Fast-Track Skills Assessment Pilot Project

Report of the First Round

Implementation period (from July to December, 2014)

February 2015

Supported by giz

In collaboration with Swisscontact

Table of Content

This report was prepared by Naing Yee Mar, U Ko Ko Naing, U Kyaw Win, Mr. Joachim Stahl from GIZ, Mr. Gerhard Kohn from Swisscontact and Daw Khin Mar Aye and U Myint Than from MoLES in consultation with the Project Team, and edited by Ms Franziska Seel (GIZ).

Chapter 1: The Fast-Track Skills Assessment Pilot Project Initiative

Background

The National Skills Standards Authority (NSSA) of the Ministry of Labour, Employment and Social Security (MoLES) was formed by a Cabinet Order in 2007. It is headed by the Deputy Minister for Labour, Employment and Social Security and comprised of representatives of the various Ministries concerned with skills development as well as Non-Governmental Organizations, NSSA's aim is to lay down competency standards and promote the systematic training and certification of skilled workers. After it was established, the NSSA formed 14 Sectorial Committees, comprised of representatives of the concerned Ministries as well as the private sector, with the objective to draw up competency standards for a variety of priority occupations in 14 economic sectors. The Sectorial Committees, up till 2012, drew up Occupational Skills Standards at four levels for 173 occupations,of which 93 were submitted to and approved by the Cabinet.

After the enactment of the Employment and Skills Development (ESD) Law by the Pyidaungsu Hluttaw in 2013, which provided a legal framework for the NSSA, and with a view to engage with the implementation of the ASEAN Economic Community (AEC) by 2015, MoLES further increased its efforts to enhance NSSA's capacity. Among many other activities, and in accordance with the Exchange of Notes No. 245/2012 and No. 27/2013 by the Federal Republic of Germany and No. 324147 (1695), dated 3 April 2013, by the Ministry of Foreign Affairs of the Republic of the Union of Myanmar, MoLES andthe Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) agreed upon the provision of technical assistance for strengthening the NSSA organizational structure and it's quality assurance system in the context of National Qualifications Framework as well as for drawing up rules related to the skills development part of the ESD Law.

In April 2014, at a meeting of the NSSA in Nay Pyi Taw with the Sectorial Committees and development partners, including GIZ, a request was made by the NSSA to provide support to the certification of skilled workers as a priority matter. At this point, however, the rules and regulations pertaining to the assessment of skills at different levels (a prerequisite for the assessment and certification of skilled workers) were still being drafted and the National Skills Development Agency (NSDA) under the new EDS Law had yet to be formed. Due to these circumstances, and acknowledging the urgency of assessing and certifying skilled workers expressed by the authorities, GIZ proposed to NSSA to undertake a"Fast Track Skills Assessment Pilot Project", implemented under the existing ACC and the NSSA, which were formed prior to the enactment of the ESD Law. GIZ further agreed to providetechnical and financial assistance to such a project as a means to support NSSA in fully establishing itself and operating in such a way as to be able to fulfill its mandate constituted by the ESD Law.

Since the main phase of the Vocational Skills Development Project, which is supported by the Swiss Development Corporation and implemented by Swisscontact, was scheduled to commence in September 2014, Swisscontact agreed to also provide input to the project through the technical expertise of an international expert. Technical input to the project was also provided by international experts from Singapore Polytechnic International (SPI) and the Asian Development Bank (ADB).

Project Aim and Scope

The aim of the project is to pilot a system of assessment and certification of skilled workers, who are already in the workforce and have acquired their occupational skills through experience and learning on-

the-job. Through the implementation of such a pilot project, it is expected to improve the capacity of the NSSA technical staff and the members of the Sectorial Committees and Assessment and Certification Committee (ACC) for revising, developing and applying demand-led occupational and competency standards and for the accreditation and certification of skills with reference to the National Qualifications Framework (NQF) and Regional Qualifications Framework (RQF).

At the start of the project, it was decided to use the recognition of prior learning, which is a method of skills assessment, by which an individual's skills or knowledge, regardless of where and how these were learned, can be formally assessed and recognized formally.This approach is also in accordance with the four levels of competency standards developed by the NSSA for the national level certification of occupational skills. The four levels are:

Level 1: Semi-skilled Worker

Level 2: Skilled Worker

Level 3: Advanced Skilled Worker

Level 4: Supervisor/Technician.

Of the four levels of occupational competency standards, the pilot project envisages skills assessmentsonly for levels 1 and 2 in a limited number of selected priority occupations (see Chapter 2 below).

The pilot project is going to consist of a minimum of three rounds. The intention is to learn from each round through evaluation and gradually improve the capacity of the NSSA, both from a technical and organizational perspective, in particular its capacity to conduct skills assessments. Because of its nature as a pilot project it was recommended that the skills assessments be conducted first in Yangon. Based on the experience gained during the first round, further rounds can be conducted in Mandalay or other cities as proposed by the NSSA.

The project team is comprised of members of the NSSA, Sectorial Committees, the ACC, employers and employer associations, national occupational experts, the NSSA Technical Working Group and its Advisory Committee members, national consultants and experts from GIZ and Swisscontact.The team is also supported by the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) and the Myanmar Engineering Society.

Timeframe

The launching ceremony of the first round of the pilot project was held at the Meeting Hall of UMFCCI on September 14, 2014. The launching ceremony was attended by the Chairperson and Secretary of the NSSA, members of UMFCCI, members of the concerned Sectorial Committee, representatives of employers, representatives of workers, representatives of the professional organizations, development partners, and the media. The implementation of the first round of the Fast Track Skills Assessment Project, which had started in July, was accelerated soon after the launching ceremony. It concluded at the end of November 2014, with the evaluation and reporting done at the beginning of 2015.

The entire pilot project was tentatively planned as seen in the Figure 1 below.

