situation is not unrelated to the discontinuation of the original practice of 5-year National Development Plans, abandoned since late 1970s.
- Assessment and evaluation processes in TVET institutions, remain largely 'academic', in spite of global trend towards industry based standard.

As the country now appreciates the necessity of competent workforce there is need to empower an inter-ministerial agency to supervise development and delivery of national certification for crucial skills. In line with the practice adopted by many countries, the choice tends to some form of National Vocational Qualifications (NVQs), and National Vocational Qualifications Framework (NVQF). NVQF is an *instrument for*

the development and classification of vocational qualifications according to a set of criteria for levels of learning achieved.

A qualification Framework provides descriptions of the **knowledge and skills** to be demonstrated as well as a common grid of skill levels for all qualifications included within the framework.

It allows for "equivalences" to be established between elements of different qualifications.

The Framework also facilitates establishment of progression routes between

- different fields of study
- general and vocational education
- learning in initial and further education
- qualifications obtained through formal and non-formal education and training

Before examining the features of NVQs and their implications for the Nigerian situation, it is essential to examine the concept of TVET and how that sector of education has fared in the country.

2.1.1 Technical and Vocational Education (TVE)

According to UNESCO-ILO recommendation, ***Technical and Vocational Education (TVE)*** is used as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of

practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.”

In the broad definition above, which is in accordance with the *UNESCO-ILO Recommendations*, also adopted by the National Policy on Education 2004, TVE refers to a range of learning experiences which are relevant to the world of work. The learning experiences may occur in a variety of learning contexts, including educational institutions and work places. In order to reflect on the integral nature of training in skills development, the term ‘TVET’ where the last ‘T’ stands for training has now become very popular among the international communities.

Originally, the direct preparation for work was the main goal of TVET, and this remains prominent in many developing nations. However, with the technological revolutions and innovations in science and technology, during the 20th century, new domains of knowledge and new disciplines have become important at all levels of education and training. The current focus is increasingly upon preparing knowledgeable and skill workers to meet the challenges posed during the transition from the Industrial Age to the Information Age, with its concomitant post-industrial human resource requirements and the changing world of work:

Recently, the most dominant trend has been an increasing emphasis by most countries on skills and competency development for employability and retention, with particular reference to technical and vocational education and training.

As a result, TVET is now a priority area in the programme activities undertaken by UNESCO's Education Sector. This is so because of overwhelming evidence to demonstrate that TVET can play an essential role in promoting the socio-economic and technological development of countries. It is estimated that worldwide some 80% of the jobs undertaken by people require technical and vocational skills.

2.2 TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) IN NIGERIA

2.2.1 Nigerian TVET Institutions

The Nigerian formal TVET institutions include polytechnics, monotechnics and technical colleges under the supervision of the National Board for Technical Education (NBTE), while the informal system works mainly through apprenticeships. Polytechnics train graduates of senior secondary school to the standards of National Diploma (ND), Higher National Diploma (HND) and the Post Higher National Diploma (Post- HND). These institutions were quite popular when the economy was stronger, as their practical outcome- based curricula proved advantageous.

The quality of academic programmes in polytechnics and technical colleges is assured by NBTE's curriculum development and periodic accreditation visits. Polytechnics and similar institutions administer their certification examinations while the National Business and Technical Examinations Board (NABTEB) is responsible for the examination and certification of the occupational trades offered by the technical colleges and Vocational Enterprise Institutions (VEIs)

A major recent initiative is the introduction of the Innovation Enterprise Institution and Vocational Enterprise Institutions (IEIs and VEIs). These are private sector driven institutions targeting areas of skills shortage and market needs. They provide industry-specific competencies in such fields as the oil and gas, communication, entertainment, fashion, hospitality, automobile, construction and welding sectors. While the programmes of these new categories of institutions are subject to NBTE accreditation, it is strongly felt that their key goals of providing employable skills and competence could be better achieved if their products are subjected to workplace assessment (WA).

Table below, indicates the numbers, types and ownerships of the various TVET institutions, as at the beginning of 2010.

TABLE 3: TVET Institution offering accredited programmes and Their Ownership Structure

INSTITUTION	OWNERSHIP			TOTAL
	Federal	State	Private	
Polytechnics	20	37	18	75
Monotechnics				
Colleges of Agriculture	18	13	-	31
Colleges of Health Technology	6	6	1	13
Other Specialized Institutions	23	2	2	27
Innovation Enterprise Institutions	1	1	78	80
SUBTOTAL	68	59	99	226
Technical Colleges	19	152	3	174
VEIs	1	1	10	12
SUBTOTAL	20	153	13	186
GRAND TOTAL	88	212	112	412

According to the National Policy on Education (NPE), the overriding goals of TVET in Nigeria are to:

- provide trained manpower in the applied sciences, technology and business, particularly at basic and advance technical levels;
- provide technical knowledge and vocational skills necessary for agricultural, commercial and economic development;
- give training and impart necessary skills with a view to making the individual self reliant economically.

Recently, a comprehensive review of curricula was undertaken by NBTE, and entrepreneurship education was duly embedded in the curricula. There is a greater desire at the policy level to deliver training to meet industry needs, but this valuable objective is currently limited due to deficiencies in areas of assessment, certification and instructional resources which need substantial upgrading.

2.3 CURRENT SITUATION OF NIGERIAN TVET SECTOR

2.3.1 Limited Access to TVET

The case of inadequate access is widespread in the different sectors of Nigerian education. JAMB report of 2011 quoted over 1.4 million UTME candidates seeking admissions for about 150,000 university enrolment slots. Total enrolment in polytechnics in the 2009/2010 session was 166,121. This was against the backdrop of the fact that actual total carrying capacity was barely 80,000, showing over-subscription by

over 100%, with consequent implications on quality of graduates. This clearly shows the need for additional training institutions to attain the objective of increasing access to technical and vocational education at tertiary level.

2.3.2 Enrolment Situation of Technical Colleges

The third edition of the National Policy on Education prescribed the following transition rates at the end of basic education (i.e. post junior secondary education)

- The Senior Secondary Schools 60%
- The Technical Colleges 20%
- The Vocational Training Centres 10%
- The Apprenticeship Scheme 10%

At the current basic education annual turnout rate of about 4 million, expected enrolments in technical colleges will be 800,000 (20%). However, the total enrolment in Technical Colleges in 2009/2010 was 74,299 made up of 63,528 (85.5%) male and 10,771 (14.5%) female students. This compares unfavourably with the expected 800,000. This shows clearly **that technical colleges are only able to enrol barely about 9.3% of their target.**

2.3.3 Quality, Relevance and Overall Adequacy of TVET Sector

Quality in the TVE sector is maintained through a process of curriculum development, accreditation of programmes and enforcement of carrying capacities of institutions for

accredited programmes. This is undertaken through curriculum development/review and inspection visits by teams representing the major stakeholders in the specialised areas including representatives of professional registration councils (e. g. COREN, CPN, ICAN, ARCON, CORBON, etc.), employers of labour, academic staff from universities and professional peers from the polytechnics. Over 80% of polytechnics programmes had by 2010 attained accreditation showing compliance with minimum required standard in input and performance.

