NATIONAL QUALIFICATION FRAMEWORK AND COMPETENCY STANDARDS:
Skills Promotion and Job Creation in East Asia and Pacific

Andrea Bateman and Xiaoyan Liang

April 12, 2016

1 This report has been prepared with the support of Korea-World Bank Partnership Facility Grant to promote job creation and skills development in the East Asia region. It provides an overview of national quality frameworks for skills/TVET in the EAP region. It synthesizes findings from a research undertaken in 12 participating EAP countries (Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Mongolia, Myanmar,
Table of Contents

Table of Contents .................................................................................................................. 2
1. Introduction ...................................................................................................................... 4
2. Overview of Qualifications Systems .............................................................................. 6
3. National Qualifications Frameworks ............................................................................. 7
   Overview .......................................................................................................................... 7
   NQF Purposes .................................................................................................................. 8
   NQF Structure ................................................................................................................ 8
4. Quality Assurance of Qualifications Approval ............................................................... 10
5. Standards Development ................................................................................................. 11
   Overview ........................................................................................................................ 11
   Notion of Competence .................................................................................................... 11
   Development of Standards ............................................................................................. 12
   Employability Skills ........................................................................................................ 17
   Relationship to Qualifications and Curriculum ............................................................. 18
6. Quality Assurance of Providers ..................................................................................... 19
7. Educator/Assessor Requirements .................................................................................. 20
8. Data Collection .............................................................................................................. 21
9. International Linkages .................................................................................................... 22
10. Barriers and Obstacles .................................................................................................. 22
11. Conclusion .................................................................................................................... 23
Appendix 1: Methodology ................................................................................................. 25
Appendix 2: Acknowledgements ...................................................................................... 26
Appendix 3: Definitions ...................................................................................................... 28
Appendix 4: Country Overview Summaries ....................................................................... 31
   Cambodia ....................................................................................................................... 31
   China (People’s Republic of) .......................................................................................... 34
   Indonesia ........................................................................................................................ 36
   Japan ............................................................................................................................... 39
   Korea ............................................................................................................................... 42
   Lao PDR .......................................................................................................................... 44
   Malaysia .......................................................................................................................... 47
   Mongolia .......................................................................................................................... 50
   Myanmar ........................................................................................................................ 54
List of Tables

Table 1: NQF summary .................................................................................................................. 7
Table 2: Summary of NQF architecture ....................................................................................... 9
Table 3: Definition of competence ............................................................................................ 12
Table 4: Development process .................................................................................................. 13
Table 5: Scope of standards ....................................................................................................... 16
Table 6: Employability skills .................................................................................................... 18
Table 7: Additional documentation ......................................................................................... 19
Table 8: Issues and barriers ...................................................................................................... 23

List of Acronyms

ASEAN Association of Southeast Asian Nations
EAP East Asia-Pacific
EAS East Asia Summit
NQF National Qualifications Framework
TVET Technical Vocational Education and Training
1. Introduction

The World Bank’s East Asia-Pacific region received a trust fund from the Korean government to promote skills development and job creation in the region including in Cambodia, China, Indonesia, Japan, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, and Vietnam over a period of three years, starting in June 2014. The three-year grant program has a broad objective to promote effective policies and programs in skills development and job creation. More specifically, it aims to:

1) Develop a knowledge base on skills supply, demand and systems by conducting analytical work with innovative methodological approaches;
2) Provide a forum on National Competency Standards as well as National and Regional Qualifications Frameworks within ASEAN+3 countries; and
3) Promote dissemination and learning exchanges on promising policies and programs in skills development and job creation within and beyond the East Asia-Pacific region, including examples of best practices.

Specifically, in Component (2) of the program (listed above) it was identified that there is a need to take stock of the current country level progress and challenges with regard to development of national competency standards and national qualifications frameworks (NQF). Further, there is a need to understand the various types of standards currently being used in different countries and their definitions, comparability, and the process and stakeholders involved in the development of such standards. Finally, it is important to evaluate to what extent they truly reflect the requirements of today and tomorrow’s labour market demands.

Strengthening the understanding between the EAP countries regarding NQFs and quality assurance systems will further enhance collaboration and possibilities for student and labour mobility.

This synthesis report brings together research undertaken in 12 participating EAP countries (Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) who responded to a survey related to national qualifications systems, including the barriers and issues facing implementation of quality assurance strategies such as NQF development, existence and implementation. The methodology for completing these surveys is included in Appendix 1. The people who assisted in the completion of the surveys is included in Appendix 2. A glossary of terms provided with the survey is included in Appendix 3.

The summaries of these surveys are included in Appendix 4. The surveys were completed in late 2014 or early 2015 and reflect the status of each country’s TVET sector at that point in time. The surveys focused on how and to what extent TVET provision is quality-assured within each EAP country. In relation to training and educational services, quality assurance was defined as “planned and systematic processes that provide confidence in educational services provided by training providers under the remit of relevant authorities or bodies” (Bateman, Keating and Vickers, 2009, p. 8).
Quality assurance of education and training can focus on:

- The training product, through the accreditation (approval) of achievement standards (such as educational and/or competency standards as well as certification of a qualification);

- The education and training providers, through registration\(^2\) (approval) processes based upon their infrastructure, financial probity and health, staff qualifications and experience, management systems, delivery systems, and student support systems;

- The monitoring of provider processes and outcomes, including student learning and employment outcomes and student and user satisfaction levels;

- The control, supervision or monitoring of assessment, certification and graduation procedures and outcomes;

- Provider or system-wide evaluations of quality, including evaluations by external agencies; and

- The provision of public information on the performance of providers such as program and component completions, student and employer satisfaction rates, and sanctions or warnings (Bateman, Keating, Gillis, Dyson, Burke & Coles 2012, p. 8-9).

Not all countries implemented all of these processes consistently within their qualifications system, which, in part, could be because for some countries TVET is not an integrated system within the overall qualifications system. Within some countries, the line of separation is made between initial vocational training and continuing education and training,\(^3\) and in others it may be between formal, informal and non-formal learning and a seemingly endless mix of delineations as to what is TVET, for example, skills/vocational/skills, training/skills, and education/technical education. In some countries, TVET is considered unique to one ministry (or mode of delivery) to the exclusion of other ministries or institutions that may be providing what would be considered TVET programs.

Divisions within the broader TVET sector are often divided along the lines of the governing or quality assuring authorities rather than any inherent difference in approach to TVET. In many countries, TVET governance and quality assurance is spread across multiple agencies, for example, Thailand and Indonesia.

\(^2\) Across some regions the processes of endorsement of the probity, capacities and processes of training providers is referred to as ‘accreditation’. These processes are termed in this report as ‘registration’ in order to differentiate registration of providers from the processes of accreditation of achievement standards (i.e. educational or competency standards and/or certification standards). Refer to Glossary.

\(^3\) Initial vocation training is focussed on general or vocational education and training, usually undertaken before entering the workforce and within the initial education system, usually before entering working life (Cedefop 2011). Continuing vocational training includes education or training conducted after initial education and training and often after entry into the workforce (Cedefop 2011).
The findings of the surveys of each participating EAP country (Cambodia, China, Indonesia, Japan, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) are included in the following section. In some instances, country overviews address only some of the sub-sectors of the TVET system, for example, Thailand and Indonesia.

This synthesis report summarises the findings against the following key themes:

1. Overview of qualifications systems
2. National qualifications frameworks (NQFs)
3. Quality assurance of qualifications approval
4. Standards development
5. Quality assurance of providers
6. Educator/assessor requirements
7. Data collection
8. International linkages
9. Barriers and issues

2. Overview of Qualifications Systems

A national qualifications system can be defined as including all the structures and activities that lead to the award of a qualification (Bjørnåvold & Coles 2010). Coles & Werquin (2006) note that a “national qualifications system is a broad concept that includes all aspects of a country’s activities resulting in the recognition of learning. These systems include the means of developing and implementing policy on qualifications, institutional arrangements, skills identification arrangements and processes for assessment, awarding and quality assurance” (p. 38).

Qualification systems can be unified, for example, all provision is included within the one system; or they could be segmented with the vocational education and training sector and higher education being separate and distinct; or, it could be linked, which is where there is different provision within and across the two main sectors while emphasis is placed on their similarities (Tuck, 2007).

Generally speaking, most reviewed EAP countries had a segmented qualifications system, but there were some countries working towards in some way linking the approaches in the different sectors. Additionally, some EAP countries had a clear division between higher education and a broad technical and vocational education and training (TVET) sector (e.g. China, Mongolia).

Other countries also had segmented systems within the broader TVET sector, for example, Indonesia, Malaysia, Thailand, and Vietnam. This is in part due to two or more ministries being involved in the regulation and implementation of the broader TVET sector (e.g. ministries responsible for education or for labour/manpower/human resources). This separation of TVET between ministries can sometimes result in a policy disconnect, especially in relation to regulation, management and implementation.
Nevertheless, there are examples of countries with segmented systems working towards greater harmonisation, for example the Philippines has established a cross-sectoral national coordinating committee for the managing and monitoring of its NQF.

3. National Qualifications Frameworks

Overview

Cedefop (2011, p. 82) defines a qualifications framework as:

An instrument for the development and classification of qualifications (e.g. at national or sectoral level) according to a set of criteria (e.g. using descriptors) applicable to specified levels of learning outcomes.

Within the EAP countries, a number of countries have recently established a NQF or are planning an NQF. This is in part due to the awareness of international trends, but it also reflects the influence of other current regional initiatives such as establishment of the ASEAN Qualifications Reference Framework.

Each EAP country is at different stages of planning or implementation of an NQF. In some countries, the NQF is well established (e.g. Malaysia), and in others it is in the early stages of implementation (e.g. Indonesia). In some instances, NQFs are documented but implementation has been limited. For other countries there is no explicit or national systematic intention to develop an NQF, although individuals or groups may be lobbying for a national approach. The development of an NQF can be grouped according to the following general categories4:

1. No intent
2. Desired but no progress made
3. Background planning underway
4. Initial development and design completed
5. Some structures and processes agreed and documented
6. Some structures and processes established and operational
7. Structures and processes established for 5 years
8. Review of structures and processes proposed or underway

The table below outlines the level of establishment of the NQFs in the region.

<table>
<thead>
<tr>
<th>Country</th>
<th>Level of establishment</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Established 2012, initial stages of implementation</td>
<td>5</td>
</tr>
<tr>
<td>China</td>
<td>Not planned</td>
<td>-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Established 2012, initial stages of implementation</td>
<td>5</td>
</tr>
<tr>
<td>Japan</td>
<td>Under consideration</td>
<td>-</td>
</tr>
</tbody>
</table>

4 These categories were utilised in the initial research for the ASEAN Qualifications Reference Framework (Bateman, Keating, Burke, Coles & Vickers 2012).
NQF Purposes

Coles et al (2014) notes that the main function of an NQF is ‘to act as a benchmark for the level of learning recognised in the national qualifications system’ (p. 22). For EAP countries, NQF documentation indicates that countries have developed qualifications frameworks for a range of purposes. In some instances, the purpose of an NQF can be explicit or implicit, that is, they are documented within an NQF policy statement or legislative document, or they are documented in planning and consultation documents. A number of documented examples of NQF purposes are noted below:

- For Cambodia, the aim of the Cambodian Qualifications Framework is to bring all recognised qualifications into a unified interconnected structure. Its main purposes include: facilitating the recognition of Cambodian qualifications and establishing links with regional qualifications, facilitating learner support and protection, as well as contributing to personal development of learners and the social and economic development of the country (See Cambodia Country Overview in Appendix 4).\(^5\)
- For Malaysia, the Malaysian Qualifications Framework is an instrument that develops and classifies qualifications; it also provides for pathways by linking qualifications.\(^6\)
- For Indonesia, the NQF is a ‘framework of competency qualifications levelling which corresponds, equalize[s] and incorporate[s] educational fields with work training fields and work experience in order to provide work competency recognition according to the work structure in various sectors.’\(^7\)
- For the Philippines, the framework aims to support the development and maintenance of pathways and equivalencies, and to align the PQF with international qualifications frameworks for student and labour mobility purposes.\(^8\)

NQF Structure

An analysis of various NQFs within the EAP region indicates that their structure varies. Bateman & Coles (2013, p. 14 - 15) indicate that the variations can relate to:

---
\(^5\) Cambodia country overview 2015  
\(^6\) MQA 2011  
\(^7\) Indonesia government 2012  
\(^8\) Philippines country overview 2015
• Coverage such as educational sectors and qualification types
• Purpose and vision of NQFs (e.g. reflective of the status quo, reforming, transparency, mobility, regional solidarity, national identity, coherence of education and training)
• Number of levels
• Number and types of domains for documenting level descriptors
• Volume measures, such as credit points
• Associated functions, such as improving quality assurance and validating non formal and informal learning, credit
• Level of regulation and governance

Of the participating EAP countries that have implemented or documented an NQF, the majority of these core elements are clearly articulated. The table below summarises, for each country that is proposing or has established an NQF or sectoral NQF, the key features of the framework.

Table 2: Summary of NQF architecture

<table>
<thead>
<tr>
<th>Country</th>
<th>Levels</th>
<th>Domains</th>
<th>Credit based</th>
<th>Unitised/Modularised</th>
</tr>
</thead>
</table>
| Cambodia         | 8      | • Knowledge
• Cognitive skills
• Psychomotor skills
• Interpersonal skills and responsibility
• Communication, information technology and numerical skills | Varies depending on methodology | - |
| Indonesia        | 9      | Consists of 2 parts:
• General – characteristics, personalities, working attitudes, ethics and morality
• Specific:
  1. Skills in fulfilling the job and competence
  2. Science/knowledge
  3. Methods and level of competence in applying science/knowledge
  4. Management skills# | - | Unitised TVET |
| Korea (TVET sector) | 8      | - | Yes TVET | Yes TVET |
| Lao PDR*         | 8      | • Knowledge
• Skills
• Application
• Social skills | - | - |
| Malaysia         | 8      | • Knowledge
• Practical skills
• Social skills and responsibilities
• Values, attitudes and professionalism
• Communication, leadership and team skills
• Problem solving and scientific skills
• Information management and lifelong learning skills
• Managerial and entrepreneurial skills | 40 hours = 1 credit point | Yes |
| Myanmar*         | 8      | • Knowledge and skills
• Application and competence
• Responsibility | - | - |
### Quality Assurance of Qualifications Approval

Across the participating EAP countries, the quality assurance of qualifications generally rests with either one or two ministries, for example, education and labour. The scope and level of establishment of approval processes varied significantly across participating EAP countries. Approval processes could be:

- In trial mode, generally supported by donor funding
- Not mandatory but perhaps required by particular cohorts of providers with particular target groups for qualifications to be recognised under the NQF.
- Mandatory for all qualifications to be recognised under the NQF.

In most participating countries the requirements for approval of qualifications are documented in legislation, government regulations or procedures. All countries have provider-approved qualifications, although some had national qualifications (e.g. Korea) or were trialling the development of national qualification (e.g. Cambodia). In many instances, the approval of provider qualifications was linked to provider approval to deliver the qualification; but this was not always the case.

A number of countries noted the degree of effort to implement quality assurance of a vast range of qualifications within the country, and indicated that it would take a significant amount of capacity development of agency staff to be able to undertake this work. For some countries, there is a lack of public register of approved qualifications.
5. Standards Development

Overview

Achievement standards in education and training are defined as a ‘statement approved and formalised by a competent body, which defines the rules to follow in a given context or the results to be achieved. A distinction can be made between competency, educational, occupational, assessment, validation or certification standards:

- ‘Competency standard refers to the knowledge, skills and/or competencies linked to practising a job
- Educational standard refers to statements of learning objectives, content of curricula, entry requirements and resources required to meet learning objectives
- Occupational standard refers to statements of activities and tasks related to a specific job and to its practise
- Assessment standard refers to statements of learning outcomes to be assessed and methodology used
- Validation standard refers to statements of level of achievement to be reached by the person assessed, and the methodology used
- Certification standard refers to statements of rules applicable to obtaining a qualification (e.g. certificate or diploma) as well as the rights conferred

A number of countries noted that documenting unitised achievement standards is a relatively new concept. In almost all instances the countries focused on competency or occupational standards in the TVET sector. In addition, most countries that have addressed the development of competency (or occupational standards) have done so through implementation in the broader vocational education and training sector. In general, countries used the terms competency standards and occupational standards interchangeably.