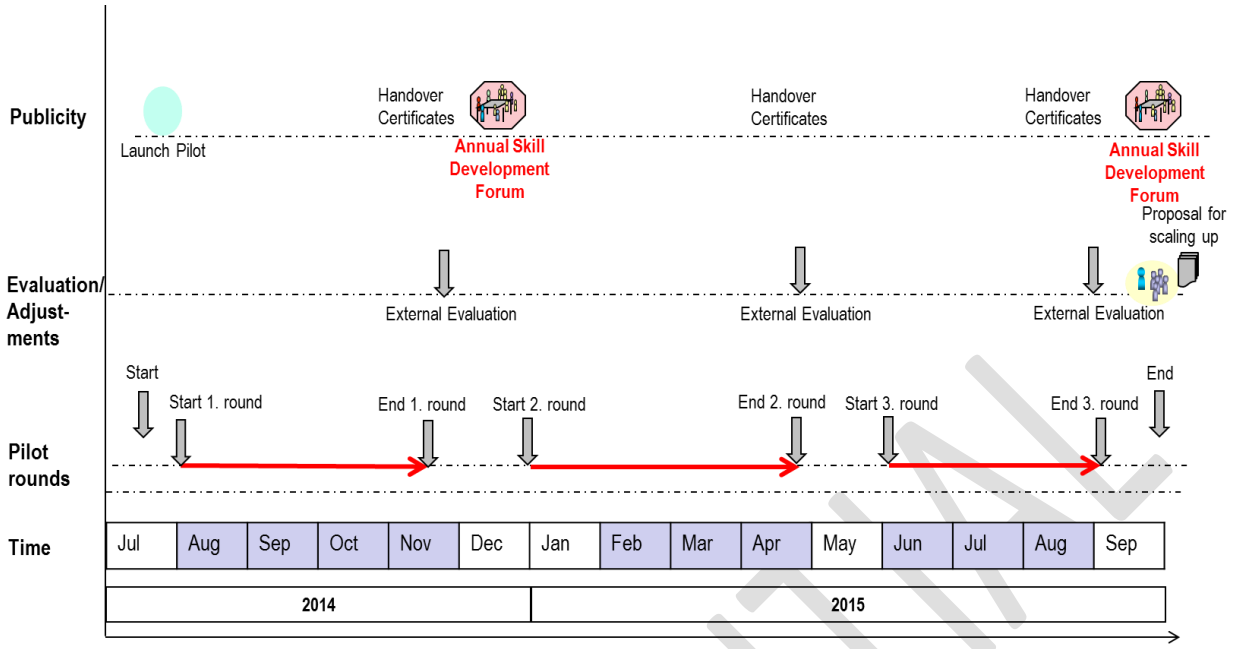

Figure 1: Proposed time plan for the fast-track pilot project (2014-2015)

Chapter 2:Implementation of the First Round

Project Design

A series of consultation meetings and workshops were held at the beginning of May 2014 with members of the Technical Working Group of the NSSA and the consultants and experts of GIZ, supported by experts from Swisscontact and ADB, in order to develop a project design and a working plan for the first round of the Fast-Track Skills Assessment Pilot Project. The first round was scheduled to be implemented in Yangon between July and December 2014 in three phases, i.e. preparation phase, assessment and certification phase, and evaluation phase. The project team proposed a functions and process architecture for use during the Fast Track Skills Assessment Pilot to MoLES and the NSSA. The architecture defines the different functions and roles towards decision taking, responsibilities and coordination between bodies and actors, as it is described in Figure 2. The purpose was to create the desired levels of coordination among key actors during the implementation phases.

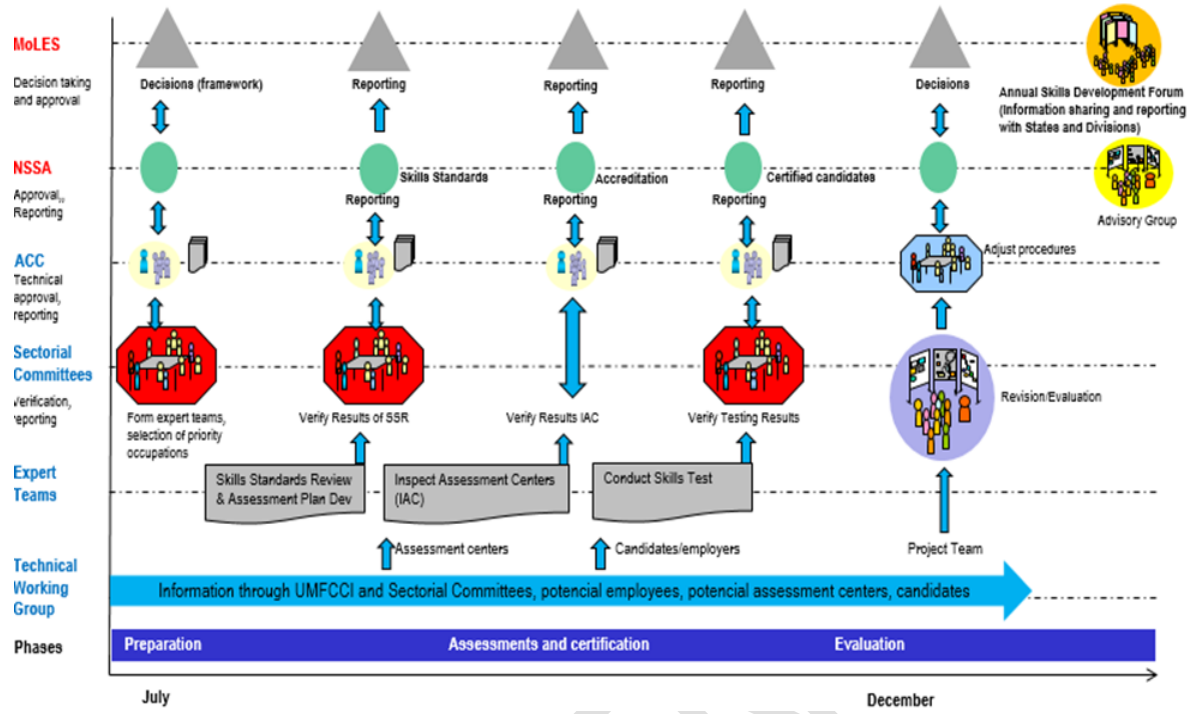

Figure 2: Functions and process architecture of the first round

Alongside a functions and process architecture, a “small scale” NSSA organizational model for the first round (as described below in Figure 3)was proposed. This was necessary, because not all Committees, as planned in the ESD Law, are already in place. The first round had therefore to be implemented with a simplified structure of organizational authority, responsibility, and functions. The small scale organizational modelhelpsthe project team observe the decision making process and the flow of information and communication between the different bodies and actors at the societal, technical and steering level, as identified for the first round. The model also allows the project teamto evaluate how different levels work together and how certain processes could be improved for the next round of the pilot, and how to redefine the functions and responsibilities of different bodies in such a way as to make organizational processes more fluent and efficient.