In the technical colleges however, the picture is different with only about 40% of the trades gaining accreditation in 2004. By 2008, the figure had further dropped to below 30%, causing serious concern on the quality of the products. The major challenge of these colleges comes from very poor funding, inadequate infrastructure, materials, and staffing, laboratory and workshops facilities, coupled with inadequate opportunity for work-based experience.

2.3.4 The Informal Sector of TVET

Situation Analysis

In view of the current high level of poverty and unemployment, it is imperative to provide citizens with the key skills that will enable them to gain employment in the relevant sectors of the economy. Most jobs are created in the private sector, especially in the small-medium, and micro

scale enterprise that fall mostly in the informal sector. Thus, training systems that address skills requirement and prepare people to be productively employed (or self-employed) are necessarily required to provide adequate human resources for the informal sector. This sector plays a major role as the engine of growth and development in Nigeria, which is central to poverty reduction.

In spite of the current and potential contributions of the informal sector to Nigeria's economic development, the education and skills requirement of the sector have not been adequately investigated. There is indeed no shortage of people with paper qualifications; it is the extent to which the qualifications match the changing socio-economic situation in Nigeria that is open to question. In fact, there is increasing recognition that the curricula of the education and training institutions in Nigeria should move to tally with the requirements of not only the formal but also the informal industrial sector.

2.4 Challenges of Nigeria's TVET Sector

The above account has outlined the characteristics of Nigeria's TVET sector, underlining the challenges of low societal recognition, which translates to low enrolment and inadequate skilled workforce, obsolete instructional facilities, inadequate funding, poor staffing, poor linkage with industry and general deficiency in quality.

Furthermore, the Nigeria's TVET sector above is too 'formalised'. There is no provision to cater for those who acquire skills informally; neither to assess them on the job, nor to provide for their progression. In addition, evaluation in all sectors of education tends to be by conventional examinations, which generally does not factor in practical techniques in the industry. This skill gap is aggravated by inefficient industrial attachment.

The result of the above scenario is a serious gap between state-of-the art skill in the industry and the skill acquired from school experience, with the resultant effect of teeming population of unemployed youths, including many unskilled graduates roaming the streets. These are the kinds of problems that may be addressed by NVQs, through short-term skills acquisition and re-skilling programmes.

There is increasing number of "politically inspired" youth development programs that are not standardised. These are introduced at Federal, State and NGOs all across the country. These widely used initiative have little or no comparability and skills and lack nationally recognised certification. This vacuum can best be addressed by the introduction of NVQF.

2.5 Initiative of the Federal Ministry of Education (FME)

In addressing the TVET challenges, the Education Reform, the Education Roadmap and the 1 year strategic plan of the Honourable Minister of Education have outlined the need for

industry based skills training in Nigeria through the introduction of the National Vocational Qualifications Framework. The Qualifications frameworks are seen as a specific policy tool that will act as a major instrument for the reform and expansion of educational provision in ways that will raise skills levels, improve labour market productivity, and contribute to economic growth.

2.6 Proposed TVET Structure (table overleaf)

Table 4: Proposed TVET Structure

NATIONAL BOARD FOR TECHNICAL EDUCATION																	
PROPOSED TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) STRUCTURE																	
FORMAL EDUCATION												NVQs		MANPOWER			
ENGINEERING		EDUCATION		TECHNOLOGY				I	I	I	NVQ LEVEL 6		SENIOR PROFESSIONAL/DIRECTOR/ MANAGER				
U	DOCTORATE	C		DEd(Tech)	P		DTech	N	N	N							
N	DOCTORATE	O		DEd(Tech)	O		D. Tech	N	S	D							
I		L	E		L			O	T	U							
V		L	D		Y			V	I	S							
E	MASTERS	E	U	M.Ed (Tech)	T		M. Tech.	A	T	T							
R		G	C	(NYSC)	E		(NYSC)	T	U	R							
S	BACHELOR'S	E	A	B.Ed (Tech)	C		B.Tech/HND	I	T	Y	NVQ LEVEL 5		ENGINEER/TECHNOLOGIST				
I	DEGREE		T		H			O	I								
T		O	I	NCE (Tech)	N			N	O	B							
Y		F	O		I				N	NID	A	NVQ LEVEL 4		TECHNICIAN/MASTER CRAFTSMAN			
			N		C		ND/ANTC/ANBC			S							
S				SENIOR SCHOOL			NTC/NBC/LTC 1	V	I	NVC 3	E	NVQ LEVEL 3		SKILLED CRAFTSMAN			
E				CERTIFICATE	TECH		LTC 2	O	N	NVC 2	D					NVQ LEVEL 2	
C							LTC 3	C	S	NVC 1							
O	JUNIOR	B	E	JNR SCH	V			A	T	T							
N	SCHOOL	A	D	CERT	O			T	I	R							
D		S	U		C			I	T	A							
P		I	C		C			O	U	I							
R		C	A		E			N	T	N							
I	PRIMARY		T		N			A	I	I							
M	SCHOOL		I		T			L	O	N							
A			O		R				N	G							
R			N		E												
								KEY				KEY					
								LTC		Labour Trade Certificate	NID	National Innovation Diploma					
								NVC		National Vocational Certificate	ND	National Diploma					
								NTC		National Technical Certificate	HND	Higher National Diploma					
								NBC		National Business Certificate.	NVQs	National Vocational Qualifications					
ASSESSMENT BASED ON KNOWLEDGE, ABILITY AND PERFORMANCE																	
MWCH-Minimum Weekly Contact Hours (In A Session of At Least 36 Weeks for Full-Time Curricula Activities in All institution)																	

CHAPTER III

3.0 IMPERATIVE FOR ESTABLISHMENT OF NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK IN NIGERIA

3.1 Phenomenon of National Qualification Frameworks

To meet the skill needs of teeming populations and address ever-rising challenges of unemployment and under-employment, governments in many countries have been compelled to strengthen the link between vocational training institutions and the work-place. This in most cases takes the form of closely involving the industry in developing occupational standards and work-based verification and continuous assessment of trainees. In this way, they make vocational skills qualifications more qualitative and relevant to the needs of the society.