In some countries, there is some intent to apply the notion of competence and competency standards to higher education programs (e.g. Philippines). For higher education, achievement standards are not clearly articulated; for some countries unitisation of qualifications has not yet occurred (e.g. Philippines) while for others, programme standards have been developed (e.g. Malaysia).

Notion of Competence

Many definitions of competence exist in vocational and education literature. Hager (1993) believes the approach to competence affects the specification of competencies and also the approach to assessment. He indicates that there are three main approaches to defining competence:

---

• Task-based or behaviourist approach which views competence as ‘discrete behaviours associated with the completion of particular tasks…in effect tasks become the competencies’ (p. 95)

• The conception of competence that concentrates on the ‘general personal attributes that are crucial to effective performance,’ which focuses on ‘general attributes that are taken to underlie competent performance of a wide range of specific tasks’ (p. 96)

• The conception of competence in terms of knowledge, abilities, skills and attitudes displayed in the context of a carefully chosen set of realistic occupational tasks which are of an appropriate level of generality’ (p. 97)

The participating EAP countries defined competence in various ways and three countries included definitions of competence within the higher education or academic sector. The table below summarises each country’s definition of competence.

Table 3: Definition of competence

<table>
<thead>
<tr>
<th>Country</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia#</td>
<td>The skills standard ‘required for effective performance in the workplace. It goes beyond specifying knowledge, skills and attitude requirements into defining the performance levels the workers in a particular job must achieve’</td>
</tr>
<tr>
<td>China</td>
<td>-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Competence is the knowledge, skills and attitude to be applied in the workplace.</td>
</tr>
<tr>
<td>Japan</td>
<td>-</td>
</tr>
<tr>
<td>Korea</td>
<td>Competence means the combination of knowledge, skills and attributes used to perform a job successfully. The National Competency Standards includes both cognitive and practical skills.</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Competence is the relevant knowledge, skills and attitude applied to the standards of the performance expected in the workplace. Competence describes the job tasks within a specific job role.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Based on the ILO definition; competence is noted as ‘an acquired and practised ability to competently carry out a task or job’</td>
</tr>
<tr>
<td>Mongolia</td>
<td>TVET – combination of knowledge, skills and attitude of learners. Higher Education – described in terms of personal and professional skills and attitudes, communication skills, knowledge skills and attitude related to core subjects.</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Knowledge, skills and ability</td>
</tr>
<tr>
<td>Philippines</td>
<td>TVET – Competence is noted as ‘capability or proficiency, and refers to the application of knowledge, skills and attitude required to complete a work activity in a range of context and environment to the standard expected in the workplace’. Higher education – Combination of knowledge, skills, behaviour and attitudes that enables an individual to perform a task or role.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Competency is a measurable set of knowledge, skills and attitudes that drives an individual’s performance to perform at his / her job effectively.</td>
</tr>
<tr>
<td>Thailand</td>
<td>Vocational and Skills sectors: Competence is the required expected or accepted level of quality of processes or product of an individual presenting, or/and problem solving, hands-on demonstrating his capacity after learning/working experiences. Professional skills sector: Competence is the application of knowledge and experience to work.</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Competence is the essential knowledge, skills and attitude to perform the tasks of one occupation.</td>
</tr>
</tbody>
</table>

Source: Country overviews, generally noted as the TVET definition unless otherwise stated. Original source ‘Competency Standards strategy,’ Cambodia. China and Japan did not provide a definition of competence.

**Development of Standards**
Most countries are developing competency standards or occupational standards in the broader vocation and training sector; although this may be part of a donor funded program (e.g. Cambodia and Lao PDR) rather than as a system-wide initiative. In higher education this initiative is less evident. In Malaysia, in the higher education and vocational sectors (not the skills sector) program standards are developed to inform curriculum and training and assessment development. These standards provide guidelines for different modes of study, such as coursework, research and a combination of both.

**Process for development**

The development of standards follows similar processes in most countries. Countries are documenting processes, either in formal directives or guidelines. In all instances the development of standards in some way included industry involvement. The table below outlines the development process for each of the participating EAP countries.

**Table 4: Development process**

<table>
<thead>
<tr>
<th>Country</th>
<th>Responsibility</th>
<th>Parties to development</th>
<th>Process for development</th>
<th>Confirmed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>National Training Board&lt;br&gt;DIRECTORATE General of Vocational Education and Training</td>
<td>Experts, employers, trainers&lt;br&gt;There is: &lt;br&gt;• Industry advisory group&lt;br&gt;• Industry expert worker&lt;br&gt;• Technical Working Group</td>
<td>Functional/job task analysis, plus advice from industry/employers, experts in field, expert trainers/assessors</td>
<td>Industry advisor group and then final endorsement by sub-committee of the National Training Board.</td>
</tr>
<tr>
<td>China</td>
<td>Ministry of Human Resources and Social Security</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Ministry of Manpower in conjunction with the technical ministry</td>
<td>Standards Committee (made up of ministry representatives)&lt;br&gt;Two working groups (drafting team [industry], verification team [industry and ministry])&lt;br&gt;Two conventions (workshops with stakeholders)</td>
<td>Functional analysis Developing a Curriculum (DACUM)</td>
<td>Ministry of Manpower endorses the qualification outcome Relevant technical ministry endorses the competencies.</td>
</tr>
<tr>
<td>Japan</td>
<td>Ministry of Health, Labour and Welfare and the Japan Vocational Ability Development Association (JVADA)</td>
<td>-</td>
<td>Job analysis</td>
<td>-</td>
</tr>
<tr>
<td>Korea</td>
<td>National Competency Standards Institute at HRD Korea in collaboration with Sector Councils</td>
<td>NCS working group Develop NCS (1 accreditation expert, 3 trainers, 7 practitioners)</td>
<td>Occupational analysis, job analysis</td>
<td>Ministry of Education and Learning</td>
</tr>
</tbody>
</table>
2. Assessment and verification  
(5 practitioners, 3 trainers, 1 accreditation expert)

| Country    | Body/Agency/Panel/Committee | Development | Occupational analysis | From among |
|------------|-----------------------------|-------------|----------------------| members of |
| Lao PDR    | National Vocational Consulting and Skills Development Council\(^\text{10}\) | Development includes a tripartite approach of labour groups, training providers and employers | Including scoping of available standards, job task analysis through observation in the workplace and confirmation workshop | NVCSDC as the National Competency Standards Review Committee |
| Malaysia   | Malaysian Qualifications Agency (MQA) | Panel of Ministry of Higher Education, higher education providers (private and public), related industry or government agencies | Information workshops | MQA |
| Mongolia   | State Professional Inspection Agency | Information not provided | Information not provided | Information not provided |
| Myanmar    | National Skills Standards Authority (levels 1–4) | National Skills Standards Authority | Adapted from other countries, reviewed by industry sectoral committees under the NSSA | National Skills Standards Authority (levels 1–4) |
| Philippines| Technical Education and Skills Development Authority (TESDA) | TESDA staff Industry representatives | Functional analysis TESDA staff develop CS and qualification mapping Heavy reliance on industry consultation, validation and verification | TESDA Board |
|           | Commission on Higher Education CHED (delegates responsibility to various agencies) | Not described | Not described | Not described |
| Singapore  | Workforce Development Agency (WDA) | Industry players, training institutions and unions work together in the | Occupational and functional analysis | Not described |

\(^{10}\) Comprised of Ministers of Education and Sports and the Deputy Minister of Labour and Social Welfare (as chair and deputy chair) plus chair of Lao Chamber of Commerce, Head of Central Mass Organisations, Permanent Secretaries of Ministries, President of Occupational Associations, Directors of State Enterprises and Specialist of TVET and Skills Development.
<table>
<thead>
<tr>
<th>Country</th>
<th>Sector</th>
<th>Institutions/Committees</th>
<th>Ministries/Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thailand</strong></td>
<td>Vocational sector – Office of the Vocational Education Commission (OVEC) and Department of Business Development (DSD)</td>
<td>Ministries work with occupational groups and industry representatives, educators and teachers. Public hearings for feedback. Committees to identify and develop standards</td>
<td>Ministry of Education and Civil Service Commission.</td>
</tr>
<tr>
<td></td>
<td>Skills sector – Bureau of Skills Standards</td>
<td>Working committee comprising industrial representatives, employers, employees, experts in the field Committees to identify and develop standards</td>
<td>Ministry of Labour</td>
</tr>
<tr>
<td></td>
<td>Professional sector - Thailand Professional Qualification Institute (TPQI)</td>
<td>Industry and business sectors supported by TPQI. Analysis of specific occupational sector, functional analysis, development, piloting</td>
<td>TPQI</td>
</tr>
<tr>
<td><strong>Vietnam</strong></td>
<td>TVET– Ministry of Labour, Invalids and Social Affairs (MOLISA) has oversight and developed by line ministries</td>
<td>National Skills Standards Development Committee – half membership belonging to the Ministry and the other half representatives from employers, employees, trade associations. Appraisal committee with 1/3 from industry to confirm process has been met, format and outcomes. Occupational analysis, job task analysis, with list of job tasks and the competencies are to be confirmed by 30 independent experts.</td>
<td>MOLISA Minister</td>
</tr>
<tr>
<td></td>
<td>Education – Ministry of Education and Training</td>
<td>Committee of teachers, experts and 1 or 2 industry experts.</td>
<td>MOET</td>
</tr>
</tbody>
</table>

Source: Country Overviews

Participating EAP countries indicated that the competency standards were developed by sourcing a range of information. In general, the main sources were:

- Workplace information, for example, functional analysis or job task analysis
- Research of other countries’ systems
- DACUM or committee processes
- Existing program design and qualifications
- Licensing requirements

Participating countries also indicated that competency standards were for the purposes of curriculum development, program design, assessment design, completion rules for qualifications, and development of training and assessment materials.

In some instances, countries indicated that the competency standards could be used by:
• Learners for development planning
• Education and training providers for designing curriculum and programs
• Employers for specifying job roles and recruitment, or for training
• Approving bodies (registration and accreditation)
• Curriculum bodies

**Format**

In general, the standards in the broader vocational education and training sector follow a similar format. The format of the competency standards usually includes:

• Occupational background information
• Unit code and title
• Unit descriptor
• Unit of Competence
  - elements and performance criteria
  - variables and range statement
  - evidence guide.

Most participating countries organise the competencies into:

• Core competencies, which are the skills and knowledge required within the technical area
• Basic competencies, which are employability skills or generic skills.

In Malaysia, in the higher education and vocation sector (not the skills sector) program standards follow a specific format, although over time there have been various iterations in style and format. The program standards outline subjects (bodies of knowledge) and key topics, credits allocated to each subject as well as formative and summative assessment information. The standards also outline student entry requirements and benchmarks for academic staff including qualifications and experience, ratio of part-time to full-time staff and staff/student ratio.

Mongolia has a similar approach to the structure of competency standards with the inclusion of: expected job skill, admission requirements, requirements for curriculum content, duration, requirements for teachers, requirements for providers and learning conditions such as tools and equipment.

**Table 5: Scope of standards**

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Level of detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Competency standards</td>
<td>Describe a distinct work activity</td>
</tr>
<tr>
<td>China</td>
<td>Occupational standards</td>
<td>-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Competency standards</td>
<td>Specific tasks</td>
</tr>
<tr>
<td>Japan</td>
<td>Occupational standards</td>
<td>Includes competencies related to job tasks and duties</td>
</tr>
<tr>
<td>Korea</td>
<td>Competency standards</td>
<td>Detailed tasks of an occupation</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Competency standards</td>
<td>Competencies relate to job tasks, qualifications to an occupation.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Occupational skills standards</td>
<td>Broad occupational competencies rather than individual</td>
</tr>
</tbody>
</table>
#### Employability Skills

Of particular interest in the development of competency standards was how employability skills were being addressed. The participating EAP countries were provided with a definition of employability skills to assist in the completion of the survey. Employability skills are:

> the skills, knowledge and competencies that enhance a worker’s ability to secure and retain a job, progress at work and cope with change, secure another job if he/she so wishes or has been laid off and enter more easily into the labour market at different periods of the life cycle. Individuals are most employable when they have broad-based education and training, basic and portable high-level skills, including teamwork, problem solving, information and communications technology (ICT) and communication and language skills. This combination of skills enables them to adapt to changes in the world of work.\(^\text{11}\)

In general, countries address employability skills or generic skills in various ways, including:

- Embedding them in achievement standards, for example, competency standards focusing on vocational skills and knowledge
- Describing them as achievement standards, for example, a competency standard focusing on the generic skills and knowledge
- Embedding them in curriculum design documents that support the achievement standards
- Embedding them in training and in training and assessment support materials

---

\(^{11}\) Brewer (ILO, 2013), p. iii.
• Embedding them in National Qualifications Framework descriptors

Within each country, no one approach was exclusive of the other and many countries used a mix of approaches. In some respects, there is a hierarchy of processes, for example, if a country embeds employability skills within a NQF then other approaches were deployed such as:

1. In achievement standards
2. As achievement standards
3. In curriculum design
4. In training

The table below provides an overview of the main application of generic competencies in each participating EAP country.

**Table 6: Employability skills**

<table>
<thead>
<tr>
<th>Country</th>
<th>In NQF</th>
<th>In Achievement Standards</th>
<th>As Achievement Standards</th>
<th>In curriculum design</th>
<th>In training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>✓</td>
<td>✓ TVET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td></td>
<td>✓ TVET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>✓</td>
<td>✓ TVET</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td></td>
<td>✓ TVET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td>✓ TVET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td>✓ CET</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>Extra curricula</td>
</tr>
</tbody>
</table>

Note: Japan, Vietnam and China did not directly respond to the survey question on employability skills.
Source: Country overviews

**Relationship to Qualifications and Curriculum**

Most of the participating EAP countries that have utilised the development of competencies have linked these directly to the determination of qualification outcomes, which in turn broadly equates to an occupational role. In some instances, qualifications linked to competencies are a relatively new concept. For example, in Indonesia although competency standards have been developed for some time, they have only more recently been aligned to qualifications.

However, countries are finding that the development of the competency standards is really ‘just the beginning’ as further assistance or linkages to program design are required to either support providers or for providers to be able to demonstrate capacity to deliver training (and assessment) against the competencies. This has culminated in development of national or provider curriculum and development of program standards, for example, TESDA in the Philippines develops Training Regulations which define the minimum requirements/information for qualifications.
Table 7: Additional documentation

<table>
<thead>
<tr>
<th>Country</th>
<th>Additional materials developed</th>
<th>Developed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Program standards including: qualification and course title, nominal duration, entry requirements, proposed assessment methods, alignment of units to delivery modules, required resources, and module information (learning outcomes, delivery methods, assessment criteria)</td>
<td>Central*</td>
</tr>
<tr>
<td>China</td>
<td>Curriculum</td>
<td>-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Curriculum, program design, training materials, assessment instruments</td>
<td>Provider</td>
</tr>
<tr>
<td>Japan</td>
<td>Training providers rarely use competency standards; they are generally used by companies to train employees.</td>
<td>-</td>
</tr>
<tr>
<td>Korea</td>
<td>Curriculum</td>
<td>Central</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Curriculum, training materials [teacher guides, student guides] and some assessment instruments</td>
<td>Central*</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Curriculum (higher education and vocational sector – MQA) Curriculum learning materials and assessment instruments (Skills sector – DSD)</td>
<td>Provider</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Higher education – curriculum endorsed by Ministry</td>
<td>Central</td>
</tr>
<tr>
<td>Myanmar</td>
<td>TVET – curriculum approved by Ministry of Labour</td>
<td>Provider</td>
</tr>
<tr>
<td>Philippines</td>
<td>TVET – assessment instruments – standards used for testing only</td>
<td>-</td>
</tr>
<tr>
<td>Singapore</td>
<td>CET – Competency standards (reference document for a competency unit), Curriculum, Training and Assessment Guides (CTAGs) or Training and Assessment Guides (TAGs)</td>
<td>Central</td>
</tr>
<tr>
<td>Thailand</td>
<td>TVET – curriculum, assessment criteria can be developed nationally or at provider level (for approval)</td>
<td>Both</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Education and learning program materials</td>
<td>Provider</td>
</tr>
</tbody>
</table>

Note: * as part of a donor project.
Source: Country overviews

6. Quality Assurance of Providers

Across the participating EAP countries, the quality assurance of providers generally rests with either one or two ministries, for example, those responsible for education or for labour. Provider approval processes varied significantly across participating EAP countries. Provider approval processes could be:

- Not mandatory for specific cohorts of providers, but may be required by particular cohorts of providers with particular target groups
- Assumed for particular providers (e.g. government providers)

---

12 Training providers, training and assessment providers, assessment only providers
• Mandatory for all providers to be recognised under the NQF

In most participating countries the requirements for approval of providers are documented in legislation, government decrees, and regulations or, in some instances, in quality criteria or requirements. The focus on requirements includes: governance arrangements, finance, facilities and equipment, and staffing.