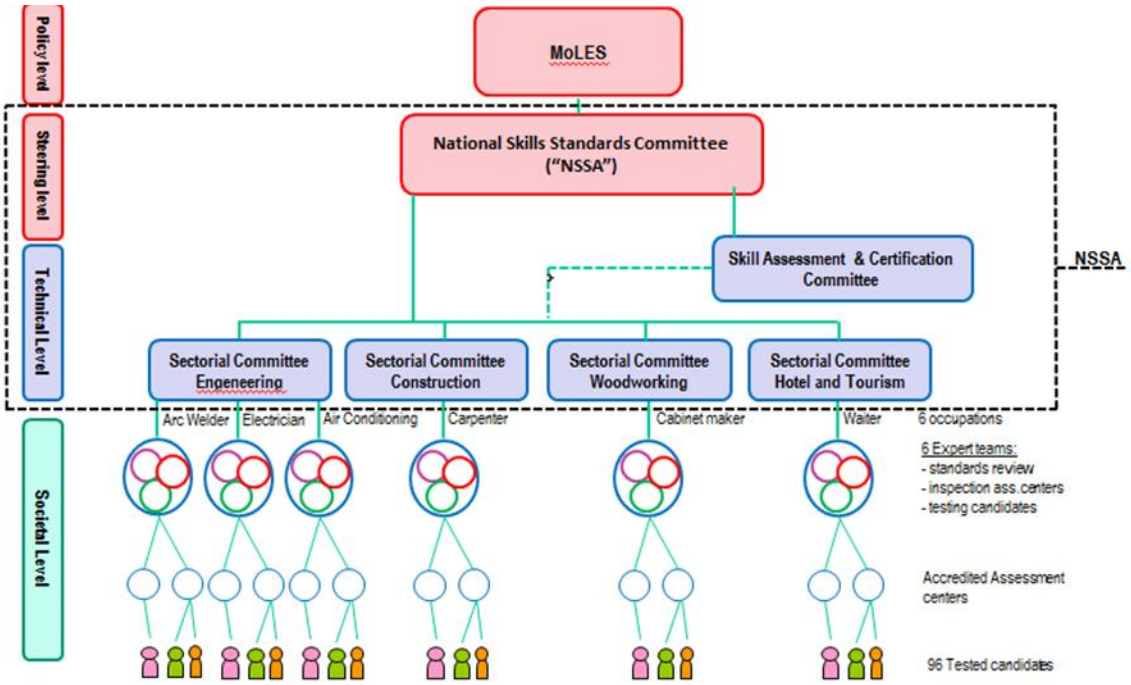

Figure 3: The "small scale" organizational model of NSSAdesigned for the first round

Key Activities Undertaken During the First Round

According to theorganizational model developed for the first round, NSSA has the function to set the overall framework for the implementation of the fast track pilot project, which includes the following key activities shown in Figure 4 and described in more detail below.

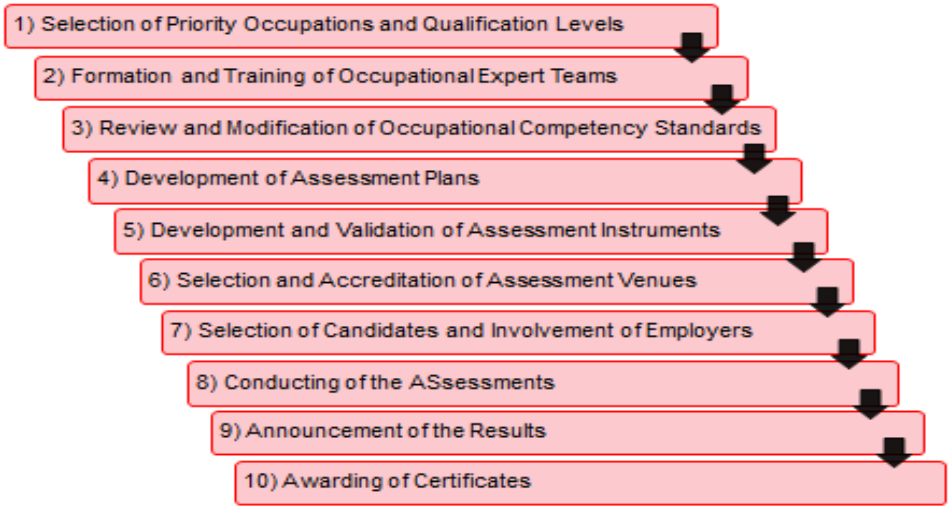

Figure 4: Key activities of the first round

1) Selection of Priority Occupations and Qualification Levels

In order to fast track the skills assessment, 25 occupations were selected based on the discussions held with Sectorial Committee members (April 29 Meeting in Nay Pyi Taw) as well as with the UMFCCI (May9 Meeting at UMFCCI). It was recommended that the skills testing in the 25 occupations should be undertaken in several rounds of six to ten occupations each so as to be manageable. It was also agreed to start with priority occupations for which assessments could be undertaken at training centers or workplaces that had conducted skills assessments before. Therefore, it was agreed that only six occupations will be pilotedin the first round. For future rounds, occupations will be prioritized in accordance with the economic and social needs suggested by the Sectorial Committees.

For the first round, the following criteria were used to select priority occupations:

- Demand of labor market for occupations
- Existence of NSSA-reviewed occupational competency standard
- Availability of trained assessors and inspectors
- Readiness of assessment venues to conduct assessments (within the Yangon area)
- Readiness of Sectorial Committees to proactively contribute support to conduct assessments
- Availability of technical and financial support from development partners and employers

Based on these criteria, the following six occupations were selected for the first round:

(a) Air-ConInstaller
(b) Arc Welder
(c) Cabinet Maker
(d) Carpenter
(e) Electrician
(f) Waiting Staff (F&B-Service)

For all six occupations, the NSSA decided to implement the assessments only for the first level (semi-skilled worker) of the four-level occupational competency standard framework drawn up by its respective Sectorial Committee:

(1) Metal and Engineeringrelated Occupational Competency Standard Committee
(2) Construction related Occupational Competency StandardCommittee
(3) Woodworking Industry related Occupational Competency StandardCommittee
(4) Hotel and Tourism related Occupational Competency Standard Committee

2) Formation and Training of Occupational Expert Teams

The members of the concerned Sectorial Committees were asked by the NSSA to nominate occupational experts for the formation of standard review teams, inspector teams, and assessor teamsfor their respective occupations. Their role during the first round was to review and revise the occupational standards, inspect the venues, develop assessment plan, instruments and conduct assessments. For the members of inspector teams and assessor teams, the ACC in consultation with the NSSA made a final confirmation and appointed them to carry out their tasks and roles as described in the NSSA guidelines and criteria. Assessor teams consists of assessment plans developer teams and assessment panels. Due to the limited number of qualified assessors, most of the assessors were involved in both of the development of assessment plans and assessments.

In order to carry out their functions and roles, assessorswere trained in skills assessment methods and guidelines developed by project team. In order to ensure consistency in how they conduct their assessments, all assessors, including those who had previously been trained by Singapore Polytechnic International (SPI)/sponsored by Temasek Foundation, received this training.

3) Revision and Modification of Occupational Competency Standards

In a first and important step for the finalization of the occupational competency standards to be used during the first round, a unified NSSA standard format (template) was developed and agreed upon by the project team for use during the pilot project. In line with the format, reviews and modifications of the competency standards of level 1 of the six occupations were conducted with inputs from the consultants and international experts of GIZ, Swisscontact and ADB.