This process of bridging the gap between training and industry takes a formal structure through the establishment of some kind of *qualifications framework*. According to the International Labour Organization (ILO), which has taken a great deal of interest in this world-wide phenomenon, a qualifications framework is intended to improve understanding of qualifications in terms of information they convey to an employer about prospective workers' competencies. Frameworks are also intended to explain how qualifications relate to each other and thus can be combined

to build pathways within and across occupations and education and training sectors'.

3.2 Importance of National Vocational Qualifications in Development of Skills

The National Vocational Qualifications Framework (NVQF) is a system for the development, classification and recognition of skills, knowledge and competencies acquired by individuals, irrespective of where and how the training or skill was acquired. The system gives a clear statement of what the learner must know or be able to do whether the learning took place in a classroom, on-the-job, or less formally. The framework indicates the comparability of different qualifications and how one can progress from one level to another.

National Vocational Qualification Framework generally strengthen national standards for industry based competence by:

- (i) providing the much needed common denominator against which standards for graduation, job entry, career progression and remuneration could be gauged easily and fairly;
- (ii) standardizing learning outcomes, competencies to be attained and demonstrated, as well as the technology adopted in skilled manpower development at the formal and non-formal levels;

- (iii) strengthening linkage between vocational training sector on the one hand, and industry on the other;
- (iv) providing convenient systems for assessment of prior experiential learning (APEL) achievements;
- (v) expanding access to education and promoting lifelong learning; and
- (vi) providing a system for up-skilling and re-skilling of youth and working adults.

3.3 International Dimensions of Competency Based Qualifications

The concept of NVQ scheme, as currently popularised around the world, initially started in the UK in 1986. It has now spread widely to other countries, including; New Zealand, Australia, South Africa, Singapore, Malaysia, Caribbean Islands, etc. At the moment, several African countries, including Ghana, Gambia, Mauritius, and Botswana, are also attempting to introduce it. A recent ILO survey indicates that over 70 countries are in the process of developing or implementing some kind of qualifications framework, either specifically for vocational skills training or for the entire education system. Apart from national systems, regional qualification frameworks have also emerged. Thus, we have European Qualifications Framework (EQF), Caribbean Vocational Qualifications (CVQ), and there are plans for regional qualifications for the various African Regional Economic Communities.

3.4 General Arrangement for Delivery of National Vocational Qualifications

The NVQ Framework is managed based on National Occupational Standard (NOS). Candidates are assessed on the job to ascertain their achievement or mastery of NOS before being awarded with the National Vocational Qualifications. The NOS are developed with inputs mainly from industry and regulated by guidelines from the NVQ regulatory agency.

The operation of the framework requires that the coordinating agency works with the sector skills bodies representing the various industries. The framework is organised in levels of increasing competence starting from semi skilled entry level to advanced level professional skills.

A candidate is assessed by an industry-based certified Internal Assessor whose work is validated by both internal and external verifiers. The award is made on satisfactory assessment of all the required units of the occupation.

Where awarding bodies exist, they are accredited by the regulatory agency, which also regulates their operations.

A schematic diagram of certification for work competence is shown figure below.

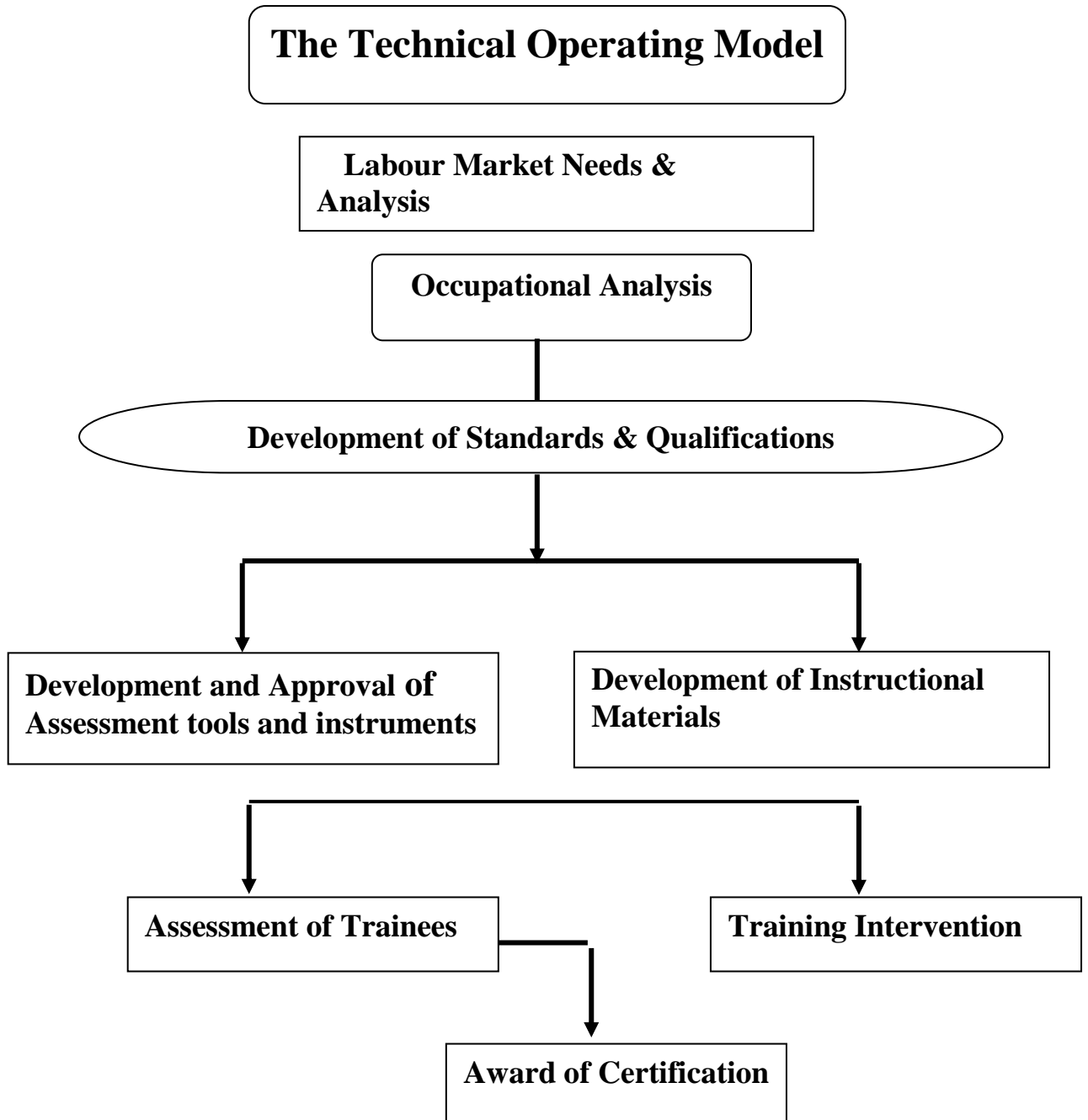


Figure 1. Schematic diagram of certification for work competence

3.5 Operational Structures of NVQFs in Various Countries

3.5.1 Practice in the United Kingdom (UK)

The operation of NVQs in the UK involves different bodies exercising various responsibilities. These include:

1. The Office for Qualifications and Examinations Regulation (Ofqual) and the Qualifications and Curriculum Development Agency (QCDA), along with the equivalent Scottish agencies, carry out overall quality assurance and supervise the functions of awarding bodies, qualification providers, standard-setting bodies, etc. They are responsible for maintaining the national qualifications framework (NQF).
2. Sector Skills Councils, responsible for development of standards;
3. Awarding bodies which administer assessment procedures, organizing the roles of Assessors, Internal/External Verifiers, etc and conduct of assessment
4. institutions that provide qualifications
5. assessment centres which assess NVQs according to awarding body criteria

3.5.1.1 Delivery of NVQs in the UK

In the UK, National Vocational Qualifications are awards which recognize what a person is able to do at work, and each level is made up of units of national occupational standards, which define the knowledge, understanding and competence required to perform that particular job related role.

To make sure that these national occupational standards and the resultant NVQs are relevant to the sector they relate to, industry sector bodies and organisations, such as Sector Skills Councils. Each NVQ is 'outcome based' there is no prescribed programme of learning. This means that each one is highly flexible and tailored to meet the individual trainee's ability. To guarantee consistency on a national basis, awarding organisations certify a learner's achievements on a unit by unit basis.

According to the original conception of NVQs in the UK, five (5) levels were initially designated to certify the following categories of skilled personnel:

Table 5: Skills Certification Levels in UK

Level	Skill Level
LEVEL 1	Foundations or basic skilled employees
LEVEL 2	Operators or semiskilled employees
LEVEL 3	Technicians, craft, skilled and supervisory employees

LEVEL 4	Technical and junior management positions
LEVEL 5	Professional engineers and senior management positions

To specify precisely, the required competence at each level, the following level descriptors were initially applied :

Table 6: Level Descriptors in UK

LEVEL	LEVEL DESCRIPTOR
Level 1	Competence that involves the application of knowledge in the performance of a range of varied work activities, most of which are routine and predictable.
Level 2	Competence that involves the application of knowledge in a significant range of varied work activities, performed in a variety of contexts. Collaboration with others, perhaps through membership of a work group or team, is often a requirement
Level 3	Competence that involves the application of knowledge in a broad range of varied work activities performed in a wide variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy and control or guidance of others is often required.
Level 4	Competence that involves the application of knowledge in a broad range of complex, technical or professional work activities performed in a variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often present.

Level 5	Competence that involves the application of a range of fundamental principles across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources features strongly, as do personal accountabilities for analysis, diagnosis, design, planning, execution and evaluation.
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The NVQ system in the UK was later harmonized with the new National Qualifications and Credit Framework (NQCF), which embraced the entire education sector. Basically, the above five levels were subdivided such that Level 4 was split into three, and Level 5 into two to fit into the current eight levels, plus the Foundation level. Other national vocational qualification systems in Commonwealth countries tend to be modeled on the UK model, with very similar descriptors.

3.5.2 Caribbean Vocational Qualifications (CVQ)

The Caribbean Vocational Qualifications framework, which started from Trinidad & Tobago and was later adopted by many countries of the CARICOM, also has five levels, specified as below:

Table 7: Caribbean Vocational Qualifications Framework

LEVEL	OCCUPATIONAL COMPETENCE	EQUIVALENT ACADEMIC COMPETENCE
Level 5	Advanced Professional Senior Manager	Postgraduate/Advanced Professional

Level 4	Master Craftsman Technologist	Bachelor's Degree
Level 3	Technician Supervisor	Diploma/ Associate Degree
Level 2	Skilled Worker (Unsupervised)	Certificate (Grade 11)
Level 1	Semiskilled, entry level Worker (Supervised)	Certificate (Grade 10)

3.5.3 Malaysian Qualifications Framework

The vocational qualifications framework is based on Malaysian Skill Certificates (MSC), and Statement of Achievement at Levels 1, 2, 3, 4 & 5 as described below. The qualifications are also based on National Occupational Skill Standard (NOSS).

Table 8: Malaysia NVQ Levels and Descriptors

Level	Descriptor
Level 1	Competent in performing a range of varied activities, most of which are routine and predictable.
Level 2	Competent in performing a significant range of varied work activities, Some of the activities are non-routine and required individual responsibility and autonomy.
Level 3	Competent in performing a broad range of varied work activities, performed in variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others is often required.
Level 4	Competent in performing a broad range of complex technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy.

	Responsible for the work of others and allocation of resources is often present.
Level 5	Competent in applying range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy, and often significant responsibility for the work of others, and for the allocation of substantial resources feature strongly, as do personal accountabilities. for analysis and diagnosis, design, planning, execution and evaluation.

It may be noted that there is considerable similarity in the competence level descriptors internationally. This is due to the common origin of the systems, but is also very helpful in enhancing transferability and portability across national borders.

3.6 Prospects for NVQs in Nigeria

It is expected that the introduction of NVQs in Nigeria will lead to the following outcomes;

1. Training will be industry- focused, through partnership (links) between the training providers, the Industries and enterprises they serve.

2. Skills and competences obtained at various settings: on the job, at home or in a formal training institution, could be assessed and certified, thus expanding recognition and opportunities for progression.

3. Curriculum will be flexible and could be delivered in a range of settings, presented in modular form so as to provide close guidance to the trainee and facilitator.
4. Training will be competency-based so that employers are clear about what people can do,
5. There will be a consistent system of certification which guarantees quality, as well as transportability of skill.
6. Wide range of skills could significantly increase employability.
7. Assessment process, being practical and work-based, could effectively check certificate racketeering and examination malpractices.