Very few countries indicated that they had implemented strong monitoring of providers’ processes and outcomes (including outcomes of monitoring activities), and also very few had public registers of providers accompanied by qualifications that they were approved to deliver.

7. Educator/Assessor Requirements

The requirements for educators and/or assessors varied across the EAP countries as well as variations within countries that occurred across sectors of the qualifications system. The requirements for educators and assessors tended to be outlined in:

• Legislation (e.g. China, Mongolia, Korea)
• Quality standards (e.g. Singapore, Indonesia – assessors for competency certification)
• Regulation (e.g. Philippines – TVET trainers)
• Policies or guidelines (e.g. Malaysia, Philippines – TVET assessors).

In almost all countries the requirement for trainers and/or assessors included at least the level of competence in the vocational content and skills as well as a qualification in teaching pedagogy and in some instances workplace experience. In some cases, the vocational and pedagogical requirements were combined into a specific qualification, as, for example in Japan. For some countries (e.g. Cambodia, Myanmar and Laos) trainer/assessor requirements are relatively new and not fully implemented. For other countries (e.g. China) national examinations were the key requirement, and for some education teaching experience was required to be involved in a competency based system (e.g. Laos). For other countries there was a separation of different types of educators, for example, professional/general/on-site teachers in Korea. In Vietnam the two ministries responsible for TVET require a bachelor qualification in vocational content plus a certificate in teaching pedagogy.

There were very few countries that had national registers for trainers (Philippines being an example of a national TVET register, and also in Thailand [OVEC]), and where assessment was centrally controlled there was a register of qualified assessors (e.g. Philippines TVET and the Indonesian competency certification system). In both the Philippines and Indonesian competency certification systems there was a monitoring process for assessors.
8. Data Collection

The quality assurance of qualifications systems ‘depends to a large extent upon the availability, validity, and reliability of data about the practice and outcomes’ as well as ‘the generation and use of indicators of quality’.\(^{13}\) If data is made publicly available it can be used to:

- Assure funders and investors of the probity, effectiveness and efficiency of expenditure;
- Assure stakeholders of the capacity and behaviour of providers;
- Assure stakeholders of the relevance and quality of the processes and products;
- Inform providers as a basis for improvements and innovations; and
- Assure national and international users of the relevance and quality of the product and system.\(^{14}\)

An analysis of the country overviews provided by participating EAP countries indicates that the range of data collected was not consistently applied across the education and training sectors or, for some countries, within the vocational and training subsectors. The majority of data collected related to context, input and output data, such as:

- Student background characteristics (e.g. in terms of ethnicity, age, gender, disabilities, prior qualifications);
- Student enrolment patterns;
- Proportion of funds supporting student learning, including those with disabilities, and supporting staff professional development/in-service training;
- Qualifications, experience and expertise of teaching staff;
- Retention and completion rates and patterns; and
- Graduate destinations.

However, the more complex data requiring more advanced collection and analysis were not as frequently collected, such as:

- Recognition of prior learning/credit transfer arrangements and outcomes;
- Process for program design, accreditation and review; and
- Stakeholder satisfaction (e.g. employers, students) with the delivery and outcomes of the course.

In many countries that have less developed and coherent qualifications systems, the level of data collection lacked scope and was limited to:

- Student characteristics, but limited in the level of detail (e.g. only name, gender and age);

---

\(^{13}\) Bateman, Keating, Gillis, Dyson, Burke & Coles 2012 p. 17–18

\(^{14}\) Bateman et al 2012
• Provider characteristics, limited to physical infrastructure information and staffing ratios; and
• Enrolments, retentions and completions at program level as opposed to unit or subcomponent of a qualification.

Some countries collected additional data (e.g. Vietnam collects data on the level of collaboration between enterprises and providers), but for many there is no national data standard to facilitate a coherent collection of data.

The findings tend to indicate that refined data collection and using the data to inform continuous improvement is more a strategy of an advanced qualifications system, and that for others the focus for implementation is on more immediate quality assurance arrangements.

9. International Linkages

One of the key purposes cited by participating EAP countries that had an NQF was the potential for linking to an international qualifications framework for student and labour mobility purposes. Across the EAP countries a number of arrangements are evident. For the ASEAN countries, international linkages are generally focused on the mutual recognition agreements currently agreed to or being agreed upon. On an individual country basis, some agreements or alignment activities have occurred (e.g. Malaysia with New Zealand) related to comparability of specific qualification types.¹⁵ A number of participating EAP countries and individual agencies noted that agreements or MOUs have been negotiated (e.g. China, Indonesia, Philippines, Thailand and Vietnam).

In relation to cross border provision, not all countries had processes to address international providers in place. Of those countries who had international providers within the country, the same conditions applied or special processes applied. Only one country explicitly stated that their providers could not provide training and assessment services outside the country (i.e. Singapore). In terms of incoming individuals wanting qualifications assessed, not all countries had a documented process for these instances, and stated that they tend to address recognition requests on a case-by-case basis.

10. Barriers and Obstacles

The country overviews provided by participating EAS countries, offered a wealth of information in relation to barriers and obstacles to implementing NQFs or qualifications systems. Some countries responded specifically in relation to TVET sector issues and other

countrie
s responded in relation to the NQF or general concerns. A number of critical issues were identified, such as:

- Connections and coordination between sectors;
- Finances;
- Capacity of quality assurance agency staff to support initiatives; and
- Capacity of providers to be able to provide quality training and assessment services.

The table below synthesises the issues and barriers identified by participating EAP countries.

### Table 8: Issues and barriers

<table>
<thead>
<tr>
<th>Theme</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections with other education sectors</td>
<td>Issues related to: lack of linkages across (and within) education and training sectors, including: program pathways, recognition or credit within and between sectors; lack of harmonising legislation or strategies</td>
</tr>
<tr>
<td>Progress for implementation</td>
<td>Poor progress of implementation was seen as a consequence of other issues, such as: quality assurance and NQFs containing unfamiliar concepts; number and variety of providers to be quality-assured; time taken to develop competency standards and curriculum; and time needed to embed strategies within the system.</td>
</tr>
<tr>
<td>Poor coordination</td>
<td>Issues were related to: lack of cooperation, coordination and communication between sector ministries; inability to engage technical ministries in development of competency standards; separate and disconnected TVET subsectors; lack of integration and harmonization of requirements of quality assurance agencies.</td>
</tr>
<tr>
<td>Staff capacity within agencies</td>
<td>Issues were related to: lack of capacity of staff to implement quality assurance strategies, to develop or understand the potential of an NQF, and the inability to build a critical mass of expertise</td>
</tr>
<tr>
<td>Financial support</td>
<td>Multiple countries commented on limited budget support for initiatives.</td>
</tr>
<tr>
<td>Perception of TVET</td>
<td>Concerns included the poor image of TVET, and the value of competency based training not being well understood</td>
</tr>
<tr>
<td>Engagement with stakeholders</td>
<td>Limited involvement of stakeholders (including industry/enterprises), which impacted on relevance and flexibility of provision.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Issues related to: TVET not being responsive to labour market needs, lack of data management systems and annual reporting to inform the system, and duplication of provision across ministries.</td>
</tr>
<tr>
<td>Capacity of providers</td>
<td>The quality of provision is affected by poor infrastructure and equipment, out-dated curriculum, unqualified staff, an inability to shift from classroom delivery to competency-based training, and traditional testing for entry excluding access to certain cohorts.</td>
</tr>
</tbody>
</table>

Source: Bateman & Coles 2015, country overviews.

### 11. Conclusion

The review has revealed that there is significant variance in the level of quality assurance of qualifications and providers, although all countries are focused on the importance of quality assurance in terms of improving recognition and level of trust of country qualifications. It is clear that establishing NQFs is really just the start of the quality assurance work and the greatest effort is spent on the implementation and embedding processes. Very few of the
participating countries had NQFs let alone quality assurance systems that are well established and moving into the stage of reviewing and enhancing the strategies.
Appendix 1: Methodology

Research for this project was undertaken with 13 participating countries based on a survey developed and provided to EAS countries through the Australian Government East Asia Summit TVET Quality Assurance Framework, which began in 2012. This survey culminated in a country overview shared to all countries through this project.

For this project the survey was refined and expanded to include questions pertaining to competency standards development, competence, employability skills, and data collection. In a number of instances some countries built on and updated the existing country overview provided during the East Asia Summit project.

The survey included a series of questions pertaining to:

1. Qualifications system overview
2. National qualifications framework
3. Quality assurance mechanisms:
4. Approval of qualifications
5. Approval of providers
6. Relationship of standards to qualifications
7. Educator/assessor requirements
8. Transnational and cross border linkages
9. Data collection
10. Issues and barriers

For some countries additional support was provided through a face-to-face interview to assist in the completion or update of the country overview. All countries were provided with a finalised country overview for confirmation. From this overview, a summarised country overview has been provided in Appendix 4.
Appendix 2: Acknowledgements

The country summaries have been derived from extended country overviews. The country overviews could not have been finalised without significant input from country representatives. The following people provided significant input into their respective country overviews.

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Role and Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Mr Khim Yorm</td>
<td>Ministry of Labour and Vocational Training</td>
</tr>
<tr>
<td></td>
<td>Kath Marnane</td>
<td>TVET Curriculum and Qualifications Specialist, SMEC – Asia Development Bank</td>
</tr>
<tr>
<td>China</td>
<td>Yinan Zhang</td>
<td>Consultant, The World Bank</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Dr M. Moedjiman</td>
<td>Chairman of National Training Council (independent body), Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Muchtar Azis</td>
<td>Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Aris Hermanto</td>
<td>Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Darmawansyah</td>
<td>Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Agus Susilo</td>
<td>Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Mr Zakir</td>
<td>Member of LA-LPK</td>
</tr>
<tr>
<td></td>
<td>Didik Sumbodo</td>
<td>Chairman, LA-LPK</td>
</tr>
<tr>
<td></td>
<td>Surono Surono</td>
<td>Chairman of Commission for Planning and Institutional Harmonization, BNSP</td>
</tr>
<tr>
<td></td>
<td>Mega Santos</td>
<td>Ministry of Research, Technology and Higher Education</td>
</tr>
<tr>
<td>Japan</td>
<td>Dr. Keiich Ogawa</td>
<td>Professor/Principal Researcher, Kobe University</td>
</tr>
<tr>
<td></td>
<td>Mr. Kentaro Shimada</td>
<td>Research Assistant, Kobe University</td>
</tr>
<tr>
<td></td>
<td>Mr. Katsuki Sakaue</td>
<td>Research Assistant, Kobe University</td>
</tr>
<tr>
<td></td>
<td>Mr. Jeje Okurut</td>
<td>Research Assistant, Kobe University</td>
</tr>
<tr>
<td>Korea</td>
<td>Joon Chul EOM</td>
<td>TVET/NQS Expert, HRD Korea/GIFTS</td>
</tr>
<tr>
<td></td>
<td>Bong Gy Jang</td>
<td>Professor/NCS Expert, Korea Polytechnics</td>
</tr>
<tr>
<td></td>
<td>Hyewon Ko</td>
<td>Researcher, Korea Research Institute for Vocational Education and Training (KRIVET)</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Phouvieng Phoumilay</td>
<td>Department of Technical Vocational Education, MOES</td>
</tr>
<tr>
<td></td>
<td>Joe Wagner</td>
<td>Department of Technical Vocational Education, MOES</td>
</tr>
<tr>
<td></td>
<td>Vannalek Leuang</td>
<td>Department of Technical Vocational Education, MOES</td>
</tr>
<tr>
<td></td>
<td>Panya Chantavong</td>
<td>Deputy Director, Educational Standards and Quality Assurance Centre, MOES</td>
</tr>
<tr>
<td></td>
<td>SisakdaBoulom</td>
<td>Ministry of Education and Sports (MOES)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Zita Mohd Fahmi</td>
<td>Malaysian Qualifications Authority</td>
</tr>
<tr>
<td></td>
<td>Datuk Dr Pang Chau Leong</td>
<td>Director-General, Department of Skills Development, Ministry of Human Resources</td>
</tr>
<tr>
<td>Mongolia*</td>
<td>Khishigbuyan Dayan-Ochir</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>Daw Khin Mar Aye</td>
<td>Director, NSSA</td>
</tr>
<tr>
<td></td>
<td>Dr Kyi Shwin</td>
<td>Rector, Banmaw University</td>
</tr>
<tr>
<td></td>
<td>Robyn Jackson</td>
<td>Programme Specialist TVET, UNESCO</td>
</tr>
<tr>
<td></td>
<td>Daw Naing Yee Mar</td>
<td>Senior Consultant, GIZ</td>
</tr>
<tr>
<td></td>
<td>Konrad De Bortoli</td>
<td>Head TVET Project, GIZ</td>
</tr>
<tr>
<td></td>
<td>U Ko Ko Naing</td>
<td>Consultant, GIZ</td>
</tr>
<tr>
<td>Philippines</td>
<td>Irene M. Isaac</td>
<td>Deputy Director General for Policies and Plans, TESDA</td>
</tr>
<tr>
<td></td>
<td>Marissa G. Legaspi</td>
<td>Executive Director, Planning Office, TESDA</td>
</tr>
<tr>
<td></td>
<td>Imelda B. Taganas</td>
<td>Executive Director, Chief of Staff, Office of the Director General, TESDA</td>
</tr>
<tr>
<td></td>
<td>Luz Victoria G. Amponin</td>
<td>OIC-Executive Director, Qualifications and Standards Office, TESDA</td>
</tr>
<tr>
<td></td>
<td>Elpidio D. Mamaril, Jr.</td>
<td>Asst. Executive Director, Certification Office, TESDA</td>
</tr>
<tr>
<td>Country</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Singapore</td>
<td>Thomas Yeo</td>
<td>Principal TVET Consultant, CET Global Pte Ltd</td>
</tr>
<tr>
<td>Thailand</td>
<td>Dr Siripan Choomnoom</td>
<td>Senior Advisor, and Vocational Education Commission Members, OVEC</td>
</tr>
<tr>
<td></td>
<td>Swita Metiranan</td>
<td>Administration, TPQI</td>
</tr>
<tr>
<td></td>
<td>Noppadol Piyatrapoomi</td>
<td>Deputy Director General, TPQI</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Nguyen Quang Viet,</td>
<td>Deputy Director, National Institute for Vocational Training (NIVT), General Directorate of Vocational Training (GDVT), MOLISA</td>
</tr>
<tr>
<td></td>
<td>Hoàng Ngọc Vinh Vũ trường Vũ</td>
<td>GDCN, MOET</td>
</tr>
</tbody>
</table>

Note: * Survey completed by World Bank staff.
# Updated by World Bank staff based on EAS project overview written by FAN Wei, Director of Division of Higher VET, MOE, P.R. China & LIU Yufeng, Research Professor of CIVTE, MOE, P. R. China (2012).
Appendix 3: Definitions

A series of definitions were provided to the participating EAP countries for completion of the survey. These definitions were sourced from those included in the ASEAN Qualifications Reference Framework and the EAP TVET Quality Assurance Framework.