The format design included required items such as 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. Guidelines for the format were also drawn up, in order to facilitate the review of standards by the respective occupational standard review teams. A sketch of theunified format for the occupational competency standards used in the first round is shown in Figure 5 below.

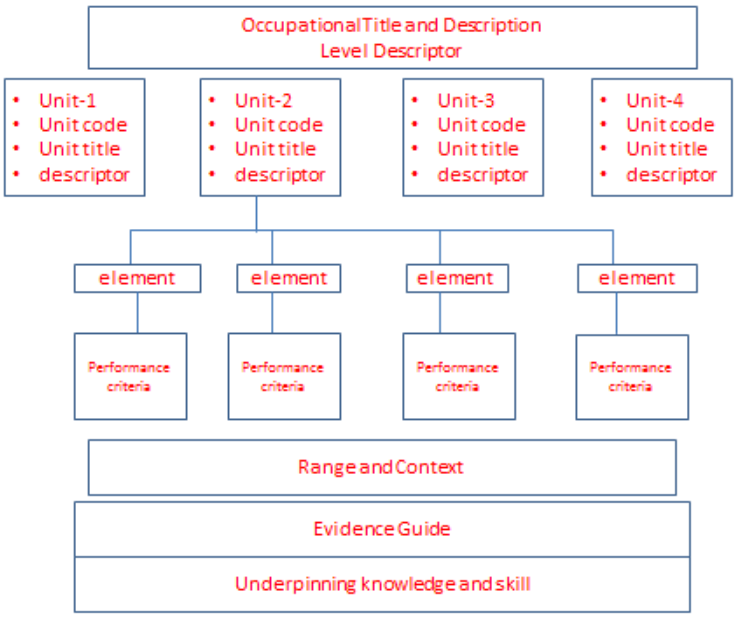

Figure5: Sketch of the unified format for the occupational competency standards

After the unified format had been developed, the standard review teams met for a 3-day meeting in August 2014 to review the existing competency standards of their respective occupations and modify them where necessary. The standard review teams explicitly noted that the modified versions can be used for the first round, but might need to be reviewed and modified again afterwards, based on the project evaluation results.

4) Development of Assessment Plans

In consultation with the experts from GIZ and Swisscontact, instructions and guidelines for assessmentsas well asassessors involved in the assessment panels were developed by the concerned assessment plans developer teams. These guidelines includea set of criteria for assessor selection, code of ethics for assessment panels, a procedure for the proper conduct of assessments and a method for assessment plan development, as well as the checklist for assessors to apply during the practical performance test.

In consultation with the project team, the concerned assessor teams developed assessment plans for all six priority occupations. Each assessment plan includesthe assessment tools (instruments and instructions), a set of criteria upon which competency assessment can be measured, layout of the assessment venues, required tools, equipment and materials, occupational safety and health requirements, and the test plan based on the reviewed occupational competency standards.

In line with the recognition of prior learning approach, all assessment plan developer teams of six occupational areas designed the test plans that included both practical performance and knowledge tests for the candidates, as well as rating schemes for the assessors. The practical performance tests, comprised of instructions for practical exercise, made up 80% of the test plan. The knowledge test, with theoretical questions for the candidates, made up 20% of the test plan. Overall, the practical performance tests covered four facets to assess the candidate's skills:

- Procedural skills
- End-results as specified in the instructions
- Duration of time taken to complete the test
- Appropriate behavior (including the adherence of occupational safety and health requirements)

5) Development and Validationof Assessment Instruments

Each assessment plan developer team developed assessmentinstrumentsin accordance with their test plan. In general, project samples and checklists weredeveloped for the practical performance tests and oral (arc welder, cabinet maker, carpenter, waiting staff) and multiple choice (air-con installer, electrician) questions for the knowledge tests. Checklists were designed to evaluate skills, specific procedures, work practices, communication and application of knowledge. The main advantages for using checklists include ease of administration, scoring, and the provision of feedback.

In addition, upon assessing the competenciesof each candidate (competent or not yet competent), the assessment panels used one or a combination of appropriate rating methods, depending on the nature of the occupation. For example, for the cabinet maker and carpenter occupations, the assessment plan developerteams used a linear and weighted rating system (rubrics) in conducting the practical performance tests. For the electrician and waiting staff occupations, linear and deduction rating approaches were used. For the air-con installer and arc welder occupations, it was observed that the assessor panels mainly used the critical incident (competent or not yet competent) rating system.

Concerning the duration of assessments, there are two types of tests that credit the candidates differently for their time used:

1) Fixed-time test: The candidates were asked to stop the performance test exactly when the set time was up.
2) Completion test: A set time was given, but the candidates were allowed to complete their work in performing the test with a mark deduction for any extra time taken.

During the first round of the pilot project, all assessmentpanels used the fixed-time approach in their practical performance tests.

In order to check the quality and validity of the assessment instruments to be used in their practical performance tests, each assessmentplan developer team conducted a trial test for their occupation prior to the actual assessment. Based on the outcomes of the trial tests, the assessment plan developer teamsadjusted the time settings as well as the content of the assessment instruments where necessary.After the trial tests, each assessment plan developer team made the assessment instruments ready for the actual assessment.

6) Selection and Accreditation of Assessment Venues

For the purpose of the first round, the institutions listed in Table 4 were selectedfor the conducting of assessments, based on their previous experience and available resources. All institutions are located in Yangon, and each institution offered a venue (an appropriate work station) for conducting the assessments. The equipment, tools and materials were identified according to the assessment plan for each occupation and installed by the project (sponsored by GIZ) at the assessment venues.

No.	Occupation	Accredited AssessmentVenues	Type of Institution
1	Air-Con Installer	Skills Training Center and AKI School of Engineering	Government and Private Training Centers
2	Arc Welder	Kabar Welding Testing Center	Private Training Center
3	Cabinet Maker	Center for Vocational Training	NGO Training Center
4	Carpenter	Central Construction Training Center	Government Training Center
5	Electrician	Skills Training Center	Government Training Center
6	Waiting Staff (F&B-Service)	Monsoon Restaurant and TRC Vocational Training Center	Private Workplace and Training Center

Table 1: Accredited assessment venues

The accreditation procedure started with a submission of applications from the selected institutions. After their application, accreditation teams were formed by the ACC to make on-site inspections and to recommend to the NSSA the readiness of those venues for conducting the assessments. If the venue was found to be lacking in some aspects for the assessments (not meeting the accreditation criteria) the accreditation team(s) recommended improvements to be made prior to undertaking the skillsassessments. The inspector team(s) applied the guidelinescalled “The Guidelines and the Criteria for Accreditation of AssessmentVenues”, which were developed by the inspector teams in consultation with the project team.

The guidelinesinclude a list of points designed to identify whether a venue complies with the requirements for skills assessment. These points refer to having particular facilities, organizational structures, layout

plans, equipment and tools, and a certain safety levelin place. The selection guidelines were mainly used by the inspector teams to inspect those venues that applied for accreditation.