CHAPTER IV

4. OBSERVATIONS, FINDINGS AND RECOMMENDATIONS

4.1 Outline the Levels of Attainment on the Framework;

4.1.1 Findings

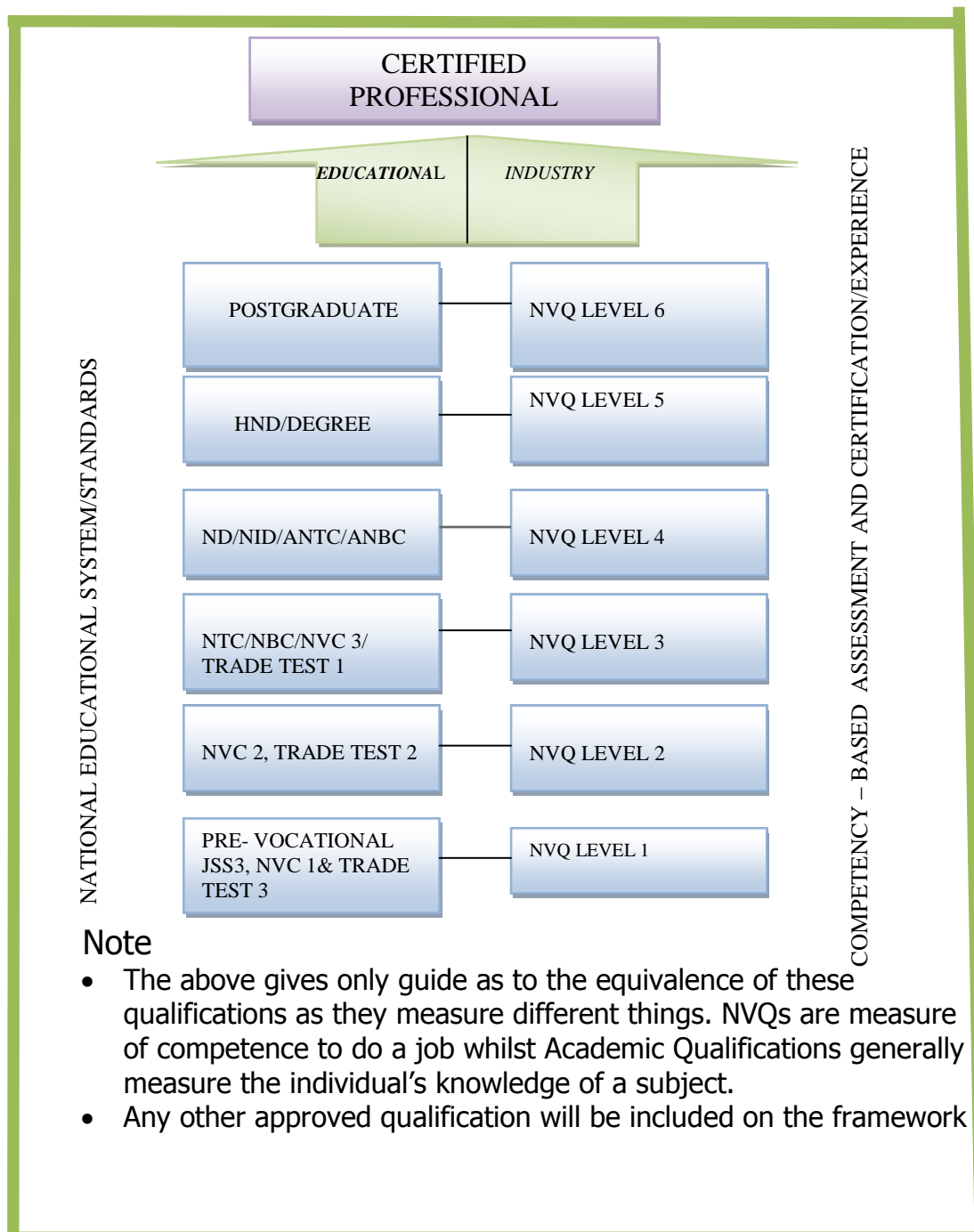
A national qualifications framework is a system arranging the various approved educational qualifications within the country in a hierarchical order from the lowest to the highest, specifying the knowledge and skill expected at each level. The framework will usually allow for "equivalences" to be established between elements of different qualifications. A vocational qualifications framework is similar but focuses on **technical & vocational skills and competences to be demonstrated and assessed on the job.**

Thus, a National Vocational Qualifications Framework (NVQF) provides descriptions of the **occupational competences** to be demonstrated, as well as a common grid of skill levels for all qualifications within the framework. Typically, in line with the first NVQF developed in the UK in 1986, such framework is a grid of five (5) steps from the Lowest Competence Level (an Unskilled or Semiskilled Worker) to the Highest (Advanced Professional). The **level descriptors** for each framework define the generic outcomes expected at each level.

Recommendations

The Committee studied the NVQ frameworks of a number of Commonwealth countries (see Chapter 3 of this report) and noticed that while they in essence complied with the initial UK format of five-level, they introduced variations in line with the peculiarities of their societies. Accordingly, the Committee proposes a six-level framework for Nigeria as indicated in figure 2 overleaf:

Figure 2 Structure for the proposed NVQ Framework



This proposed six-level system of qualifications at different levels of skill, autonomy and responsibility, corresponds to levels of employment in the Nigerian labour market, beginning with level 1, which describes the entry level worker, through to level 6 which describes the professional worker.

4.2 Define the Levels Descriptors;

4.2.1 Findings

(See Section 4.1.1)

4.2.2 RECOMMENDATIONS

Level Descriptors

The Level Descriptors set out the generic characteristic outcomes of each level. They are intended to provide a general, shared understanding of each level and allow broad comparisons to be made between qualifications and learning at different levels.

They are not intended to give precise or comprehensive statements and there is no expectation that every NVQ, programme should have all of the Characteristics.

The descriptors have been developed through a series of consultations and are offered as a first working guide and will be revised in the light of feedback on their use.

The descriptors are appended in the figure below.