<table>
<thead>
<tr>
<th>TERMS</th>
<th>OPERATIONAL DEFINITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accreditation</strong></td>
<td>The official approval of achievement standards, including qualifications or unit(s) of a qualification, usually for a particular period of time, as being able to meet particular requirements or standards defined by an accrediting agency that functions within a quality assurance system.</td>
</tr>
<tr>
<td><strong>Accredited qualifications</strong></td>
<td>Qualifications which have been accredited or granted approval by an accrediting agency or organisation as having met specific requirements or standards of quality.</td>
</tr>
<tr>
<td><strong>Accrediting agency</strong></td>
<td>Accrediting agencies are those competent bodies (such as national qualifications agencies, national accreditation agencies, official review boards or other nationally approved bodies or agencies with the responsibility to approve qualifications) that manage program and qualifications accreditation under national legislation. Accrediting agencies function within a quality assurance system.</td>
</tr>
</tbody>
</table>
| **Achievement standards (in education and training)** | Statements approved and formalised by a competent body, which defines the rules to follow in a given context or the results to be achieved. A distinction can be made between competency, educational, occupational, assessment, validation or certification standards:  
  • competency standard refers to the knowledge, skills and/or competencies linked to practising a job;  
  • educational standard refers to statements of learning objectives, content of curricula, entry requirements and resources required to meet learning objectives  
  • occupational standard refers to statements of activities and tasks related to a specific job and to its practise;  
  • assessment standard refers to statements of learning outcomes to be assessed and methodology used;  
  • validation standard refers to statements of level of achievement to be reached by the person assessed, and the methodology used;  
  • certification standard refers to statements of rules applicable to obtaining a qualification (e.g. certificate or diploma) as well as the rights conferred. |
| **Awarding and/or Certifying body** | Body issuing qualifications (e.g. certificates, diplomas or titles) formally recognising the achievement of learning outcomes (knowledge, skills and/or competences) of an individual, following an assessment and validation procedure. |
| **Credit** | Credit describes the value of an amount of learning. It can be transferred to a qualification from learning achieved from formal, informal and non-formal settings. Credit can be allowed to accumulate to predetermined levels for the award of a qualification. The processes involved in valuing credit, transferring credit and accumulating credit are governed by rules in a credit framework. |
| **Curriculum** | Inventory of activities implemented to design, organise and plan an education or training action, including definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers. The term curriculum refers to design, organisation and planning of learning activities whereas the term program refers to implementation of these activities. |

---

16 A unit of a qualification may be called course, module, unit of study, unit, competency etc.
20 Cedefop (2011), p. 28
### Employability skills

Employability skills are ‘the skills, knowledge and competencies that enhance a worker’s ability to secure and retain a job, progress at work and cope with change, secure another job if he/she so wishes or has been laid off and enter more easily into the labour market at different periods of the life cycle. Individuals are most employable when they have broad-based education and training, basic and portable high-level skills, including teamwork, problem solving, information and communications technology (ICT) and communication and language skills. This combination of skills enables them to adapt to changes in the world of work’.\(^{21}\)

### Learning outcomes

Learning outcomes are clear statements of what a learner can be expected to know, understand and/or do as a result of a learning experience.

### Level descriptor

A general statement that summarises the learning outcomes appropriate to a specific level in a qualifications framework. Level descriptors are usually grouped in domains of learning.

### National Qualifications Framework

An instrument for the development and classification of qualifications according to a set of criteria or criteria for levels of learning achieved. This set of criteria may be implicit in the qualifications descriptors themselves or made explicit in the form of a set of level descriptors. The scope of frameworks may be comprehensive of all learning achievement and pathways or may be confined to a particular sector, for example initial education, adult education and training or an occupational area. Some frameworks may have more design elements and a tighter structure than others; some may have a legal basis whereas others represent a consensus of views of social partners.\(^{22}\)

### Program

The arrangements made for the teaching and learning of a body of knowledge, set of skills and of wider competences. A learning program can lead to a qualification.

### Provider

An organisation that plans and delivers education/training and assessment services that often leads to the award of qualifications or components of qualifications.

### Qualification

Qualification is a formal certificate issued by an official agency, in recognition that an individual has been assessed as achieving learning outcomes or competencies to the standard specified for the qualification title, usually a type of certificate, diploma or degree. Learning and assessment for a qualification can take place through workplace experience and/or a program of study. A qualification confers official recognition of value in the labour market and in further education and training.\(^{23}\)

### Qualifications Framework

Instrument for development and classification of qualifications (at national or sectoral levels) according to a set of criteria (such as using descriptors) applicable to specified levels of learning outcomes.\(^{24}\)

### Qualifications system

Qualifications system includes all aspects of a country's activity that result in the recognition of learning. These systems include the means of developing and operationalising national or regional policy on qualifications, institutional arrangements, quality assurance processes, assessment and awarding processes, skills recognition and other mechanisms that link education and training to the labour market and civil society. Qualifications systems may be more or less integrated and coherent. One feature of a qualifications system may be an explicit framework of qualifications.\(^{25}\)

### Quality assurance

Quality assurance is a component of quality management and is ‘focused on providing confidence that quality requirements will be fulfilled’.\(^{26}\) In relation to education and training services, quality assurance refers to planned and systematic processes that provide confidence in the design, delivery and award of qualifications within an education and training system. Quality assurance ensures

---

\(^{21}\) Brewer (ILO, 2013), p. iii. Note: HRD Recommendation 195, 2004; this was reinforced in the Resolution on Youth Employment 2005.


\(^{24}\) Cedefop (2011) p. 82.


\(^{26}\) AS/NZS ISO 9000:2006: Quality management systems—Fundamentals and vocabulary, p. 8
stakeholders interests and investment in any accredited program are protected.

<table>
<thead>
<tr>
<th><strong>Quality assurance framework</strong></th>
<th>A set of principles, guidelines, tools and standards that act as a reference for guiding the consistent application of quality assurance activities. 27</th>
</tr>
</thead>
</table>
| **Quality assurance system**  | Quality assurance system includes all aspects of a country's activity related to assuring the quality of education and training. These systems include the following elements:  
  • clear and measurable objectives and standards, guidelines for implementation, including stakeholder involvement,  
  • appropriate resources,  
  • consistent evaluation methods, associating self-assessment and external review,  
  • feedback mechanisms and procedures for improvement,  
  • widely accessible evaluation results. 28 |
| **Quality standards**         | Technical specifications which are measurable and have been drawn up by consensus and approved by an organisation recognised at regional, national or international levels. The purpose of quality standards is optimisation of input and/or output of learning. 29 |
| **Regional qualifications framework** | A broad structure of levels of learning outcomes that is agreed by countries in a geographical region. A means of enabling one national framework of qualifications to relate to another and, subsequently, for a qualification in one country to be compared to a qualification from another country. |
| **Registering agency**        | Registering agencies are those competent bodies responsible for approving education and training providers, e.g. national qualifications agencies, official review boards or other nationally approved bodies or agencies. Registering agencies function within a quality assurance system. |
| **Registration of providers** | Registration processes include formal acknowledgement by a registering agency that a provider meets relevant standards. Under NQFs it is usual for a provider to be registered in order to deliver and assess accredited programs and issue awards. Some agencies differentiate between the two processes, e.g.:  
  • Formal acknowledgement that the provider meets key generic standards  
  • Formal acknowledgement that the provider meets specific standards related to the provision of teaching, learning and assessment of a specific program. |
| **Standard (in education and training)** | Statement approved and formalised by a competent body, which defines the rules to follow in a given context or the results to be achieved. Also refer to Achievement Standards. |
| **TVET**                     | Education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market. 30 OR  
  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 occupation in various sectors of economic life. TVET thus equips people not only with vocational skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. Examples of the benefits include self-awareness and self-esteem, and strengthened interpersonal, citizenship, communication and entrepreneurial skills. 31 |

---

27 Adapted from Cedefop 2011, p. 22
28 Adapted from Cedefop 2011, p. 19.
29 Cedefop (2011), p. 96
Appendix 4: Country Overview Summaries

Cambodia

Education System

The education system in Cambodia embraces formal and non-formal education. The formal pre-tertiary education structure, under the Ministry of Education, Youth and Sport (MoEYS), consists of three years of pre-school education, six years of primary school, three years of lower-secondary school, and three years of upper secondary school.

The formal Higher Education sector consists of one year of pre-university (foundation year), two years of Associate Degree, with an additional two years for a four-year Bachelor Degree, two years of Master Degree and three years of Doctoral Degree. The Directorate General of Higher Education of MoEYS is the regulatory entity for state universities and also oversees the registration of private universities.

The Directorate General of TVET of the Ministry of Labour and Vocational Training (MoLVT) manages the national TVET system. The National Training Board (NTB), with representation from all 14 ministries with training institutions, is responsible for policy direction and coordination. The formal TVET System comprises of 38 TVET institutions. There are 23 Provincial Training Centres, 8 Polytechnics/Institutes, 1 specialised Institute, namely Secondary School of Japan Vocational Centre, and six other institutions which offer community based short courses to improve family income.

The courses currently offered by MoLVT are the short courses in basic skills (3–5 months’ duration), the certificate courses at 3 levels, requiring entry point at grade 9 or skills bridging, Higher Diploma Programmes of 2 years requiring Grade 12 or completion of the 3 Certificate levels, Bachelor Programmes of 4 years requiring Grade 12 or 2 years after completion of Higher Diploma levels, and Master Programmes of 2 years after completion of Bachelor Degree.

Cambodia Qualifications Framework (CQF)

The CQF is the national instrument that develops and classifies qualifications based on a set of criteria that is agreed nationally for specified levels of learning achieved. CQF encompass all levels of education and Training in Cambodia. There are eight levels of qualifications and each level is differentiated by the general characteristics that include minimum entrance requirement, typical duration, programme characteristic, cumulative duration in full-time equivalent, type of subsequent education and learning outcomes. The framework has a credit system so that the volume learning may be recorded and students may receive credit for all qualifications. At this stage there is no legislation being developed for an agency to monitor and manage the CQF.

---

Quality Assurance Strategies

Accreditation of Qualifications
The National Training Board (NTB) is the accrediting body for qualifications for TVET sector. The NTB is supported by Directorate General of Technical and Vocational Education and Training (DGTVET). The NTB is made up of the ministers from the 14 line ministries.

Accreditation processes through the NTB are in the trial stage through a donor-funded project. There are no quality standards or criteria related to the performance of the accrediting agency or related to the accreditation of qualifications.

At the moment there is no public register of national qualifications (or qualifications developed internally and not accredited).

Currently the DGTVET through a donor-funded project has developed competency standards (clustering into qualifications), curriculum, learner workbooks (includes some theory assessment) and assessment materials (for the practical assessment) for Level 2 to Level 4 qualifications for electrical, plumbing, masonry and carpentry.

Assessment
It is proposed that the NTB will be the awarding body responsible for the issuance of national TVET qualifications. National TVET qualifications endorsed by NTB will be based on competency standards. Certificates (and/or statements will include a list of competencies achieved).

It is proposed that registered TVET providers will be able to undertake training and assessment services, and there will be established 10 assessment centres for the purposes of assessing current competence (RPL) and qualifications.

Beyond the assessment developed in the learner workbook and the competency assessment package, there is no clear guidance as to how the consistency of assessment judgments will be moderated or reviewed.

Relationship to Standards
Competency standards will form the basis of qualifications in TVET. There are no quality standards for the development of competency standards, although the Competency Strategy outlines the process. The development process includes: Industry Advisory Group, Industry expert worker and a Technical Working Group.

The Industry Advisory Group’s role is to advise on critical job roles that needs skill development, validate the list of competencies to be developed and endorse the competency standards and qualification completion rules. The Technical Working Group facilitates in conducting a functional and job task analysis to identify competencies that need to be developed. These lists of proposed competencies are reviewed and endorsed by the Industry Advisory Group. The Technical Working Group then drafts the competencies. These draft competencies are then taken to informed and skilled experts in the field for comment and then final drafts are endorsed by the IAG. The IAG then submit the competencies and qualification completion rules to the Sub Committee of the NTB for checking to ensure that they meet the requirements of the CQF and then they are passed to the NTB for approval.

Included in this process is the endorsement and approval of competency based curriculum; these are programme standards. These programme standards include advice in relation to course design. Competency standards development is informed by functional and job task analysis, expert advice from industry/employers, experts in the field, and expert trainers/assessors.
**Registration of Providers**

In TVET, currently the registering bodies are separated by sectors. There are currently 14 line ministries who manage the training and assessment services across the relevant industry sectors. There are 292 providers of training and assessment registered with GDTVET, of which 39 are government owned institutions.

Currently there are no quality standards developed that address the role of regulators. There is no body responsible for the monitoring of these regulators (e.g. ministries).

NTB, supported by DGTVE, MLVT, will register all providers of TVET. The standards or requirements that need to be met for the registration of providers are being developed in the ongoing ADB funded project, strengthening Technical and Vocational Education and Training (STVET). These criteria have been developed.

In the case of TVET, the registration standards for TVET providers focus on six criteria – Management and Governance, Resources, Staff and Teaching Staff, Trainee and Student, Curriculum and Teaching/Learning, Research and Development. These criteria have been developed. The supporting documents related to these criteria are being developed to assist the training providers. Currently those registered with DGTVE are required to complete an application form to be registered.

Each of the 39 government institutes will monitor themselves against the six criteria. It is envisaged that this process will be eventually implemented across all registered providers. A detailed monitoring and evaluation system will be put in place. For TVET, there is a register of providers, but the registers are incomplete. The providers will have to undertake quality audits, annual self-assessment as well as prepared annual performance reports.

**Educator/Assessor Requirements**

The ADB STVET Project is developing an integrated learning services system for the upgrading of technical and vocational education and training (TVET), including teacher training, skills standards, testing and assessment, development of curriculum and training materials, plus institutional management and upgrading. The Competency Standards for TVET Teachers, which are being finalised, will be used as a tool for identifying the minimum standards of TVET teachers.

For the education sector, teachers, trainers and lecturers are trained at the National Institute of Education for upper secondary school and universities. Teachers, trainers, educators, lecturer requirements in both sectors are noted in legislation.
China (People’s Republic of)³³

Overview

Chinese Education system is divided into four levels – preschool education, primary education, secondary education, and higher education. Compulsory education in China is nine years. Vocational school education in China includes three levels – primary, secondary and higher. Primary and secondary vocational school educations are carried out respectively by primary and secondary vocational schools (at junior and senior secondary level respectively). The higher vocational school education is, in accordance with the actual needs and conditions, undertaken by higher vocational schools or by common institutions of higher learning. Other schools may, in accordance with the overall planning by the education administrative department, implement vocational school education at corresponding levels.

National/TVET Qualifications Framework

Currently China does not have a national qualifications framework. The qualification system is mainly composed of two systems – educational qualification system and occupational qualification system. Ministry of Education is in charge of the educational qualification system, and Ministry of Human Resource and Social Security is in charge of the occupational standards system.

TVET Quality Assurance Mechanisms

Accreditation of Qualifications

The national occupational standards are released by Ministry of Human Resources and Social Security with reference to the Technical Note on Establishing National Occupational Standards. Each set of occupational standards is created by a working team of five to ten experts who are familiar with the standard establishment methodology and those with theoretical and industrial experience. There are currently 1,100 occupational standards.

The occupation-specific standards are an important reference for curriculum development, occupational activities, prerequisite training, and hiring decisions. The standards cover four core areas: Overview, Basic Requirements, Job Requirements and Percentage of Gravity (a measure composition of technical requirements versus theoretical knowledge for each level of occupational qualification).

The standards are expected to be updated every three to five years. Both industry representatives and trainer providers are recruited into a standards updating committee. However, in reality the update does not take place as frequently due to capacity constraints and some of the standards do not reflect the most up-to-date market trends.

Registration of Providers/Awarding Bodies

The National Occupational Testing system consists of the national Occupational Testing Authority (OSTA) and the regional/industrial Occupational Testing Centres. The Ministry of Human Resource and Social Security is in charge of the comprehensive management of the OSTA. OSTA’s main responsibilities include: developing plans, policies and standards; examining and approving the vocational skill accreditation bodies of related industries; organizing, coordinating and guiding occupational skills’ testing; and, issuing qualification certificates.

---

³³ This summary is based on the China Report on Standards and Qualifications (2015) prepared by Yinan Zhang with support from the World Bank. The Report expanded on the original submission by China (FAN Wei, Director of Division of Higher VET, MOE, P. R. China and LIU Yufeng, Research Professor of CIVTE, MOE, P. R. China) for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
Occupational skills testing stations implement the occupational skills testing process. Occupational skills testing stations should meet 4 standards related to facilities, testing instruments, assessors, and management.

Organisations or individuals could apply for occupational testing at local occupational skills testing stations or centres. The Rules for National Occupational Qualification Examination Management (Tentative) provides detailed guidelines on carrying out the occupational qualification examinations. The certificates granted after passing the skills tests are recognised more by state-owned enterprises than by the private sector.

**Registration of Training Providers**

There are various types of public training providers in China. The Ministry of Education manages and oversees technical schools ("zhong zhuang") and the Ministry of Human Resources and Social Security manages and oversees vocational schools ("ji xiao"). Vocational schools in China offer training to students and provide services to the general public. Public employment training centers receive public financial allowance and are subject to the management and monitoring of Ministry of Human Resources and Social Security. There are also private vocational training agencies.

Any organization with the intent to become an educational provider is required to provide an application to governments at different levels. The organisation should meet the 4 requirements related to governance, teachers, facilities and equipment, and funds.

**Educator Requirements**

The requirements for educators are governed by the Teachers Law of the People’s Republic of China, which stipulates that ‘the State shall institute a system of qualifications for teachers’.