7) Selection of Candidates and Involvement of Employers

Since private sector involvement is crucial in skills development activities, the project was designed in such a way that employers could take part effectively and play a key role not only by sharing technical knowledge and experience from their daily work but also by providing the candidates (their selected employees) for assessment. Through the engagement with the skills assessment process, the pilot project also providesemployers with a chance to increase their understanding of the importance of skilled labor. This is something of high importance for the Myanmar business environment.

The first round involved several coordination meetings held between the four concerned Sectorial Committees and employers, and allowed discussions about issues related to the assessments, particularly the nomination of suitable candidates for the tests through the use of nomination guidelines.

The candidates sent by employers were given refresher courses for their occupations in preparation of their assessments. After the assessments, the project allowed the occupational expert groups together with the project team and responsible persons of the NSSA and ACC to conduct several consultation meetings with the employers. The purpose of these meetings was to discuss with the employers in confidentiality the test results of their employees and to advise them on how they can support them in upgrading their skills.

The number of organizations and companies that participated can be seen in Table 2 below.A total of 51 companies and organizations participated and sent candidates for the national skills assessment conducted by the NSSA. Out of the 51, only a small percentage was public enterprises.

No.	Occupation	Number of Organizations and Companies
1	Air-Con Installer	5
2	Arc Welder	12
3	Cabinet Maker	4
4	Carpenter	7
5	Electrician	13
6	Waiting Staff (F&B-Service)	10
	Total number	**51**

Table 2: Number of organizations and companies that sent candidates in the first round

8) Conducting ofAssessments

The assessments were carried out for 16 workers of the carpenter occupation on November 8, 2014; for 24 workers of the arc welding occupation on November 27 and 28, 2014; for 24 workers of the air-con installation occupation on November 25 and 27, 2014; for 20 workers of the cabinet maker occupation on November 29 and 30, 2014; for 18 workers of the waiter staff (F&B-service) occupation on November 29, 2014 and for 24 workers of the electrician occupation on December 1 and 3, 2014 respectively.

Assessment panels of a minimum of five occupational experts for each occupation were formed to conduct the actual assessments and orientation programs (i.e. refresher and familiarization courses). During the conducting of the assessments, occupational experts in groups of two or more were sent by the ACC to conduct on-site invigilation of the assessments. Project teams, comprised of responsible persons from the NSSA, ACC, GIZ and Swisscontact, were also invited to observe the test process during the orientation programs and the actual assessment days.

The announcements for the assessments were made well in advance of the implementation so that both workers and their employers were aware of their place and date, entry requirements, fees (free of charge for all candidates), as well as the place and date of the refresher and familiarization courses. The announcements were made through the respective Sectorial Committees.

9) Announcement of Results

Competent or not yet competent criteriawere set for each occupation prior to the actual tests by the assessors in consultation with members of the project team. Four weeks after the assessment, the results of the tests(the practical performance test and the knowledge test) were made known to the candidates and their employers.

A total number of 157 candidates took part in the first round of the pilot project to attain thelevel 1 national certificate of occupational competencyin the six occupational skills areas. Out of this total number of 157 candidates, 133 candidates (84.7%) were found to be competent and the remaining 24 candidates (15.3%) were found to be in the notyetcompetent stage.

Occupation	Number of Candidates	Number of Candidates Who Passed
Air-Con Installer	24	9
Arc Welder	24	19
Cabinet Maker	20	16
Carpenter[1]	47	47
Electrician	24	24
Waiting Staff (F&B-Service)	18	18
Total	**157**	**133**

Table 3: Results of the candidates' assessments of the first round

10) Awarding ofCertificates

For the first round of the pilot project, NSSA has awarded the following different types of certificates:

[1] Out of the total of 47 candidates, 31 candidates were sent by UN-HABITAT to take part in the assessment on their own costs.

1) National Certificate of Competency: It is to certify a candidate, who has been assessed against the relevant national occupational competency standard in accordance with prescribed procedures and found to be competent in the occupation at the level mentioned.
2) Certificate of Accreditation: It is to certify an assessment venue, which is accredited to carry outassessments of occupational competencies of candidates for the awarding of National Certificates of Competency.
3) Assessor Appointment Certificate: It is to certify the appointment of a qualified person to carry outassessments of occupational skills of candidates for the awarding of NationalCertificates of Competency (Level 1).
4) Inspector Appointment Certificate: It is to certify the appointment of a qualified person to carry out the inspections for the accreditation of assessment venues for the conducting of national occupational competency assessments (Level 1).
5) Certificate of Appreciation: It is to award those who participated in and contributed to the implementation of the first roundpilot project.

The certificates issued during the fast track pilot project shall be numbered serially and be registered by the NSSA. The certificates indicate the occupation and skill level. The register shall contain the numbers of the certificates, the names, photographs and particulars of the persons to whom they have been issued and the date of issue. The register shall also contain the particulars of candidates, who were declared not yet competent in the assessment.

Chapter 3: Evaluation of the First Round

Approach

Evaluation of the first round of the pilot project was undertaken in a systematic way with a view to improving the following three aspects for the second round of the pilot project:Technical, organizational and costing. More precisely, the evaluation reflected on the extent to which the NSSA competency standards were needed for revision; how the testing and certification procedure should be continued, improved, expanded, or curtailed; and on possibilities to improve the organizational structure of the NSSA in order to increase the effectiveness of its management and administration and to identify the accountability requirements of its members and partners.

A workshop to evaluate the technical aspects of the first round of the Fast Track Skills Assessment Project was held at the Sedona Hotel in Yangon on December 5, 2014. The workshop was attended by the Secretary of the ACCand the NSSA, members of the four concerned Sectorial Committees, consultants and international experts of GIZ and Swisscontact, as well as the occupational expert teams. The workshop allowed the chief assessors of each occupational expert team to make presentations on their experience, critical issues and lessons learnt related to the assessment process and to discuss with the observer team, comprised of GIZ and Swisscontact, the technical aspects of the exercise. This discussion was guided by the following quality criteria for good testing.