Table 9: NVQ Levels and Descriptors proposed for Nigeria

NVQ Level	LEVEL DESCRIPTION	EDUCATION EQUIVALENTS	SKILLS EXPECTATIONS
1	<ul style="list-style-type: none"> • Competence which involves application of knowledge, skills in the performance of a range of work activities or task • Most of which may be routine or predictable 	Pre-vocational/JSS 3 and NVC 1 and Trade Test 3 Qualifications. Recall and Comprehend basic knowledge of the discipline	Use skill and key competencies to carry out tasks where actions is governed by rules defining routine and strategies
2	<ul style="list-style-type: none"> • Competence which involves the application of knowledge/skills in a range of varied work activities or tasks • Some of the activities are complex or non-routine • There is some degree of individual responsibility and autonomy • Team work may often be required 	National Vocational Certificate2 (NVC2) and Trade Test 2	<p>Use skills and key competencies to carry out tasks where action is governed by rules defining routine and strategies</p> <p>Select and apply basic methods, tools and materials</p>
3	<ul style="list-style-type: none"> • Competence which involves the application of knowledge and skills in a 	National Technical Certificate(NTC), National Business	Use a range of specific skills to carry out tasks and show personal

	<p>broad range of varied work activities</p> <ul style="list-style-type: none"> • Most of which are complex and non-routine • There is considerable responsibility and autonomy • Control or guidance of others is often required 	<p>Certificate (NBC), National Vocational Certificate 1(NVC1) and Trade Test 1</p>	<p>interpretation through selection and adjustments of methods, tools and materials</p>
4	<ul style="list-style-type: none"> • Competence which involves the application of knowledge and skills in a broad range of complex, technical or professional work activities • Requires substantial degree of personal responsibility and autonomy • Responsibility for the work of others and the allocation of resources is often present 	<p>National Diploma (ND) National Innovation Diploma (NID), Advance National Technical Certificate (ANTC) and Advance National Business Certificate (ANBC)</p>	<p>Use a range of specific skills to carry out tasks and show personal interpretation through selection and adjustment of methods, tools and materials. Evaluate different approaches to tasks</p>
5	<ul style="list-style-type: none"> • Competence which involves the application of skills in a range of 	<p>Higher National Diploma (HND), Degrees</p>	<p>Demonstration of high level knowledge of an area of work to use ideas and</p>

	<p>fundamental principles across a wide and often unpredictable variety of contexts</p> <ul style="list-style-type: none"> • Very substantial personal autonomy and often significant responsibility for the work of others • Allocation of substantial resources feature strongly • Personal accountability for analysis and diagnosis • Design, plan, execute and evaluate outcomes 		<p>research in response to complex problems and situations</p>
6	<ul style="list-style-type: none"> • Competence which involves the application of skills and a significant range of fundamental principles across a wide and often unpredictable variety of contexts • Very substantial personal autonomy and 	<p>Post graduate qualifications</p>	<p>Demonstration of high level specialist professional competence. Development of new and creative approaches that extend or redefine existing knowledge or professional practice</p>

	<p>often significant responsibility for the work of others is required</p> <ul style="list-style-type: none"> • Allocation of substantial resources feature strongly • Personal accountability for analysis and diagnosis • Design, plan, execute and evaluate outcomes • Liaise with external regulatory agencies and professional organisations in the strategic planning 		
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4.2.3 General Guide for Delivery and Assessment of NVQs

The key organisation involved in the delivery of the NVQs include the Regulators, such as the NVQA; the Sector Skills Bodies that represent different sectors of the economy, and play key role in development of units of National Occupational Standards (NOS) that are registered on the NVQF; and the Awarding Bodies that apply various agreed rules of combination to develop Qualifications and assessment procedures used by Training/Assessment Centres. The NVQA has responsibility to regulate the roles of all other

operators, subject to its remit as stipulated in the relevant legislations.

In the UK a multiplicity of Awarding bodies exist. These bodies are mainly responsible for designing and awarding qualifications subject to regulatory agencies, and they organise assessment and approve Training/Assessment Centres. These Centres therefore have to comply with their guidelines, as well as any other overriding national requirements. In some countries such as Malaysia, and even Scotland within the UK, the NVQ coordinating agency also serves as an awarding organisation. This type of arrangement may also be a suitable starting modality for Nigeria.

4.3 OUTLINE THE MODE OF ARTICULATION FROM ONE LEVEL TO ANOTHER

4.3.1 OBSERVATIONS

Each NVQ qualification level shows what skills are needed to achieve the qualification. In the workplace, the six (6) levels approximately correspond to:

Level 1: Entry Level or unskilled employees

Level 2: Foundation or basic skilled employees

Level 3: Operators or semi skilled employees

Level 4: Technicians, skilled and supervisory employees

Level 5: Technical and junior management positions

Level 6: Professional engineers and senior management positions

For assessment at Level 1, candidates may have Basic Education Certificate, Trade Test 3 or any other formal/non-formal vocational experience, but must also demonstrate such basic literacy, numeracy, communication or problem solving skills, as may be specified in the NOS. Subsequent progression beyond Level 1 depends on satisfactory outcome of Level 1 Assessment. But each NVQ Level should also have its own requirement for Key Skills, generally involving the following areas:

- ❖ Application of Numbers
- ❖ Working with Others
- ❖ Communication
- ❖ Improving Own Learning and Performance
- ❖ Information and Communication Technology
- ❖ Problem Solving

Key Skills are general skills that can help improve learning and performance. They are relevant to education and training, work and life in general. They are important in learning because they help focus on what is being learnt and how learning is undertaken so that better results are achieved. They are also important in work because they enable people to be flexible in all types of work. Employers look for Key Skills when recruiting and promoting people. These skills are relevant to all levels of an organization as well as the self-employed.

4.3.2 RECOMMENDATIONS

For effectiveness, the following modalities are recommended for ascertaining entry level characteristics of candidates, and their subsequent progression from one NVQ level to another:

NVQs must consist of the relevant units taken from the NOS developed by the appropriate sector skills body and approved by the NVQA. Assessors for NVQs must implement the assessment strategies specified by the appropriate sector skills bodies and approved by the regulatory authorities.

The specified assessment strategies must enable the qualification to attest to competence in the workplace by complying with the following requirements:

1. They reflect application of the specified skills, knowledge and understanding to the standard required in the workplace;
2. They specify the type and amount of evidence to be collected for assessment purposes;
3. They identify aspects of the NOS that must be assessed through performance in the workplace
4. They specify the occupational expertise of assessors, internal verifiers and external verifiers.

5. They incorporate a provision for Assessment of Prior Experiential Learning (APEL) as an integral component of the NVQF.

4.4 DEVELOP CRITERIA AND PROCEDURES FOR APPROVAL AND REGISTRATION OF QUALIFICATIONS;

4.4.1 Observations

An awarding organisation will first need to be recognised to offer particular qualification types, such as vocational credit-based qualifications, on the NVQF. Qualifications Regulators in UK assess applications for recognition to ensure organisations have the necessary governance, resources, expertise, systems and processes in place to develop, assess and award NVQs in a valid, reliable and consistent way.

Once recognised, awarding organisations are free to design vocational qualifications and submit same to the Regulators for accreditation. Awarding organisations often design these qualifications to be based on industry requirements. This includes both the design of unit content, such as knowledge and/or skills and evidence requirements, and also qualification structure, such as mandatory and optional pathways.