The requirements for educators are listed in Article 11 of the law and include records of formal schooling at various levels. Citizens, without the records of formal schooling for teachers’ qualifications as stipulated in the law, must pass the national teachers’ qualification examinations. The national teachers’ qualifications examination system is prescribed by the State Council.
Indonesia

Overview

The National Education System includes basic education, secondary education and higher education. In addition, there are distinctions between formal and non-formal education, as well as education run by public and private providers.

The vocational training sector includes programs conducted under the Directorate Courses and Trainings, Ministry of Education and Culture (MoEC) or those conducted under the Directorate General of Directorate General Training and Productivity, Ministry of Manpower (MoM). Various other technical ministries and industries also undertake training to meet their specific needs, either through their own training agencies or through private providers.

The following overview of quality assurance relates specifically to the skills training sector under the remit of the Ministry of Manpower and related agencies.

Indonesia National Qualifications Framework

A national qualifications framework was confirmed under presidential decree in 2012. The Indonesian Qualification Framework (IQF) provides nine qualification levels. The framework has a strong focus on equivalency and recognizing all pathways to obtaining qualifications and it promotes recognition of prior learning. An agency responsible for governing and monitoring the implementation of IQF has not been established.

Quality Assurance Mechanisms

Accreditation (Approval) of qualifications – Ministry of Manpower

The Ministry of Manpower is responsible for the management and coordination of competency standards development. The Ministry devolves the responsibility for the development of the standards and qualifications to the relevant technical Ministries (18 Ministries), but maintains oversight of the process.

Competency standards have been developed since 1996, but they have only recently been advanced enough to be packaged into national qualifications. Both the Ministry of Manpower and the relevant technical Ministry maintain the competencies. In each technical ministry there is a competency standards committee who has one function, to monitor compliance with the standards of competence with industry needs.

The Ministry of Manpower has developed a range of guidelines related to the development and review of competency standards. The competency standards development process includes:

- Establishment of a standards committee (made up of ministry representatives)
- Establishment of two working groups (drafting team made up of industry representatives) and verification team (made up of government and industry representatives)

The Ministry of Manpower has set-up the framework of competency based training design and implementation (and for curriculum), and facilitating the implementation (MoM Regulation Number 8/2014). Based on the framework, the individual providers develop curriculum. How far the individual

---

34 This summary is based on the Indonesia Report on Standards and Qualifications (2015) prepared by a team of Indonesian experts with support from the World Bank. The Report expanded on the original submission by Indonesia for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
providers are able to do competency based training will be accredited by Training Provider Accreditation Authority, established by Ministry of Manpower as an independent body.

Registration (Approval) of training providers – Lembaga Akreditasi Lembaga Pelatihan Kerja (LA-LPK)
The LA-LPK is the registering body for the vocational institutions (Training Provider Accreditation Authority). The main functions of LA-LPK are: deciding national policy and establishing standards for training provider accreditation; establishing LA-LPK representative (Accreditation Committee) at each province in Indonesia; conducting training provider accreditation and surveillance across Indonesia by empowering accreditation committee; conducting assessor accreditation training and licensing them as a partner of LA-LPK; promoting awareness of accreditation, both for private training provider and training institution owned by government; building cooperation with national and international institution for standardization; and, harmonizing accreditation across south east ASEAN and internationally.

Vocational institutions include:

- LPKs (Lembaga Pelatihan Kerja) – which is a generic term for private training institutions
- BLKs (Balai Latihan Kerja) – which are government owned vocational institutions (national or provincial)
- BLKLNs (Balai Latihan Kerja Luar Negeri) which are generally privately run institutions for those student intending for overseas work

There are 34 provinces out of which there are accreditation committees (KAs) in 30 provinces, but the final decisions are all made by the Accreditation Committee (LA).

The registration requirements and processes are regulated through legislation and a series of ministerial regulations. The roles and responsibilities of the LA-LPK are outlined in the regulations. LA-LPK is responsible for the monitoring of training providers.

Training providers can apply to an LA or the Accreditation Committee. An assessment team is allocated to review evidence submitted and also arrange a site visit. The assessment team during approval process review 8 quality standards for training providers. It is not mandatory to be accredited (approved) to be a LPK, but it is mandatory to be accredited (approved) to be a BLKLN. Both BLKs and LPKs must be registered at labour affair at local government office in regency or city by submitting a legal status of institution. Labor affair of Local government office will release a letter of approval and valid for 2 years.

Educator Requirements
Instructors are the responsibility of the training providers. There is no register of instructors. The standards required by instructors include competence relevant to the technical task and teaching pedagogy, assessing competency from LSP (BNSP requirements), and 12 years minimum service in a high school.

There is a task force unit under MOM to monitor and develop the instructor competencies, including content and methodology of teaching/facilitating. Most instructors do not have certificate of methodology even though they are competence in content of subject.

Registration (Approval) of assessment providers – Baden Nasional Sertifikasi Profesi (BNSP)
BNSP is an independent body responsible to the President who has the authority as a certification authority in charge of implementing the certification of personnel and professional competence for labour. BNSP is the registering/licensing body of assessment providers (LSP= Professional Certification Body). The licensing/registration of an LSP is legislated by Law 13/2003, Government Decree 23/2004, and Government Decree 31/2006.

BNSP is the awarding body and approves assessment provider/certification bodies (LSP). The conditions
and criteria include BNSP Guidelines 201 & 202 which are traceable to ISO 17024/2003. There are quality standards or requirements apart from BNSP Guidelines, that is:

- Specific quality standard to be benchmarked in assessment, including the standard on quality of product or services
- Specific standard quality of workplace or simulated workplace assessment venue/centre

Support documents that assist assessment providers (LSPs) to adhere to quality standards include: BNSP Guidelines to manage the LSP organization, assessment and surveillance. The process for registration includes application and review by a team of licensing assessors. BNSP manages and monitors registration of providers or awarding bodies by assessment (audit), surveillance and witnesses. BNSP undertakes an annual audit. LSP also report to BNSP every six months all assessment activity (i.e., completions at cluster or qualification level).

**Assessment**

The assessors (licensed by LSP and registered with BNSP) undertake the assessments of competencies. Assessments are third party assessments, although an MOU has been signed with senior secondary vocational schools (SMKs) for first party assessments (internal assessment undertaken by another assessor who was not the trainer).

BNSP has a range of strategies in place to promote the consistency of assessor judgments. However, there are not yet consensus or statistical moderation strategies in place either internally or externally. BNSP provide LSPs with unique numbered parchments (certificates) for issuance by the LSP. Data of completions are sent to BNSP on a six-monthly cycle; however, completions of competencies are kept at LSP level.

**Assessor Requirements**

Minimum requirements for assessors are outlined in BNSP legislation and guidelines. Assessors are to have assessment competencies (such as planning and organizing assessments, developing assessment tools, and assessing competencies) and are to come from industry and hold the relevant competencies (although an industry expert can be used in the assessment process). BNSP monitors and manages recognition/approval of assessors. BNSP undertakes surveillance of the assessors to maintain their competences. There is a proficiency test (standardized paper based test) undertaken each year and every 3 years assessors go through a recognition of current competency process to be re-recognized.
Overview of the Education and Training System

Education in Japan follows a 6-3-3-4 tier system, comprising six years of compulsory elementary education, three years of junior high school (lower secondary) education, three years of high school (upper secondary) education (meaning that secondary education is constituted of six years), four years of higher education and two years of graduate studies (Master’s Degree), which is optional. Technical, Vocational Education and Training (TVET) is provided in TVET institutions as well as in high schools (upper secondary) education and higher education.

The TVET sub-sector in the Japanese school system is made up of: (a) Colleges of Technology; (b) Specialised Training Colleges (upper secondary course and general course); and, (c) Miscellaneous Schools.

A broader classification of TVET institutions in Japan consists of (1) Public Vocational and Training Centers, (2) Schools, and (3) Private Organisations. While TVET programs in Higher Education and Post-secondary institutions are under the Ministry of Education, Culture, Sports, Science and Technology (MEXT), polytechnic universities, colleges and centre are under the supervision of Ministry of Labour, Health and Welfare (MHLW). There are some vocational training institutions under other Ministries. In addition, there are affiliated professional schools with other Ministries such as Policy Academy, College of Meteorology and Training Centres for Diplomas. The affiliated professional schools are supervised by the National Institution for Academic and Degrees and University Evaluation (NIAD-UE).

Training provided by private organisations also plays an important role in Japan; and is mainly divided into three parts: (1) Training in Corporations; (2) Training/courses for occupational licenses; and, (3) other skill development programs. A key feature of the education and training system in Japan is the On-the-job-training (OJT) and Off-the-job-training (OffJT) conducted within private enterprises.

National Qualifications Framework

In 2011, the Cabinet Office in Japan (CAO) set up a technical task force to discuss the development of Japanese version of NVQ (National Vocational Framework) based on UK’s NQF by 2020 (CAO, 2015). The prototype of Japanese version of NVQ (JQF) is called “Kyaria Dani Seido” and has seven levels from entry level to professional level. There is no national qualifications framework.

Quality Assurance Mechanisms

Accreditation (Approval) of Qualifications
The Minister of Education, Culture, Sports, Sciences and Technology (MEXT) manages and monitors the accreditation processes. In addition to NIAD-UE, the MEXT has certified 12 accrediting agencies. NIAD-UE conducts certified evaluation and accreditation (CEA). The NIAD-UE is responsible for accrediting qualifications. In terms of TVET institutions, the CEA is only applied to colleges of technologies. Specialised training colleges, miscellaneous schools, polytechnic centres, and affiliated professional schools are not listed under the coverage. However, NIAD-UE as an accrediting agency plays a role of awarding body for these TVET institutions. NIAD-UE examines the candidates of graduation after these TVET institutions apply for approval of offering the certifications.

35 This summary is based on the Japan Report on Standards and Qualifications (2015) prepared by Professor Keichi Ogawa (Kobe University) with support from the World Bank. The Report was based on information collected from a survey developed for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
The implementing body of the national qualifications or provider specific qualifications is divided into following three: (1) governments; (2) local governments and public organisation; and, (3) legally appointed organisations. There is no systematic legislation for the occupational licenses, but each national and official license body has their own rules and regulations.

It is stated in the School Education Law that every university, junior college, and college of technology is obliged to conduct self-assessment and publish its results; no applicable unit is legally determined. Each institution conducts self-assessment at the institutional level and, where needed, at the academic unit level.

Relationship to Standards
The Vocational Ability Development Measures (VADM) is a system to assess the occupational skills and ability standards developed by MLHW. The Vocational Ability Development Measures is a national standard, and this strategy covers polytechnic institutions under MLHW, but not for other education levels and other TVET institutions.

There is Vocational Capability Evaluation Standards (VCES) called “Syokugyo Nouryoku Hyoka Kijun”. The VCES, which have been developed by the MHLW and the Japan Vocational Ability Development Association (JVADA), organises knowledge and skills which are needed in labour market, and sets up the framework of categorising examples of tasks and duties into four levels from entry level to manager level by sector, occupation, and duty. The occupational standards contain competencies needed for tasks by industry, occupation and duty.

Registration (Approval) of Education and Training Providers/Awarding Bodies
The registration of miscellaneous schools is under local governments. Public miscellaneous schools are under the prefectural board of education and private ones are under the prefectural governor.

The registration of TVET providers is under either the jurisdiction of MEXT or NIAD-UE. School institutions such as colleges of technology, specialised training colleges are under MEXT, while polytechnic centres and affiliated professional schools link with NIAD-UE. The process of registering a TVET provider includes an evaluation of an application, and an investigation undertaken by the Council for University Chartering and School Corporation subcommittees.

In terms of polytechnic centres, NIAD-UE investigates provider’s programs to ensure that they are equivalent to the standards of university’s bachelor, master’s or doctoral programs based on University Establishment Standards. The Council for University Chartering and School Corporation monitors through written reports, interviews, or site-visits whether the university conducts education and research as planned until the year in which it produces its first graduates.

Educator Requirements
The minimum requirement to become instructors in the public ordinary vocational training is to obtain Vocational Training Instructor’s License for a particular type of course/subject. Acquisition of this license is not necessary to become instructors in public advanced vocational training.

Teachers who teach vocational subjects in lower secondary schools are required to obtain Regular Certificate of lower secondary schools for these particular subjects. Likewise, teachers, who teach vocational subjects mainly in upper secondary schools with SC, are required to obtain a Regular Certificate of upper secondary schools for these particular subjects. In Japan, people are commonly qualified as teachers by completing the teacher training curriculum at colleges and universities, and receive teacher certificates from the prefectural board of education.

The minimum requirements to be a faculty member of a higher education institution are specified by the standards for establishment of each type of institution. Miscellaneous schools can set the requirements of their teachers in their own ways. Article 8 of the Ordinance of the Ministry of Education No. 31 of 1956
only states that teachers in miscellaneous schools are to have specialised knowledge and skills in the subjects they teach, and always endeavour to improve these knowledge and skills.

Minimum requirements for teachers in each course of specialised training colleges are set by the standards for establishment of these colleges specified in from Articles 18 to 20 of the Ordinance of the Ministry of Education No. 2 of 1976. In addition, there are private entities, including the Association for Technical and Career Education, which issue teacher certificates to ensure the quality of teachers in specialised training colleges (Association for Technical and Career Education, 2015).
Korea

Overview of Education System

Korea’s educational system operates on a 6-3-3-4 structure, with vocational education introduced at the upper-secondary level. At this level, the vocational high school curriculum includes vocational/technical education in technology, agriculture, commerce, maritime, housework, etc.

At the post-secondary level, vocational colleges provide the nation with mid-level technicians and professionals. In regards to the TVET system, in addition to this vocational education, vocational training is also offered under the governance of the MoEL via training institutes in both the private and public sectors or training centres housed in respective companies. For vocational education, the MoE plans and executes financial policies. Finance for vocational training can be divided into public and private funding. Public funds are derived from MoEL, related ministries and municipal governments. Private funds stem from the budgets of skills development projects from Employment Insurance paid by business owners.

National Qualifications Framework

Framework overview
Since 2013, the development of the KQF system has become one of the top policy priorities as a means of providing various pathways to youth to obtain qualifications and by acknowledging abilities rather than degrees when hiring or promoting workers. As a part of efforts, in 2013, the MoE and MoEL together established “Planning for the NQF system” which articulates that the KQF will be based on the National Competency Standards (NCS). The MoEL is now responsible for the development of the NCS, learning outcome based qualifications. The KQF covers the TVET sector and engineering major in higher education primarily.

Quality Assurance Mechanisms

Accreditation of qualifications
National qualifications include National Technical Qualifications (NTQ) and National Qualifications of Non-Technical Categories (NQNTC). Provider specific qualifications are the registered private qualifications and the nationally recognised private qualifications. Presently, both national/private qualifications and NCS-based qualifications co-exist, although the Korean government is trying to move towards NCS-based qualifications. All qualifications are registered, except for NCS-based qualifications, and the list can be viewed at [http://www.pqi.or.kr/inf/qual/infQuList.do](http://www.pqi.or.kr/inf/qual/infQuList.do).

Standards
The NCS defines what graduates are expected to know, understand, and be able to do as a result of learning for each occupational type at a certain level. The NCS has eight levels based on four classifications. The four classifications are Major Group (24), Minor Group (77), Broad Group (227) and Detailed Occupation (857). The NCS also has a volume measure at a unit. Based on the number of units, the duration of training time can be calculated. The qualifications are also unitised and modularised.

The NCS address 20 industry categories. By early 2015, the NCS have been developed for more than 800 occupations, and for each occupation, about 10 competency units have been developed.

---

36 This summary is based on the Korea Report on Standards and Qualifications (2015) prepared by Lan Joo with support from the World Bank. The Report was based on information collected from the survey developed for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
HRD Korea is responsible for developing the NCS in collaboration with Sector Councils in their relative sectors. MoEL is responsible for operating the NCS and overseeing its application in the labour market. Nine government ministries are also responsible for operating the NCS in 20 industry categories in their respective areas. The government agency, Korea Research Institute for Vocational Education and Training (KRIVET), is developing an NCS-based curriculum. This modularised curriculum will be used by training institutes, Meister high schools, and vocational colleges. Accrediting agencies for qualifications will use the NCS to issue a qualification.