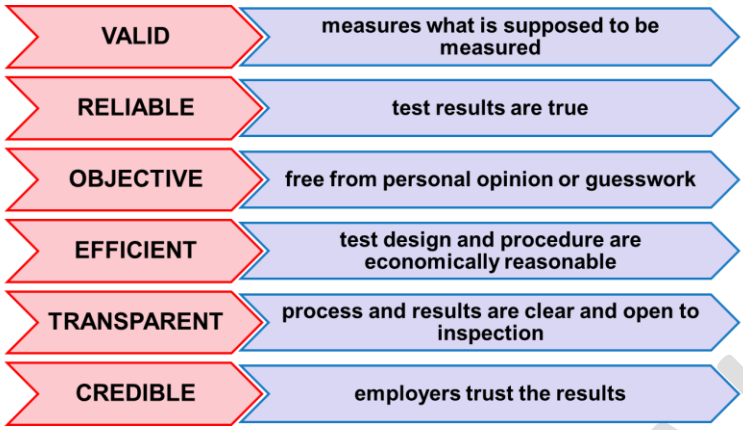

Figure 6: Criteria for quality skills Assessment

The evaluation workshops on the organizational and costing aspects of first round were held from December 8-15, 2014 at the NSSA office in the Skills Training Centre in Yankin. The workshops were attended by the Secretary of the ACC, responsible officials from the NSSA, chief assessors, as well as experts from GIZ and Swisscontact. It is expected that the evaluation helps to answer what should be considered; what should be adjusted and changed; what should be maintained and further developed; and what should be avoided when it comes to designing an organizational structure and budgeting for the second round pilot.

Technical Aspects

Pilot Assessments and Occupational Competency Standards

The NSSA competency standards for the six occupations piloted comprise between 20 to 150 pages each. Hence, it was a challenge to compose a skills assessment (in the form of a project and related theory questions) that covers a representative selection of units (duties), elements (tasks) and knowledge statements contained in the respective competency standard, since it will never be possible to test all units, elements and knowledge statements of the competency standard in a summative assessment (e.g. for the purpose of recognition of prior learning). Likewise, the assessment projects and related oral/written questions should match the level of the competency standards appropriately. All pilot assessments were conducted based on level 1 standards(semi-skilled workers).

From observations of the actual assessments and based on the assessment instruments it can be concluded that the pilot tests were appropriately composed in terms of coverage. However, in the case of the test for electricians it was observed that the test focused only on single-phase circuit installations (household installations) while the respective competency standard prescribes also installations of three-phase installations (industrial installations). Here it can be concluded that this was an issue of approaches in standard development rather than an issue of approaches in assessment. In the case of the arc welders' assessment, doubts were raised about the skills level and the coverage. The question was asked whether the type of welding required in the test project (3F, 4F) would not be too high for a welder on level 1.

Assessors

The ACC appointed assessor teams (guided by a chief assessor) for each occupation. These teams did well in preparing, conducting and evaluating the pilot tests. Each assessor team comprised between five and ten members, most of them being staff of training providers (public and private). It was reported that assessors from private companies were difficult to recruit, because employers were hesitant to release staff for the relatively lengthy period of time required for the preparation and conducting of the pilot tests. Involvement of more assessors from companies should be reconsidered when planning the next round of pilot assessments.

Given the numbers of candidates (between 18 and 24 per occupation) the overall assessor-candidate ratios ranged from 1:3.6 (waiter staff) to 1:2.4 (arc welders). These are rather comfortable ratios and it has to be acknowledged that the actual assessment situation was even better because the candidates were assessed in smaller batches (e.g. four batches of six candidates) for reasons of limited availability of workstations. Hence, the actual assessor-candidate ratio improved even further, in the case of the arc welder occupation even to a ratio of 1:1. While such ratios have many advantages, e.g. in terms of test quality, they may be a threat to the costs and sustainability, when replicating testing on a larger scale.

It was noted that some assessors had multiple roles to play, such as being members of Sector Committees or of inspection teams as well. Though this has not been critical in the case of this first round of pilot tests and must be attributed to the still limited number of motivated collaborators of the upcoming NSSA system, there is always the risk of conflict of interest, if key actors have several roles.

Grading and Pass Marks

It was observed during the pilot assessments that some assessor teams used a grading scheme (e.g. rubrics) to delineate consistent criteria for assessing the candidates' performancewhile other groups used a "competent – not yet competent" criterion for assessment. Both systems have their own justifications. However, it would be better if one unified approach was used to avoid confusion among the participants (candidates, employers). The question, which of the two systems is to be used in the future, should be discussed before the next round of pilot assessments is conducted. This discussion should be broadly based on a comparison with other international, national and regional approaches and experiences and should carefully analyze potential advantages and disadvantages of both systems.

During this first round, each assessment panel team decided on the pass marks for their occupation in consultation with the project team. Pass marks differed between practical tests and knowledge tests but also differed between the occupations. It was found that pass marks varied between almost 100% (air-con installation, practical test) and 50% (electrician, written test). These differences in pass marks may have contributed (among other factors) to quite different pass rates (100% of waiter and electrician candidates passed the test; but only 37.5% of air-con installation candidates passed). Therefore, this issue of pass marks requires some in-depth discussions before the next round of pilots is launched.

Time for Practical Tests

It was observed during some practical tests that the time allocated was rather short and had to be extended in some cases. The time allocated for practical tests should be sufficient for an average performer to complete the assignments successfully. It is common international practice to even allow slower performers some overtime and in turn deduct some marks for late finishing. In this regard, skills assessments differ from skills competitions where time may play a more prominent role.

Orientation Programs

For all occupations, the assessment panel teams conducted two types of orientation programs for the candidates: Refresher courses (2-3 days) and familiarization (1 day). The rationale behind both types of activities appeared to be essential: Since the pilot assessment focused on candidates from work life who had acquired their skills and knowledge informally in their work places (recognition of prior leaning), some preparatory training orfamiliarization with the tools, equipment and materials to be used in the practical tests was deemed necessary. From a pedagogical point of view as well as with regards to providing fair and equal chances for candidates, this practice is laudable. However, there is a risk to 'drill' the candidates too narrowly on the very special tasks to be performed in the actual assessment. In addition, to include two to three day refresher courses into the practical skills assessment increases the cost per candidate significantly. In the longer run it may be worthwhile to encourage public and private training providers to offer preparatory training for skills assessments on the market and against fees.

Organizational Aspects

Organizational Structure in Reality

The review process started with describing the organizational structure of the NSSA that was applied during the first round of the Fast Track Skills Assessment Project. Within this organizational structure, two main areas were identified, which played an important role during the fast track. These are the areas of competency standards and of skills assessment and certification. More precisely, the project team identified the competency standard reviewing and modifying process as a core process within the area of competency standards (Figure 7) and the accreditation of assessment venues as a core process within the area of skills assessment and certification (Figure 8). Subsequently, these two core processes were further evaluated with regard to their functions and the interfaces of those bodies and committees that are involved in the two processes.