4.4.2 RECOMMENDATIONS

In order to be accredited for placement on the NVQF, it is recommended that a qualification must:

1. comply fully with the design features specified by the regulatory agency for NVQF
2. have assessment arrangements designed by a recognised awarding organization that meet, and continue to meet, the assessment requirements.
3. be submitted by a named recognised awarding organisation that has arrangements in place for the delivery and administration of assessment and awarding that meet, and continue to meet, the regulator's requirements.
4. be accompanied with details of a rationale covering the need for the qualification, ensuring that the qualification match its purposes, its content is up-to-date and standards are consistently applied.
5. be approved by a sector skills council (SSC) where the qualification falls within the purview of an existing functional SSC. If the proposal does not fall within an SSC responsibility, it should be accompanied by evidence of support of appropriate representative or regulatory organisations and/or evidence of learner demand, individual or social benefit.

4.5 DETERMINE THE CRITERIA FOR REGISTRATION AND APPROVAL OF (TRAINING/LEARNING/ASSESSMENT) CENTRES.

National Vocational Qualifications are normally only offered or assessed by organizations approved by the regulatory agency and the relevant awarding organisation. A Training/Learning /Assessment Centre may be one of the following:

- school, college or higher education institute
- training organization
- large or small company
- a group of agencies which work in partnership

To secure registration, the Training/Learning/Assessment Centre must satisfy the criteria established by the NVQ Agency and awarding body. An evaluation of the training facilities is conducted to verify the information indicated in the organisation's self-evaluation submission. The registration criteria outline the minimum requirements for a training provider to be registered.

4.5.1 RECOMMENDATIONS

It is recommended that to be registered as a bona fide Training/Assessment Centre, the Centre must satisfy the awarding body that it has:

1. procedures in place to develop assessment methods for individual units, or groups of units, that:
 - ❖ are consistent with the requirements for units set out by NOS
 - ❖ enable units to be assessed individually; and
 - ❖ assess validly the skills, knowledge and/or understanding of all the learning outcomes against the stated assessment criteria

access to individuals with expertise in assessment and awarding;

2. its staff and associates have access to relevant training and guidance in assessment; and that
3. the expertise is used appropriately in the assessment and awarding of its units and qualifications.

4.6 Identify Sources of Funding

4.6.1 Findings

Based on evidences and international precedent, a parliamentary appropriation by the national and state governments has been the major source of funding the development and implementation of the NVQF. As a national programme, its potential to catalyse significant qualitative changes in education and training is well recognised by the

stakeholders and such changes are considered crucial for the success of the national human resources development strategy. Donor support should not be substituted for a main line obligation of government.

Internationally, it is well known that funding for the implementation of the NVQF involves more than funding the regulatory authority. The implementation of the framework is a very large undertaking and an evolving process. It is likely that all the objectives of the framework will be achieved simultaneously. Therefore, the implementation should involve a phased plan related to the broader transformation agenda in education and training and skills development of the states, and state funding must be sought on that basis.

In some countries, Treasury monies have been directed to vocational training centres for NVQ-accredited courses and for equipping centres to higher level where required. This has acted as an incentive for non-public training/assessment centres to fast-track their institutional development activities. However, In order to ensure sustainability, and also avoid reliance on government funding only, other revenue generation options should be considered.

4.6.2 Recommendation:

1. Federal Government should fund the project through the proposed regulatory body to be established by law, however pending that action, the NBTE should be

assigned the responsibility to ensure early take off. Subsequently the introduction of counterpart funding by industry and other stakeholders should be provided.

2. Inter-departmental NVQF strategic team comprising NDE, NAPEP, ITF and informal sector coordinating agencies should also fund the process of delivering NVQs for its members.
3. Support should be sought from Development Partners e.g. World Bank, ETF, UNESCO, PTDF, GIZ.
4. Training Centres/Institution should pay registration fees to the NVQA
5. Special grants (private and public) should be canvassed from donors
6. Training and Assessment fees could be charged in line with practice worldwide.

4.7 Develop the legal and regulatory framework;

4.7.1 Findings

At the moment, there exists no legal or regulatory framework to guide the development and institutionalisation of NVQF in Nigeria.

4.7.2 Recommendation

To ensure compliance and adherence to the framework, Federal Government should make a law to establish a National Vocational Qualifications Authority (NVQA) or make the scheme part of the function of the proposed National Commission for Vocational Education and Training (NCOVET). In the meantime, and pending the establishment of NVQA the coordination and regulation of the scheme should be done by the NBTE.

4.7.2.1 Functions of the regulatory body should include the following:

1. prescribing admission standards for the scheme
2. producing and reviewing the levels of the NVQF and the level descriptors as the need arises to meet the manpower needs of the country
3. producing and reviewing the modes of progression from one NVQF level to another
4. developing and reviewing the criteria for approval of NVQF qualifications from time to time
5. developing and reviewing the procedure for approval and regulation of NVQF qualifications from time to time

6. determining the criteria for registration of NVQF training centres and institutions
7. determining the procedure for approval of NVQF training centres and institutions
8. sourcing funds locally and internationally for the NVQF
9. determining the criteria for assessment of NVQF candidates
10. determining the procedure for assessment of NVQF candidates
11. determining the criteria for selection of NVQF assessors and verifiers
12. appointing assessors and verifiers for the NVQF
13. determining the procedures for NVQF Award
14. consulting and liaising with relevant bodies and organizations on all the functions of the regulatory body
15. carrying out a comprehensive review of the scheme every five (5) years

4.7.2.2 SANCTIONS AND CONTROL

The Committee recommends that the law should;

- a) Provide obligations for all employers to employ only those with appropriate qualifications for the job
- b) Provide penalties for awarding NVQ certificates without following due process.
- c) Provide sanctions for employers who employ those with lower NVQs for jobs.
- d) Provide sanctions for those who acquire NVQs not through due process.

4.8 Develop strategy for industry buy-in;

4.8.1. Observations/Findings

NVQF will be more successful if it generates a sense of ownership among the industry and the education and training providers. This is easier to achieve if the government is not seen to be directly managing the process.

The success of a vocational qualifications framework may be measured by the extent to which its standards and

qualifications are valued and used. Unless providers offer them, and unless committed employers understand and demand them, standards and qualifications per se will be inert and disregarded.

Thus, a vocational qualifications framework cannot stand on its own but needs to be embedded in both the provider community and the communities of users. Trust, which is closely allied to credibility and acceptance, is an essential attribute of successful qualifications anywhere, whether conventional or otherwise. Adequate involvement of stakeholders may be achieved in three main ways, all of which are important.