**Registration (Approval) of Training Providers**

There are two types of training institutes: one is funded by students’ tuition and fees and the other is funded by the MoEL. The process for registration includes:

- A training institute consults with the MoEL before registering. Then, the institute registers via HRD-Net that is managed by HRD Korea. The public register of providers exists at HRD-Net.
- Next, the provincial and local offices of the MoEL review the registered training institute in order to decide whether or not it is eligible to receive government funds.
- If the registered training institute is approved, it becomes accredited and receives training funds from the MoEL and is placed under rigorous monitoring by HRD Korea and KRIVET. HRD Korea monitors the provider by conducting surveys and interviews with individuals and groups. KRIVET monitors them by collecting client feedback on facilities, equipment, instructors, curricula, and the employment outcomes of graduates, etc. The outcome reports are conducted annually by these two agencies: the monitoring report conducted by HRD Korea is an internal report, and the report conducted by KRIVET is disclosed publicly via online, HRD-Net.

**Educator Requirements**

TVET teachers are classified into cluster training teachers (professional teachers, general teachers) and on-site training teachers. TVET teachers’ qualifications are subscribed in “the Act on Vocational Competency Development of Workers”, and they should pass both a theory and practice test, as well as a final interview, to be accredited. Endorsed by the MoEL, HRD Korea approves TVET teachers during the accrediting process. Only the teachers of the government-substitute training programs are required to register via HRD-Net, and the MoEL is responsible for managing and monitoring this register of teachers.
Lao PDR

Overview of Education System

Since 2009/2010, Lao PDR has started to reform its schooling system from 11 year schooling to a 12 year structure comprising five years of primary, four years of lower secondary, and three years of upper secondary schooling. The national education system has four components: early childhood, general education (primary to upper secondary), Vocational Education at three levels (first, middle and high level); and, Higher Education. There are two main TVET subsectors.

1. TVET is managed through the Ministry of Education and Sports (Department of Technical, Vocational Education and Training). The technical and vocational education comprises:
   - Skilled workers training divided into 4 levels
   - Vocational education: 1–3 years for lower secondary school leavers, graduate as Certificate for Vocational Education
   - Technical and Vocational Education: 2–3 years for regular course and 1–2 years for continuing study, graduate as Technician or Vocational Diploma
   - Technical and vocational education: 2–3 years for regular course and 1–2 years for continuing study graduate as High Technician or Vocational Diploma
   - Bachelor level: ≤1.5 Y for continuing study

2. The Skills Development sector is managed through the Ministry of Labour and Social Welfare. The structure of skills development consists of: basic skill level, and skills levels 1–4

National Qualification Framework

There is no national qualifications framework (NQF) which relates all levels of education, training and qualifications and identifies the pathways between them. A NQF is in the initial stages with the most recent draft proposing an 8-level structure.

Quality Assurance Mechanisms

Accreditation of Qualification

Approval

There is no unified qualification accreditation system. In 2001 and 2004, the department of Higher, Technical and Vocational Education developed the curriculum standards from certificate level to master degree, including a credit based system. Recently, the TVE department and the department of higher education have initiated the revision of its education and training system.

Under TVET law, the MOES is to approve and promulgate (as well as abolish) national curricula. Vocational qualifications are accredited against the Vocational Qualification Framework (of which there are 5 levels – basic, semi-skilled, skilled, technician, high technician). The curriculum standard for each trade is determined in specific regulations.

There are no quality standards or criteria to apply, no defined process for accreditation, nor any national qualifications. There is no accrediting agency to manage and monitor accreditation processes. At this stage there is no monitoring of quality and currency of qualifications.


38 Lao PDR, Education Law, promulgated 17 July 2007, Articles 14-22
For public providers, a list of qualifications is available on the TVET department website.

**Assessment**
A current donor funded project has developed a knowledge and practical item bank for priority areas. Currently providers develop their own assessment tools and undertake their own assessment. It is proposed that the assessment will be separated from training.

Under TVET law (No 42/National Assembly 2013) TVET institutions issue the certificate/diploma. The law notes that diploma and higher level shall be registered for control in the relevant ministry and that certificates and lower attestation shall be registered for control in concerned offices at provincial and Vientiane levels.

Providers established/registered by the Ministry of Education and Sport issue the qualification, but the provider is to provide the details and certificates to the Ministry for the formal seal to be added before being provided to the graduate.

**Competency Standards**
A donor funded project has developed competency standards for four Occupation sectors, and draft regulations that outline the process for development. Developers of the competency standards are to be a tripartite body composed of representatives from the labour group, training providers and employers of the specified industry.

There is no curriculum body that develops curriculum or training materials/assessment tools. However a donor funded project has developed curriculum and training materials (and some standardized assessment tools) for the identified occupational areas.

For government providers the Vocational Education Institute develops curriculum. For private providers there is no such facility and they are required to develop their own curriculum.

**Quality Assurance Approach – Provider**
The Educational Quality Assurance Centre (EQAC) is commissioned with the quality assurance of basic education, TVET and higher education and to develop testing and evaluation. It also has responsibility for the development of the proposed NQF. EQAC are trialing a monitoring quality assurance process utilising an external assessment process against the quality standards. The Centre has selected 87 assessors (auditors) of which 30 external assessors have been trained.

The quality assurance manual of the education sector was recently developed and approved by the minister of education in April 2011. The quality assurance mechanisms were established in all 22 TVET institutions under the MOE. The TVET quality standard consists of 10 components and 32 indicators.

Under TVET law (No 42/National Assembly 2013) the following quality assurance mechanisms have been outlined:

- Self-assessment to be conducted once a year
- Internal assessment to be conducted by Department of Inspection
- External assessment to be conducted every 5 years by an international and independent agency.

---

Registration of Providers/Awarding Bodies and Education Providers

The broader TVET sector includes:

- The Department of Non-Formal Education (DNFE) is in charge of providing non-formal education focusing on literacy, but also provides some basic vocational education skills.
- The Technical and Vocational Education Department (TVED), which supervises 22 TVET institutions under MOE
- The Department of Skills Development (DSD) of the Ministry of Labour and Social Welfare, which has one division in charge of skills development and skills assessment through four training centres
- High Education Department (DHE) supervises all universities and higher education institutions (4 universities under MOE).
- The Department of Private Education Administration (DPEA) supervises all private TVET and High Educations.
- Education and training providers of the other public sector under various line ministries.

The TVED responsibilities include: 40 (1) to supervise for the registration of all public TVET colleges and schools all over the countries including TVET in the line ministries, (2) to approve all TVET curriculum including private TVET institutions, (3) to supervise the pre- and in-service training of TVET teachers/ instructors to serve all TVET institutions, including technical teachers for secondary education and instructors for the basic vocational training in non-formal education.

The PM decree on TVET and Skills Development 2010, Article 58 indicates that the MOE supervises all kind of TVET management and inspection, while the MOLSW (Department of Skills Development and Employment) is responsible for registration, management and monitoring the skills development of both public and private institutions. 41

Under TVET law (No 42/National Assembly 2013) there are 4 types of TVET institutions: training centre, schools, colleges and institutes. Under this law, providers are to meet standards set by the MOES.

Under the new TVET law in early 2014, all registration of TVET providers is being moved under the Department of TVET, MOES. This includes public and private providers.

Educator Requirements

TVET teachers are under the Department of TVET, and there are two types – practical teachers in workshops and theory teachers. There are two standards for TVET trainers/assessors:

- Those developed by GIZ – for theory teachers and trained by university
- Those developed ADB – for practical trainers and trained by Vocational Education Institute. There are four levels of training/assessing qualifications for vocational trainers.

---

40 MOE Decision on the role and responsibilities of TVE department, 2008
41 PM decree on TVET and Skills Development, 2010, article 57 and 58
Malaysia

Overview

The Malaysian education system encompasses: pre-tertiary education (pre-school to secondary education) under the jurisdiction of the Ministry of Education (MOE) and tertiary or higher education under the responsibility of the Ministry of Higher Education (MOHE). The Department of Skills Development, Ministry of Human Resource is responsible for Skills sector. The legislative base for tertiary education (higher education, TVET and Skills sectors) is:

1. Universities and University Colleges Act 1971
3. Education Act 550 1996

National Qualifications Framework

The Malaysia Qualifications Framework (MQF) was officially published in 2007. The MQF enables individuals to progress in higher education through transfer of credits and recognition of prior learning, acquired from formal, non-formal and informal learning. The MQF is an 8-level framework, has a credit point system, and includes program profiles for disciplines and qualifications.

The quality documents that are developed comprised of rules and regulations that need to be complied by HEPs. The documents are:

1. Malaysian Qualifications Framework (MQF)
2. Code of Practice for Program Accreditation (COPPA)
3. Code of Practice for Institutional Audit (COPIA)
4. Programme Standards (PS)
5. Guidelines to Good Practices (GGP)
7. Code of Practice for Skills Programme Accreditation

Quality Assurance Mechanisms

Accreditation of Qualifications

For TVET & Higher Education qualifications, the Malaysian Qualifications Agency (MQA) is the only accrediting body as stated in the MQA Act 2007. Programme of studies that are accredited by MQA will be registered in the Malaysian Qualification Register (MQR).

There are professional bodies that recognise their own specific fields, such as the Engineering Accreditation Council (EAC) and Malaysian Medical Council (MMC).

For Skills qualifications, the Department of Skills Development, Ministry of Human Resource (DSD, MOHR) accredits programmes. The accreditation process for skills programmes is based on NASDA Act 2006.

---

The DSD, MOHR uses National Occupational Skills Standard (NOSS) to accredit programmes. At the moment there are no specific National TVET qualifications; however, qualifications are guided by National Occupational Skills Standards (NOSS).

Monitoring of quality and currency of qualifications includes:

- For technical and vocational programmes conducted by Polytechnics and Community Colleges will be monitored by MQA through a maintenance audit once in every five years.
- For skills programmes the DSD MOHR audit and star-rate once in every two years.

**Assessment**

Higher education and technical and vocational providers are the awarding bodies. For skills programmes based on NOSS standards, the Department of Skills Development, Ministry of Human Resources is the main awarding body. Assessments are undertaken by individual providers.

For programmes accredited through MQA, assessments are internally developed and subject to COPPA and to some extent COPIA which requires student assessment processes to have external scrutiny (enhanced standard).

For those programmes accredited through DSD (MOHR), there are assessment test banks which providers must use (this initiative is still in progress and assessment banks do not address all industry sectors of the NOSS). Portfolio or practical assessments are developed by the individual providers. NOSS qualifications are subject to internal and external verification processes.

To ensure consistency of assessor judgements in relation to student assessment:

- For technical and vocational programmes and skills programmes, quality and currency of qualifications are monitored through accreditation, maintenance audit, Institutional Audit, rating and continuous quality improvement.
- For MQA accredited programmes, the evaluations undertaken by the panel of assessors are based on quality assurance documents and MQA established Accreditation Committees to ensure consistent judgement. These committees are comprised of subject experts from various fields.

**Relationship to Standards**

Standards are used for programme development for the higher education, technical and vocational education and skills education sectors.

For higher education and technical vocational education programmes approved by the MQA, educational standards are developed (referred to as programme standards) to inform curriculum and training and assessment material development. Assessment of students’ performance is subjected to the quality assurance as set out in COPPA and contextualised by discipline through the Programme Standards at programme level by COPIA when checking the policies and systems on student assessment at institutional level. External examiners are especially mandatory for bachelor and above programmes.

For skills programmes approved by DSD, MOHR, the development of ‘occupational skills standards’ are developed at a national level. Individual standards include:

- Competency profile chart
- Competency profiles including work activities (job tasks) and performance criteria
• Curriculum of competencies unit (COCU).

The competency profiles are the competency specifications supported by the COCU which includes required knowledge and skills, training hours, delivery mode and assessment criteria.

**Registration of Training Providers**
The registration of higher education providers and technical and vocational providers is under the jurisdiction of Ministry of Education, whilst the registration of skills providers is under the jurisdiction of Ministry of Human Resource. Both ministries have developed their own standards and requirements for registration of TVET/Skills Programmes Providers.

Monitoring strategies are employed by both ministries and TVET provider outcomes are reported through programme accreditation reports and maintenance audit reports.

There is a register for higher education and TVET and for skills providers maintained by the Ministry of Education and DSD, Ministry of Human Resource.

**Educator/Assessor Requirements**
There are minimum requirements for teachers stated in the MQA quality assurance documents. In general, teachers’ qualifications should be at least one level higher than the program intended to be taught (experience is not mandatory).

According to DSD, MOHR quality assurance documents, teachers should have qualifications appropriate to the program intended to be taught. The DSD requires assessors to have at least a Malaysian Skills Certificate one level higher than that they are assessing and the Vocational Training Officer qualification (which is a 3-month program with 6-month internship). Trainers and assessors have different standards, with the trainer standards being less stringent.
Mongolia

Education System Overview

The education system in Mongolia consists of the following levels: pre-school, secondary (combining primary, lower secondary and upper secondary), and TVET and tertiary education. After completing nine years of basic education, students can either continue to upper secondary education or enter TVET schools. After completing twelve years of secondary schooling, students who wish to continue with further studies may enter tertiary institutions or TVET schools.

TVET schools were administered by the Ministry of Education until 2012 and now are under the Ministry of Labour. There are four types of institutions that offer TVET programs: (a) vocational training and production centres (VTPC) (40 of them); (b) independent (technical) colleges (9); (c) branches of higher education institutes (?); and (c) branches of universities (15).

VTPC and technical colleges enrol students who graduated from 9th grade of secondary schooling (completion of basic education). They are expected to study two and a half years and receive both vocational education certificate along with secondary education completion certificate.

Vocational programs operating within branches of universities and institutes enrol only graduates of 12th grade of secondary schooling (high school graduates). They are expected to study only one year for getting vocational education or occupational certificate or 2–3 years for vocational education diploma.

Non-formal vocational training programs are short-term programs (up to three months). These are administered by the Ministry of Labour. After completion of training the participants receive a vocational/skills or competency certificate. In addition, on-the-job training is administered by employers.

National Qualifications Framework

Mongolia does not have a national qualification framework (NQF). A few years ago, a six-level TVET qualification framework was proposed under the Millennium Challenge Account Mongolia-TVET project (2007–2012). However, the government has not proceeded with establishing the framework.

Quality Assurance Mechanisms

Accreditation (Approval) of Qualifications

There is no accrediting or assessment agency for qualifications in Mongolia. In tertiary education, the MEDS defines the general rules for issuing qualifications by education institutions. Based on the general rules, each institution develops their own rules on issuing qualifications.

The tertiary education and TVET sector quality assurance system includes three main modes:

---

43 This summary is based on the Mongolia Report on Standards and Qualifications (2015) prepared by Khishigbuyan Dayan-Ochir with support from the World Bank. The Report was based on a survey developed for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
1) Institutional or program level accreditation: the Mongolian National Council of Education Accreditation (MNCEA) has accredited 65 HEIs, 4 TVET schools, 174 higher education programs, and 8 TVET programs. MNCEA has established a two-step process for quality assurance: self-assessment by institutions and on-site assessment by external assessors.

2) Attestation: Every HEI should go through the attestation process once every five years, managed by the external expert team appointed by the Ministry of Education. The criteria for attestation include several aspects, such as legal environment, academic program organisation, teaching, students, learning environment, ICT, and research activities.

3) Licensing: Licensing is a special permission that the Ministry of Education or Ministry of Labour gives to those applying to establish a new educational institution.

Furthermore, there are three government agencies in charge of collecting data related to education for quality assurance: National Statistical Committee, MEDS, and Ministry of Labour (only in charge of TVET).

**Relationship to Standards**

**Standards in Higher Education**

The 2002 Education Law stipulated that higher education program standards approved by the Mongolian Agency for Standardization and Metrology (MASM) should be used as mandatory national standards for all HEIs. MASM is the government agency which registers and keeps the standards.

These standards approved by MASM include sample course lists for the program applied, list of common competencies to be acquired by the graduates, knowledge and skills related to profession to be obtained by graduates and evaluation criteria and qualification criteria for teaching staff. Each program standard is initially drafted by a team composed of representatives from university professors and specialists-practitioners in the related field, and approved by the MASM. The Ministry of Education and Science (MEDS) reviews the standards and works closely with MASM in the approval process. At MASM level, there is a committee to review and approve the standards. A representative from MEDS has to work in this committee.

**Standards in the TVET sector**

The Law on TVET (Article 10) (2009) stipulates that vocational education and training standards should define the requirements of knowledge and skills for learning content (learning content consists of the three: general core, professional core and specialised core), requirements for evaluation, learning conditions and teacher qualifications. Standards are to be approved by the MASM according to the Law on Standardization and Metrology. A sample standard of TVET program was approved by Resolution No A/163 dated on 18 July 2014 of the Minister of Labour. This sample standard includes expected job skills of graduates, admission requirements, requirements for curriculum content and its assessment, teacher qualifications and requirement for institutions and learning conditions, such as tools and equipment.