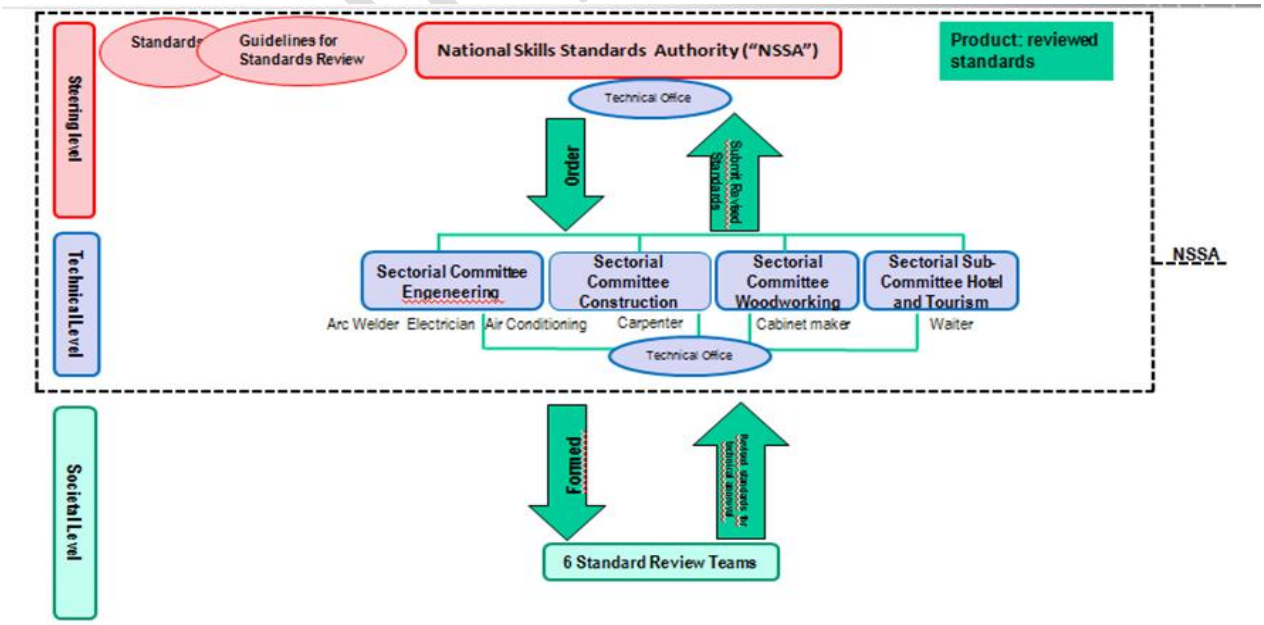

Figure 7: Core process "Competency standard reviewing and modifying"

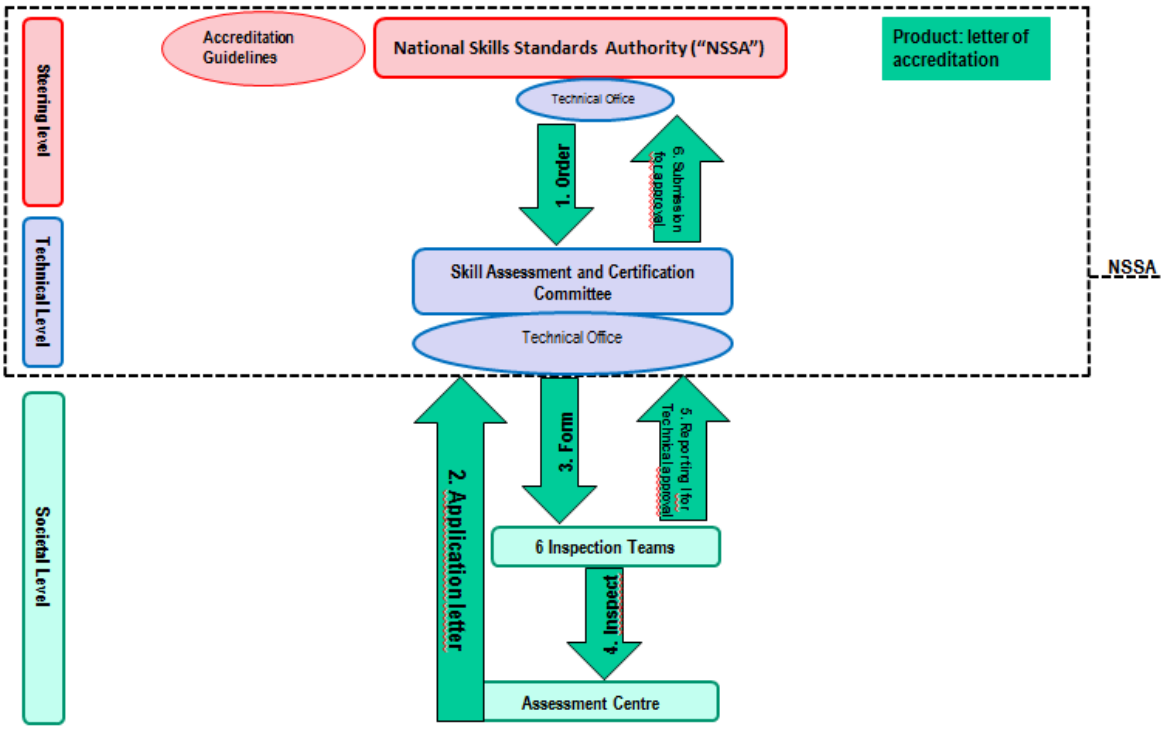

Figure 8: Core process "Accreditation of Test Venues"

For the purpose of further evaluation, those functions and interfaces of the different bodies and committees, which are involved in these two core processes, were compared with the organizational structure developed during the project planning phase in June 2014. The purpose was to update the organizational structure in accordance with the actual situation of the first round of the Fast Track pilot project and analyze strengths and weaknesses of the applied organizational structure. Based on this analysis, critical factors were identified with the aim of finding ways for improvement in the second round. The result can be seen in Figure 9 below.