- i. Representation of all categories of stakeholders on the governing board of the agency on rotational basis. This will enable the stakeholders to have a say in the overall direction of NVQF implementation
- ii. Establishment of a network of sector councils or committees, each representing a broad occupational subject area.
- iii. Agreed consultation procedures should be established, to ensure that employers, trade unions, and training providers have the opportunity to express their views directly and not just through their representatives on the Board or sector councils.

4.8.2 Recommendations

1. The industry should be involved in the development and application of the NVQF scheme
2. All major sectors of the industry should be adequately represented in the regulatory bodies
3. Sensitization and advocacy should be widely undertaken to engage stakeholders/industry
4. Appropriate legislation be effected as recommended under sanctions above

CHAPTER V

5.0 IMPLEMENTATION FRAMEWORK

1. NBTE to recommend to the Hon. Minister to sensitise National Council on Education (NCE) and seek Federal Executive Council approval for the introduction of NVQ Framework in Nigeria.
2. A National Vocational Qualifications Authority (NVQA), to coordinate the implementation of the Framework, to be established by an Act of National Assembly. In the meantime, NBTE should be mandated to handle the responsibility working in collaboration with a network of stakeholders' committees from MDAs, Industry/industry associations and professional bodies
3. A law to establish NVQA to regulate the delivery of NVQs should be promulgated.
4. Identify the most popular occupations within the six priority sectors (energy, manufacturing, ICT, hospitality and tourism, agriculture/forestry/conservation and construction) to launch pad the scheme and evaluate its outcome before full roll out to other sectors.
5. National Occupational Standards (NOS) and instructional manuals for the priority occupations be considered for early

review/development and national/international consultants with expertise in the development of national occupational standards be engaged. Also to sign an M oU with an International awarding body for a minimum of five (5) years

6. Capacity building programs for the administrators, assessors, verifiers, training/assessment centre managers etc, be carried out before the institutionalisation of NVQF in Nigeria
7. Organised Private Sector (OPS), Labour Unions and professional associations should be actively involved at all stages of development such as identification of pilot areas, development of NOS, determination of awarding bodies
8. Standard Organisation of Nigeria (SON) be involved in order to work for ISO classification for the qualifications.
9. Government should make adequate budgetary provision to drive the NVQF development process for a minimum of 5 years and subsequently, introduce the concept of counterpart funding by the industry and other stakeholders.
10. The six-level NVQ Framework recommended should be subjected to review from time to time by NVQA taking cognisance of developments in AU,ECOWAS and other bodies

ROADMAP FOR THE INSTITUTIONALISATION OF NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK (NVQF) IN NIGERIA

PHASE I

S/No	ACTIVITY	OBJECTIVE	EXPECTED OUTCOME	TIME FRAME	REMARKS
1	Formal presentation of NVQF Report to Honourable Minister of Education	To seek Federal Executive Council (FEC) approval and recognition by members of National Council on Education(NCE)	Report submitted to FEC and members of NCE sensitised	15 th August to 15 th September, 2011	
2	Engagement of a consultant on media campaign.	To identify and commission a competent media consultant for the development of advertisement in print and electronic media, media campaign (documentary, drama, talk shows) and radio/TV jingles on NVQ Framework Institutionalisation	A consultant Commissioned and general public sensitisation commenced	17 th October, 2011	Clique media consultants were engaged on NVQF project since year 2007
3	Continuous advocacy visit to key stakeholders i. e. Lagos State Government, National Planning Commission, National Assembly, NigerDock, Nigerian Breweries, Standards Organisation of Nigeria, Industry Association and	To sensitise, solicit for support and partnership	Stakeholders sensitised and partnership commitment obtained	22 nd August to 23 rd September, 2011	

	Professional Bodies and MDA's(NDE,N APTIN)				
4	Signing of Memorandum of Understanding 's(MoU) with National and International partners	International and National partners signing agreement on partnership in terms of priority areas to develop National Occupational Standard(NOS), Quality Assurance scheme, funding arrangement	MoU signed with interesting partners and priority areas for piloting identified.	30 th October,2011	
5	International Working Visit to assessment centres, training centres, awarding bodies, quality assurance agencies and regulatory agencies in UK and Scotland for 45 days.	4 no. Operational Staff from NBTE and 2no. from NABTEB to under study the management and delivery of NVQs in UK and Scotland	Knowledge and expertise for the delivery and management of NVQs acquired.	6 th November,2011	

PHASE II

S/No	ACTIVITY	OBJECTIVE	EXPECTED OUTCOME	TIME FRAME	REMARKS
1	Engagement of National/International consultants on NOS	To identify a competent consultants to facilitate the development of NOS	Consultants engaged for each of the NOS	2 nd November,2011	
2	2-week training of resource persons on NOS and Instructional materials	To identify and train resource persons on the procedure for the development of NOS and Instructional Materials	Resource persons identified and trained	9 th January, 2012	
3	5-week for the development of NOS and Instructional Materials	To develop 6no. NOS and Instructional Materials	6no. NOS and Instructional Materials developed	24 th January,2012	
4	6 days National Critique workshop on the NOS and Instructional Materials	To obtain input on the standards and Instructional Materials developed	The National Occupational Standards and Instructional Materials critiqued	4 th March, 2012	
5	Refinement of the NOS	To refine the NOS and Instructional Materials from the outcome of the critique	Final NOS/ Instructional Materials ready for approval	25 th March,2012	
6	2-week Capacity Building	To develop the capacity of the trainers, assessors, verifiers, centre managers and quality assurance agents	Assessors, verifiers, master trainers, centre managers and quality assurance agents trained and certified	2 nd April,2012	
7	Development of assessment and approval instrument and quality control mechanism	To develop standards for assessment, accreditation of centres/occupation,	Standards for assessment and accreditation	20 th April,2012	

		and guidelines for quality auditing and assessment of prior learning	developed		
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PHASE III

S/No	ACTIVITY	OBJECTIVE	EXPECTED OUTCOME	TIME FRAME	REMARKS
1	Accreditation of training and assessment centres	To assess the availability of human and material resources for the training and assessment of candidates.	Resources determined for the running of occupations	5 th May,2012	
2	Constitution of sector and awarding bodies	To network relevant stakeholders to perform the task of either a sector body or an awarding body	Sector and awarding bodies formed	10 th May,2012	
3	Design and Development of labour market information system and dissemination of information	To design a system for gathering, analysing and dissemination of information on labour market needs	A system for gathering, analysing and dissemination of labour market information developed	1 st June,2012	
4	Development of monitoring and evaluation instrument on the effectiveness and efficiency of NVQs.	To design an instrument to monitor and evaluate the effectiveness and efficiency of the NVQs	Instrument to monitor and evaluate the system developed	5 th June,2012s	

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