**Quality Assurance of Standards**

The State Professional Inspection Agency (SPIA) under the government cabinet is in charge of overseeing the implementation of standards in all fields of economy and social sectors, including education sectors. This agency has the Department in charge of overseeing educational institutions which is in charge of quality assurance of standards and competency framework.

**Curriculum Development**

Article 8.4 of the Higher Education Law states that programs and their curriculum should be developed for each major field of study and they should be endorsed by the Ministry of Education and
approved by rectors of higher education institutions. The curriculum includes general and professional core content, and the specialisation core as content. Decree No A/370 (2014) required that at institutional level there should be a Program Committee for each major field of study in charge of designing and implementing programs. In addition, each program should have a study plan or curriculum.

The TVET curriculum is supposed to be in accordance with relevant industrial and educational standards involving employers, experts, teachers and methodological experts. Approval is required from the Ministry of Labour. MOL has the Department of TVET Policy and regional methodological centres in 5 provinces. The regional methodological centres play a key role in curriculum development.

According to the Article 9 of the Law on TVET, the curriculum content is divided into three parts: general core, professional core and specialised core. Since 2010, competency-based curriculum development process is underway. Faculties of TVET schools were trained in designing competence-based curriculum under Millennium Challenge Account (MCA) TVET project.

Registration (Approval) of Education and Training Providers/Awarding Bodies

The Education Law sets the rules for awarding a license for establishing a new higher education institution. The Law on Licensing of entities in Mongolia is applied to this process along with education related legislations and rules. According to this Education Law statement, the following documents should be submitted to the Ministry of Education for establishing a higher education training provider or institution: curriculum; detailed information about teaching staff, their qualification; school building, equipment, textbooks; financial sources and capacity to run the school; list of real estate or building to be provided by owners; and land license.

The joint Ministerial Order No 386 by the Ministry of Education and Science (MEDS) and Ministry of Labor (MOL) in 2013 sets rules for establishing a new TVET school. According to this joint Ministerial order, the following quality requirements apply:

- Each program to be offered at the TVET schools should describe the proposed curriculum describing competencies for students. Each program should identify the hours allocated for contact hours and internships. Curriculum should be developed according to the rules for competency based curriculum and in partnership with industry.
- Criteria for teaching staff are as follows: highly qualified, industrial experience, and trained in pedagogical methodology program
- Learning condition should meet the requirements for infrastructure, safety and hygiene.
- Proper lab equipment and condition.

The educational institutions are monitored by respective Ministries. The quality assurance modes are mentioned above.

Educator Requirements

For tertiary education faculties and lecturers, the main requirement is a Master’s degree in the field of teaching as stated in the Article 13 of the Law on Higher Education. An additional requirement is that they should have been taught in pedagogical methodology of teaching.

In addition, the Ministers of Education and Science order No 139 in 2003 identifies the key general requirement for tertiary education faculty: (a) general or communication skills; (b) creative skills; (c) professional skills as educators; and, (d) research skills.
For TVET and higher education sectors, there is no official approval or licensing for teachers. There is no centralised register.
Myanmar

Overview
The National Education Law, 30 September 2014, aims to implement a system of national education that links formal education, non-formal education and personal education.

Early childhood education will be implemented by parents, villages and appropriate departments and organisations. Pre-school education will be implemented from age 3 to age 5. Formal education will include: basic education, technical and vocational education, and higher education.

Technical and Vocational Education is divided into the following:

- Basic level technical and vocational education that can be attended by those who have completed primary school.
- Middle level technical and vocational education that can be attended by those who have completed middle school
- Diploma level technical and vocational education that can be attended by those who have completed high school
- Non-formal education and vocational education for improving ability regardless of educational level, gender, or age, offered in schools opened by government or private organisations that meet the criteria.

The relevant ministries shall establish the curriculum, period of study, kind of degree or certificate to be awarded for each of the levels of education.

National Qualifications Framework
The planned NQF will cover all sectors, from Basic Education through to TVET and Higher Education.
It proposed that the framework will be 8 levels.

Quality Assurance Mechanisms

Accreditation (Approval) of Qualifications

Approval
The National Skills Standards Authority (NSSA) has the authority under the Employment and Skills Development Law (ESD) to accredit TVET qualifications from levels 1–4. Accrediting agencies for some professions (e.g. engineering) exist as do international agencies such as City and Guilds. Accreditation of qualifications is legislated only under the ESD, for TVET levels 1–4. There are quality standards for accrediting agencies being developed under the ESD for TVET, levels 1–4.

The NSSA for TVET levels 1–4 is responsible for managing and monitoring accreditation processes. Different Ministries (e.g. Science and Technology, Education) have their own accreditation and monitoring arrangements. There are no national qualifications, but there are provider specific qualifications, that is, by institution. There is no public register of qualifications. The quality and

---

currency of qualifications is monitored by Ministry officials visiting institutions for discussion with high level management.

Assessment
Assessment for recognition of qualifications includes, for TVET under NSSA, assessors from the industry sector committees. Consistency of judgements is managed by NSSA using a “trial test” to validate test instruments and consult with employers. In TVET the NSSA issues skills qualifications levels 1–4.

Relationship to Standards
Occupational and/or competency standards relate to specific tasks. The format design includes type of competencies (basic, industrial and technical or functional), unit code, unit title, competency elements, performance criteria, essential or underpinning knowledge, range and context etc.

In 2007, the NSSA developed 173 standards across a number of industry sectors and occupations. In addition, international standards apply for specific industries where there are employment requirements, such as maritime and the International welder association.

The process for development of competency standards includes:

- Standards that were copied and adapted from other countries with minimal consultation with industry are now being reviewed and refined with industry. Under the ESD Law, the standards should be developed by sectoral committees.
- The 173 developed in 2007 were approved by cabinet, but there is no public access. Out of 173, six occupations have been modified and tested for the fast track.

The NSSA is responsible for development of standards, following enactment of the ESD Law in 2013. The occupational standard from NSSA is currently used for testing and used as a reference for the curriculum development requested by training centres, both private and public.

Registration (Approval) of Training and Providers
At present there are no registering bodies. In terms of managing and monitoring registration of providers or awarding bodies, for TVET this will likely be the NSSA. The establishment of quality standards for providers is in process.

Educator/Assessor Requirements
The minimum requirements for assessors in TVET have been set in a testing/assessment pilot conducted by the NSSA with support from GIZ. The bodies responsible for monitoring and managing trainers and assessors are (a) NSSA for TVET (Ministry of Labour, Employment and Social Security) – in process, and (b) Department of TVET (Ministry of Science and Technology). There is no register of teachers, trainers, educators, lecturers, assessors.
Philippines

Overview

The Philippine education system consists of both formal and non-formal education. Formal education is a sequential progression of academic schooling at three levels—elementary (grade school); secondary (high school) and tertiary (college). In terms of structure, however, it is categorised either as basic (preschool, elementary and high school) or tertiary (post-secondary: technical/vocational, college and graduate).

Since 1992, the Philippine education system has been tri-focalised into basic, technical/vocational and higher education governed by three agencies, namely the Department of Education (DepEd) for basic education, the Technical Education and Skills Development Authority (TESDA) for technical education and skills training, and the Commission on Higher Education (CHED) for higher education. The focus on this overview is on the quality assurance arrangements of TESDA.

National Qualifications Framework

The Philippine Qualifications Framework (PQF) is a national policy that aims to define educational qualifications and set the standards for qualification outcomes within the Philippine education system. The Philippine Qualifications Framework (PQF) covers all sectors of education: basic, TVET and tertiary education. The PQF is an 8-level framework. The PQF National Coordinating Committee (PQF-NCC) is responsible for managing and monitoring the NQF.

Quality Assurance Mechanisms

Accreditation (Approval) of Qualifications

Approval
The TESDA Board approves and monitors qualifications. The development of qualifications is facilitated by the TESDA Secretariat either sub-contracting it to an Industry Association/Industry Working Group or to technical experts. The developed qualification goes through a series of consultations before it is submitted to the TESDA Board for approval/promulgation. The TESDA Board promulgates the Training Regulations which defines the minimum requirements/information on qualifications: the competency standards, training standards, trainer qualifications, facilities, tools and equipment. The competency assessment and certification recognise qualification as evidenced in the issuance of national certificate/ and or certificate of competency. All qualifications promulgated can be accessed at the TESDA Website at www.tesda.gov.ph. TESDA promulgated qualifications are periodically reviewed/updated every three (3) years.

Assessment
Assessments are undertaken by Accredited Competency Assessors who are individuals authorised by TESDA to assess competencies of a candidate for national certification in an Accredited Competency Assessment Centre – an establishment officially authorised by TESDA to manage the assessment activities of candidates for national certification including the provision of support services.

---

Two assessments processes are in place:

1. Institutional administered assessment is undertaken for a TESDA registered program to ascertain if the student has gained the necessary competencies before being declared a graduate of a given qualification.

2. The student-graduate must take the mandatory National Assessment administered by a TESDA Accredited Competency Assessor for qualifications covered by TESDA-promulgated Training Regulations. Passing the National Assessment enables the student-graduate to be a National Certificate holder for the promulgated qualification.

For TESDA Accredited Competency Assessors, calibration and moderation exercises are managed by TESDA to achieve validity and reliability of competency assessment results.

**Relationship to Standards**

Competency standards are industry based standards and are developed and packaged into what are called Training Regulations (TRs). The standards are based on notion of competence. The competency standards describe the specific tasks based on a broad occupation functions and roles through a process called functional analysis. The development Training Regulations follows a quality assurance system where industry technical experts provide specification of industry requirements in terms of knowledge, skills and attitude. The technical expert panels are composed of representatives from industry, academe and labour. The system relies heavily on stakeholder consultation at different stages.

TVET institutions/training providers are to develop their own curriculum as part of the requirements of program registration.

**Registration (Approval) of Training/Assessment Providers**

The TESDA is the registering body responsible for registering (quality-assuring) and monitoring the TVET programs of public and private TVET providers in their areas of jurisdiction before they are offered to the public. The major steps in the registration of a provider include review of application and conduct of site inspection by the TESDA team and submission of the inspection report. The registered programs of the TVET providers are subjected to periodic compliance audits by the concerned TESDA Provincial and Regional Offices one year after registration and every two years thereafter. There are 9 criteria for evaluating TVET providers for program delivery.

TESDA-accredited assessment centres are required to satisfy the following:

- Physical structure – related to physical infrastructure and equipment
- Administration – equipment and staff.

Assessment providers are monitored through:

- Compliance audit conducted a year after the program has been issued Certificate of Program Registration and every two years thereafter; or unscheduled compliance investigation.
- Evaluation of programs based on certification rates and employment rates of graduates reckoned against the national standards.

**Educator/Assessor requirements**

1. Each qualification (Training Regulation) promulgated by the TESDA Board contains the trainer qualification requirements. As a general rule, all TVET trainers must possess the appropriate National TVET Trainer Certificate (NTTC) Level which requires the following: a relevant national vocational certificate; training pedagogy certification; and, industry experience.
Additional requirements for TESDA-accredited assessor relate to: employment history and assistance at assessment for new assessors, and attendance at moderation and performance evaluation for recertification.

2. TESDA monitors and manages recognition/approval of trainers and of its assessors, including a register of trainers/assessors.

**Singapore**

**Overview**

The Singapore education system under the Ministry of Education (MOE) covers pre-school, primary, secondary, post-secondary, and university level education. The MOE also delivers continuing education and training (CET) through the Institute of Technical Education (ITE), and polytechnics. Each of the formal education institutions (i.e. 5 autonomous universities, 5 polytechnics and ITE) has an Act that spells out the establishment and functions of the institutions etc., including the powers to award qualifications (Source: http://www.moe.gov.sg/).

For the private education sector, the Council for Private Education (CPE) oversees and regulates private education institutions (PEIs), under the Private Education Act. The Enhanced Registration Framework (ERF), as set out under the Private Education Act and the Private Education Regulations, spells out the mandatory registration requirements and legislative obligations which all private education institutions, must meet, including registration, corporate governance, quality of provisions, and enhanced information transparency. (Source: http://www.cpe.gov.sg)

The Singapore Workforce Skills Qualifications (WSQ) is a national credentialing system, based on national standards developed by the Singapore Workforce Development Agency (WDA) in collaboration with various industries comprising industry sectoral frameworks. WSQ trains, develops, assesses and recognises individuals for the key competencies that companies look for in potential employees. It is designed to be a practical, accessible and affordable launching pad for individuals to take charge of their own careers and advancement. It is also a business tool for employers to access and maintain a skilled workforce as it enhances their competitive edge and advances their businesses. The Singapore Workforce Development Agency Act spells out the establishment and functions of the WDA, including the powers to award qualifications. WDA is also supported by the Skills Development Levy Act that requires employers to pay a skills development levy and the establishment of Skills Development Fund (SDF). (Source: http://www.wda.gov.sg)

**National Qualifications Framework**

There is no national qualifications framework; however, the WSQ is a sectoral skills qualifications framework for the continuing education and training of the workforce. There are about 34 industry WSQ frameworks developed to date. Each WSQ framework is developed in consultation with industry stakeholders.

Industry players, training institutions and unions work together in the Industry Skills and Training Councils (ISTC) to identify the skills required in the industry and to develop the industry-specific

---

46 This summary is based on the Singapore Report on Standards and Qualifications (2015) prepared by Thomas Yeo with support from the World Bank. The Report was based on a survey developed for the East Asia Summit Vocational Education and Training Quality Assurance Framework Project managed by Australia Commonwealth Government in 2012.
WSQ. The ISTC also reviews the learning outcomes to ensure the framework remains current and relevant.

The WSQ system has 6 levels of qualifications – certificate, higher certificate, advanced certificate, diploma, specialist diploma, and graduate diploma/graduate certificate. Each WSQ level and qualification has its level descriptors described in learning outcomes. The WSQ credits system includes a measure of the relative magnitude of the learning effort expressed as Recommended Learning Hours (RLH). The RLH is defined as the number of hours which a typical trainee is expected to undergo, on average, in order to accomplish the specified learning outcomes of a competency unit, regardless of the methods of training and assessment adopted (i.e. directed learning). The WSQ credits system adopts a currency of 1 credit = 10 RLH. The credits of a qualification are the sum of credits of the requisite competency units leading to the qualification.

WDA establishes a set of rules and parameters governing the design of qualifications, such as the volume of learning required, mix of core and elective competency units, and, naming and coding rules.

Assessing and recognising qualifications from other economies is not actively or proactively undertaken by WDA. Focus of WDA is to upskill the local workforce. The various Ministries and government agencies in Singapore have their own evaluation criteria when determining how to assess and recognise overseas qualification.

Quality Assurance Mechanisms

Accreditation (Approval) of Qualifications

Approval
The design, development and implementation of the WSQ frameworks are facilitated by WDA, in consultation with the industry. Industry players, training institutions and unions work together in the Industry Skills and Training Councils (ISTC) to identify the skills required in the industry and to develop the industry-specific WSQ. The ISTC also reviews the learning outcomes to ensure the framework remains current and relevant. For WSQ qualifications, WDA approves training organisation to be their Approved Training Organisation (ATO) first before they are allowed to deliver the WSQ training.

Only organisations /institutions that have legislative Acts are empowered to award qualifications. Each of the polytechnics, ITE, IHLs and WDA do not accredit qualifications. They award qualifications within the powers of their respective Acts.

Assessment
The Singapore Examinations and Assessment Board (SEAB) was established on 1st April 2004 as a statutory board, to develop and conduct national examinations in Singapore, and to provide other examination and assessment services and products, locally as well as overseas. SEAB collaborates with MOE on all national examinations from Primary School Leaving Exam, GCE (N), (O) and (A) level Exams. Students who passed these exams will be issued the corresponding certificate by the MOE.

Each of the polytechnics, ITE, IHLs and WDA has their own examination/assessment requirements. Students/learners who passed these exams/assessments will be issued the corresponding certificate by the respective institutions.
**Relationship to Standards**

Only WDA and ITE use competency standards in their curriculum design and development. The competency standards list the skills, knowledge and attitudes needed to perform a job task and describe the acceptable levels of performance. WDA competency standards are developed and validated by industry for their uses. WSQ Approved Training Organisations (ATOs) use the competency standards in design, development, training and assessment of WSQ training programmes; whereas ITE competency standards are developed for and validated by industry, but only used within the ITE setting.

For each WSQ framework, an Industry Skills and Training Council drives the development and validation of skills standards, assessment strategies and training curriculum for the industry. Each council is represented by key industry partners, including employers, industry associations, training organisations and unions.

WDA oversees the quality of WSQ competency frameworks, competency maps, standards, courses, and assessment plans. There are guidelines and templates for the development of these standards. Competency standards can be accessed at [https://www.skillsconnect.gov.sg/web/guest/home](https://www.skillsconnect.gov.sg/web/guest/home). WSQ ATOs design and develop the WSQ training programmes based on the competency standards. Only when there is a critical need for ensuring consistency in quality and speed to implementing the training, will WDA develop national curriculum for industry use. All WSQ courseware require WDA’s accreditation before implementation.

**Registration (Approval) of Education and Training Providers/Awarding Bodies**

Any training organisation that wishes to offer WSQ courses must meet the organisation accreditation criteria established by the Singapore WDA. Upon approval as a WSQ ATO, ATOs can proceed to submit a course to WDA for accreditation before implementation. Every ATO is expected to maintain and upkeep the standard of delivery in training and assessment. WDA will periodically validate the WSQ internal quality assurance system and capability of ATO under the Continuous Improvement Review (CIR) audits. The requirements and criteria for organisation and course accreditation, and CIR can be found at [http://www.wda.gov.sg/content/wdawebsite/L225-ForTrainingProviders/L325A-001TP-ATO.html](http://www.wda.gov.sg/content/wdawebsite/L225-ForTrainingProviders/L325A-001TP-ATO.html). WSQ training providers are audited on an 18-month cycle. Those who do not meet the renewal requirements may be suspended from operations or terminated. WDA maintains a list of WSQ training providers at [http://www.wda.gov.sg/content/wdawebsite/L101-ForIndividuals/L220A-004CETFullList.html](http://www.wda.gov.sg/content/wdawebsite/L101-ForIndividuals/L220A-004CETFullList.html).


**Educator Requirements**

Pedagogy qualifications requirements for WSQ Adult Educators include:

<table>
<thead>
<tr>
<th>Role of Adult Educators</th>
<th>For Public Training Providers</th>
<th>For In-company Training Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSQ Trainer and/or Assessor</td>
<td>WSQ Advanced Certificate in Training and Assessment (ACTA)</td>
<td>WSQ Workplace Trainer Programme (WTP)</td>
</tr>
</tbody>
</table>
In addition, Adult Educators should possess relevant industry/vocational qualifications and/or formal academic qualifications, and work experience. Specific details on the Adult Educators requirements for each WSQ Qualifications are specified in the Curriculum, Training and Assessment Guide (CTAG), and ATOs are required to ensure that the Adult Educators meet these. WDA will also conduct checks on the Adult Educators before they can be deployed to conduct training.

**Thailand**

**Overview**

The formal education qualification system of Thailand is divided into three parts: Basic Education (primary and secondary education); Technical and Vocational Education; and, Higher Education. The system also includes professional qualifications system which is focused on assessing competencies of individuals in accordance with the developed occupational standards.

**National Qualifications Framework**

The Thailand NQF was approved by the Cabinet in January 2013, and implementation was approved by the Cabinet in November 2014. The NQF covers all education sectors (secondary education, TVET, higher education) as well as skills standards qualifications, and professional qualifications. It is a nine level framework and includes a volume measure. The Office of the Education Council (OEC) is responsible for providing national information, coordinating, managing and monitoring the NQF.

**Quality Assurance Mechanisms**

There are three key bodies responsible for quality assurance of broader TVET in Thailand: Office of the Vocational Education (OVEC) (Ministry of Education); Department of Skills Development (Ministry of Labour); and, Thailand Professional Qualifications Institute.

**Quality Assurance Mechanisms – OVEC**

Technical and Vocational Education (TVE) includes three levels of TVE plus short-course vocational training (Certificate of Vocational Education (1–3), Diploma of Technical Education (1–2) and Bachelor’s degree of Technology (1–2)). A TVET qualifications framework outlines the learning outcomes of each level of qualification and includes a credit based system.

OVEC is responsible for: formulating national TVET policies and issues; establishing national TVET qualifications framework; monitoring and evaluation TVET quality standards and qualifications; organising and implementing Internal Quality Assurance System for TVET; and, supervising 421 public TVET colleges. OVEC is also responsible for TVE national curriculum qualification, including monitoring and evaluation. TVE institutions in both public and private sector use the same structures of TVE curriculum. The Office of Private Education is responsible for TVE in private TVE institutions. The Office of Educational Services areas are delegated power to oversee private TVE institutions in each area.

**Accreditation (Approval) of Qualifications: OVEC**

According to the legislation, every educational qualification must be endorsed by Ministry of Education and accredited by Civil Service. Quality standards or criteria apply to accreditation include requirements stated in Vocational Educational Qualification Framework. Quality and currency of qualifications are monitored through Internal Quality Assurance System and External Quality Assurance System which is organised by a public agency under the Prime Minister Office, every five years.

---

Assessment for recognition of qualifications is organised at the Ministry of Education, and students are required to take two national tests – a written test related to core or generic competencies and a theory and practical assessment in each specialised field. Each institution is authorised to issue the qualifications of Ministry of Education.

For OVEC, the Bureau of Vocational Education Standards takes care of quality and standards through monitoring and evaluation. Standards once developed are endorsed by MOE, and accredited by the Civil Service Commission. The Bureau of Vocational Education Standards of OVEC develops national TVET curriculum structures, criteria, and other related standards as well as developing some specific curriculum required at a national level. Most providers develop curriculum and submit for approval.

**Registration (Approval) of Training Providers/AWARDING BODIES – OVEC**
OVEC approves and supervises institutions according to standards set. Although registration is not legislated, the process involves a working committee from central authority, OVEC visiting the providers to ensure standards are met, and approval sought by Vocational Education Commission. Providers need to meet quality standards, including Internal Quality Standards and External Quality Standards. OVEC are responsible for TVET providers through the system of Internal Quality Standards, and the Office of National Education Accreditation and Quality Assessment, Prime Minister Office is responsible for External Quality Assessment and Accreditation of institutions/providers.

**Educator Requirements – OVEC**
There are minimum requirements for teachers, trainers, educators, and lecturers. For OVEC, teacher qualifications are organised and controlled by Teacher Council. The Teacher Council monitors and manages the teacher standards system. There is a register of teachers/trainers/educators. Requirements are in the Education Act, Ministry of Education Administration Law, and Vocational Education Law.

**Quality Assurance Mechanisms – DSD**
DSD is responsible for development of National Occupational Skill Standards, and provides occupational skill training and testing. Occupational Skill Testing System is divided into three types: 1) skill testing for national skill standards qualifications; 2) skill testing for working overseas qualifications; and, 3) skill testing for working in specific industrial or service sector qualifications. Incentives for industries to provide training for the trainers also provided. DSD supervises the Skill Development Institutes located in every region of Thailand.

**Accreditation (Approval) of Qualifications – DSD**
The National Committee for Promotion of Skill Standards is responsible for development, approval and accreditation of National Occupational Skill Standards (NOSS), identification of promotion strategies, establishment of training and testing centres, and encouraging the industries to use workers who have occupational skill standards qualification.

The Skill Standard Testing Committee organises the assessment process. Assessment is organised by each DSD centre for each program. Strategies to ensure consistency of judgements have not been implemented for DSD system. Skill Development Institutes issue certificates or qualifications after an individual passes a test.

In terms of curriculum, curriculum can be developed at a national level through DSD, but also individual providers can develop their own curriculum. It is a mix of both.
Registration (Approval) of Training Providers/Awarding Bodies – DSD
DSD approves and supervises institutions. There is no legislation or regulation for this. Providers are established and authorised to provide training and testing, and awarding certificates. Quality standards or criteria that apply to approving providers are focused on quality of trainers, involvement of industries, and facilities in the training and testing centres. DSD has responsibility in supervision and monitoring their centres.

Quality Assurance Mechanisms – TPQI
The TPQI is a public organisation under the supervision of the Prime Minister, established under a Royal Decree in 2011. TPQI is responsible for developing the national professional qualifications system, including the professional qualifications framework, supporting the industry in developing occupational standards, registering and monitoring organisations responsible for assessing competencies of individuals in accordance with the developed occupational standards.

Accreditation (Approval) of Qualifications – TPQI
Accreditation processes are legislated through the role of the TPQI. TPQI accredits professional qualifications and occupational standards. TPQI supports industrial and business sectors in developing the occupational standards. Occupational standards and qualifications are endorsed at the TPQI’s Board of management meetings. TPQI is responsible for the maintenance of the occupational standards as well as professional qualifications, including reviewing and updating.

Assessment centres that are accredited by TPQI undertake assessments of candidates. Assessors are provided with assessment guidelines and their assessment decision will be checked by the assessment auditing committee. Assessment centres use TPQI common assessment tools that have been developed by the industrial and business sectors. TPQI awards professional qualifications to individuals.

Assessment Providers – TPQI
TPQI accredits assessment centres for the assessment of competencies and issuance of qualifications under its remit. Centres must meet the requirements of ISO/IEC 17024:2012 related to Personnel Certification Bodies)/Certification Bodies for Persons. Assessment centres undertake assessments of competence on TPQI’s behalf.

Assessor Requirements – TPQI
Assessors must have at least 5 years of experiences in the field and are trained by TPQI in ISO 17024 (organisation auditing) and in assessment materials. Additional requirements for assessors will be developed according to occupational standards which industrial and business sectors are in charge of. Assessors are trained by TPQI in ISO 17024 and then they assess according to given assessment guidelines. Assessment decisions made by assessors will be checked by the assessment auditing committee.
Vietnam

Overview of Education and Training System

School education takes 12 years for students from 6 to 18 years of age. After graduation from lower secondary school, students can go into three pathways. First, students can go to upper secondary school and study there for three years and take a national exit examination from high school (if they do not have problems with their learning achievement). Second, students who cannot go to upper secondary school will continue their learning at the continuous education centre and may sit for a national examination to get a certificate of high school program graduation by the end of three years of learning. Students who do not want to join the previous program can go to technical and vocational education and training (TVET) institutions.

TVET institutions in Vietnam are divided into two:

- Vocational training under the administration of the Ministry of Labor, Invalids and Social Affairs (MOLISA); classified into three types according to credentials they offer (vocational training centre, middle vocational school and higher vocational colleges). Vocational training centres offer vocational training courses from some days up to less than 1 year and are eligible to offer elementary vocational certificate, while intermediate vocational schools offer vocational training courses of at least from 1 to 2 years leading to vocational intermediate qualification. Vocational training colleges admit high school graduates to train them from 2 to 3 years and offer upper-intermediate qualification. The last two types of vocational training institutions can offer both short course and long course.

- Technical and vocational education (TVE) under the Ministry of Education and Training (MOET). TVE institutions can offer courses from 1 to 3 years according to students’ entry qualifications. Students who hold a vocational certificate (one-year course) have to be trained at least one year more and can gain an intermediate diploma. Graduates from lower secondary schools need to take three-year courses leading to the diploma. Two-year courses are for graduates from high school and lead to a diploma.

The TVET system has recently changed due to a new TVET law endorsed by the Parliament November 2014 (validated 01 July 2015). Therefore, there will be no separate vocational training under MOLISA or a subsystem under MOET, but there will be one college type, one secondary school type and one centre for TVET oversight. Information in this overview pertains to pre November 2014 law.

NQF Development in Vietnam

A NQF proposal is due to be completed by the end of 2014. The single framework will cover the higher education sector and the vocational training sector. The structure of the proposed framework includes 8 levels and will include 3 levels of certificates, diploma, advanced diploma, bachelor, masters and doctorate qualification levels. It is anticipated that the governance of the framework will be with an established board.

---

Quality Assurance Mechanisms

Quality Assurance of Qualifications
For education institutions, MOET provides national curriculum which are similar to programme standards. These standards include an introduction, general objectives of qualification, learning outcomes, subject or knowledge required to be learnt, duration, assessment advice, requirements of the teachers, and equipment, facilities and textbook advice. These programme standards are developed through a committee process. The committee is initiated through the MOET and incorporates those teaching in the area, experts and 1 or 2 industry expert representatives. From these programme standards individual education institutions are to develop their own detailed curriculum within an internal quality management system. MOET may inspect quality of education programmes at site inspections. MOET has a website register of providers, but does not have a register of qualifications that providers offer.

For vocational institutions, MOLISA is responsible for developing national curriculum. This curriculum is similar to that developed by MOET in terms of structure, but includes a great deal more detail. The curriculum development process is more closely aligned to occupational and functional analysis process. MOLISA convenes meetings and workshops with TVET institutes, companies and university experts to identify job tasks to develop into curriculum. The curriculum includes essential knowledge and skills, learning outcomes, assessment guide and criteria (including performance criteria), duration and module (subject) detail. The curriculum may be informed by national skills standards if they are developed in that particular field; however, it is more than likely that the curriculum has been developed before the competencies. MOLISA has a register of providers registered although not what qualifications are offered by these providers. MOLISA also has a register of curriculum summaries.

Both sectors cover similar qualifications across similar occupations, skills and knowledge. In both sectors there are common subjects (generic subjects) that all students must undertake in each qualification. These subjects include IT, foreign language, physical education, politics, law and national defence/security. These subjects are taught at all qualifications levels; however, subject complexity and duration vary across the qualification levels.

Relationship to Standards
MOLISA is responsible for defining principles, procedures for developing and issuing national skills standards for each occupation; responsibilities in relevant offices and organisations for developing and issuing national vocational skills standards for each occupation. MOLISA has oversees the development of national occupational skills standards undertaken through the line ministries for qualifications up to level 5.

National skills standards consist of regulations on performance level, requirements of essential knowledge, skills and attitudes to perform the tasks of one occupation. Government bodies organise and coordinate with relevant offices and trade associations to develop and issue national skills standards under regulations of vocational training law and the above regulation.

National skills standards are based on a job role, equated to a qualification, and describe specific tasks. National skills standards are based on the notion of competence, are developed in a consistent format including occupation description, list of tasks, performance criteria, assessment criteria and performance conditions.

The process for development includes a development committee comprising a mix of ministry and other representatives (employers, employees, trade associations and experts), occupational and job
task analysis, drafting using 30 independent experts, appraisal committee of at least 1/3 industry representation, and ministerial endorsement.

MOLISA has a register of all national skills standards that have been developed on its website. Generic competencies have not been developed to be included in qualifications; they are all vocationally specific tasks.

**Assessment**

For education institutions (MOET), all institutions are responsible for issuing their own qualifications and retaining student outcomes data. However, each institution submits a graduation report to MOET for limited data retention.

For vocational training institutions, certificates related to curriculum programs are issued by the institution and are the responsibility of the principal. However, for certificates issued related to national occupational skills standards the certification process is the responsibility of MOLISA, and issued by MOLISA. For national occupational skills standards, MOLISA develops the test item bank and also the practical test for testing centres to use.

**Quality Assurance of Providers**

There are two accreditation organisations: one under General Department of Vocational Training (MOLISA), the other is Department of Testing and Accreditation, MOET. The two ministries have issued their own documents related to accreditation standards focused on quality assurance.

MOLISA has issued the Decision No 1&2/2008/QĐ-BLĐTBXH dated 17 January 2008, on regulation of the system of criteria, standards of accreditation for vocational training schools and vocational training colleges. MOET has promulgated the decision No 65/2007/QĐ-BGDĐT dated 17 January 2007 on regulation of standards of quality evaluation of university.

All providers of education and training must register at the state administrative authority of education and training in local or central level according to qualifications they are going to offer.

All providers are monitored to a certain extent by state administrative authorities of education and training independent of the central government. MOET and MOLISA have regulations to mandate all TVET and higher education institutions to self-assessment (internal evaluation).

An accreditation body can be established by the Government, private organisation or individuals under permission of Minister of Education and Training.

GDVET/MOLISA is responsible for skills testing. Testing centres are generally established within a TVET institution and are responsible for national occupation skills standards testing. MOLISA licences these centres. There has been limited update of competency testing at this stage.

**Educator Requirements**

For TVET institutions (MOLISA) and for education institutions (MOET) the requirements are that vocational and training educators require a bachelor within the field of teaching plus a pedagogical certificate. There are no specific requirements for assessors in TVET. There are no registers of teachers retained or national oversight/agency in either sector.
References


Indonesia government 2012, Decree of the President of the Republic of Indonesia Number 8 Year 2012 on The Indonesian National Qualification Framework (INQF).