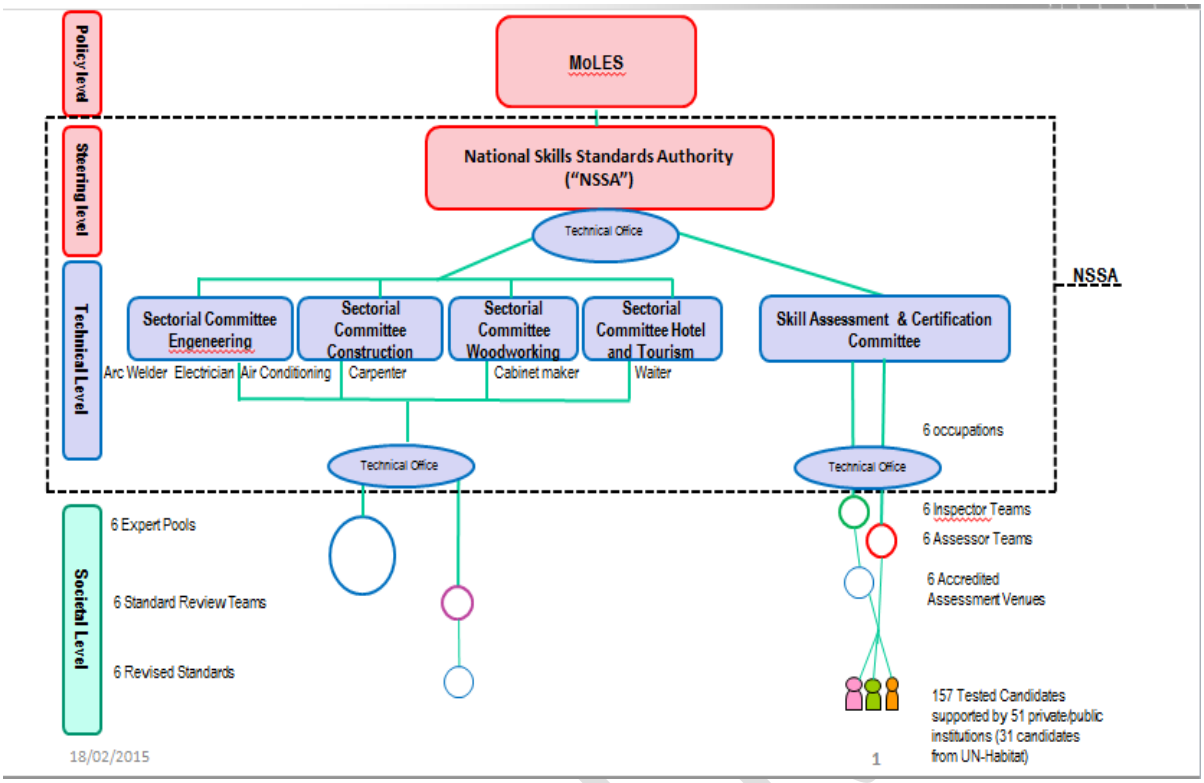

Figure 9: Organizational structure realized during the first round

The following main differences between the planned organizational structure and the actually realized organizational structure were found:

- As the Skill Standards Development and Training Committee is not yet in place, the four Sectorial Committees are acting on the same level as the ACC. Although this is not the structure planned in the ESD Law, it was the way how the pilot worked with the already existing structures and committees.
- The technical office and the ACC became key players in the first round, although initially their roles and functions were not yet clear.
- The technical office played a very important role in the whole process. In particular, it was acting as a "post office" for all communications and reporting going to or out of the NSSA, as well as to the Sectorial Committees and the ACC.
- The ACC played a greater role in confirming the inspector teams as well as in the accreditation of the assessment venues, compared to their envisaged role.
- In the planned organizational structure, NSSA was envisaged as a standalone regulatory body. However, in reality the NSSA was supported by the technical office.
- There was no formal communication and coordination to be found between the Sectorial Committees and the ACC. All communication requests between these two actors went through the technical office. This led to slow processes and an overload of communication and coordination responsibility within the NSSA, because the technical office always needed permission from the NSSA to act on a communication request.
    - Example: When the ACC needs experts to form inspector and/or assessor teams, they ask the NSSA. The NSSA then asks Sectorial Committees to provide experts, the

Sectorial Committees provide names of experts to the technical office and the technical office (with permission from the NSSA) finally forwards the names of experts to the ACC.

Identifications of Functions and Roles of Key Actors

The evaluation process also included the identification and description of the different key actors and their respective functions/roles and members based on the first round of the project. The result can be seen in the "Actors and their functions matrix" (Table 4) below. The purpose of putting this matrix together was to create a common understanding of the functions and roles of each key actor as a foundation for supporting them more efficiently in the second round of the project in fulfilling these functions.

Actor	Function/Role	Members
MoLES	• Steering • Approval for the fast track pilot project	Union Minister
National Skills Standard Authority (NSSA)	• Decision making about the framework of the first round • Awarding of certificates	Chair: Deputy Minister for Labor and Employment (DOL); Secretary: DG, DOL Members: representatives from the concerned Ministries and private associations(based on the Cabinet Order of 2007)
Skills Assessment and Accreditation Committee (ACC)	• Establish inspector teams • Approve procedures for accreditation of assessment venues • Accredit assessment venues • Establish assessment plans developer teams and assessment panels • Provide technical approval of assessment plans and results submitted byassessment plans developer teams and assessment panels.	In November 2014,ACC was reformed based on NSSA Order. It has the following members since then: Chair: DG of Ministry of Industry; Secretary: Director, Members: representatives from concerned Ministries and private associations, and experts.
Sectorial Committees	• Select priority occupations • Establish expert pools • Establish standard review teams • Provide technical approval of occupational standards, reviewed and revised by standard review teams • Nominate candidate employees in consultation with employers	Sectorial Committees were established in 2007 and reformed in December 2013 based on NSSA Order. Members are: Chairmen: Representative of concerned Ministries (DG/DDG); Members: Representatives fromconcerned Ministries and private associations
Technical office	• Secretariat, administration and technical support functions • Request approval from concerned authorities • Documentation • Database development	1 staffseconded by Ministry of Industry (to support functions of ACC), 3 officialssecondedby MoLES (to support NSSA functions),2staff and 1 consultant financed by GIZ

Project team	Consulting, advising, reporting, programming, technical coordination, backstopping, monitoring and evaluation, capacity building of technical office staff	ACC Secretary; 2 officials from NSSA; 2International experts and 2 nationalconsultants from GIZ; One international expert and one national from Swisscontact; 5 members of Advisory Group
Occupational expert teams: • Standard review teams • Inspector teams • Assessor teams (assessment plans developers and assessment panels)	Provide occupational know-how in their respective fields	Individuals from private and public institutions nominated by Sectorial Committees and UMFCCI
Assessment centers	Provide facilities for trial tests, refresher training, familiarization, and actual assessments	6 assessment venues
Public and private organizations	• Nomination ofcandidates • Taking part in the trial and actual assessments	51 companies and government enterprises

Table 4: Actors and their functions matrix

Strengths and Weaknesses of the Applied Organizational Structure

For the analysis of strengths and weaknesses of the applied organizational structure during the first round and the identification of critical issues to be improved for the second round, the review team focused on several key areas such as functions and responsibilities of the actors, their cooperation (direct/indirect), process management, decision making procedures and learning gained from the real situations of the first round. For the areas of functions and responsibilities of actors, their cooperation (direct/indirect) and the processes established to carry out functions, the questions raised are such as what did (not) work and what needs to be developed further. For the decision making area the questions raised are such as who was involved, how did they come to an agreement and does NSSA officially need to appoint an NSSA manager. Finally, the question was asked: How can the lessons be shared and learning be further developed?

Costing Aspects

In general, the actual assessments were conducted in a rather professional way. The purpose was to design a skills assessment system, which is sustainable and delivers good quality assessments that can be replicated for an increasing number of occupations and candidates across Myanmar.Hence, the

guiding principle of the pilot assessment was to establish a healthy balance between *quality*(of tests), *quantity* (i.e. numbers of occupations and candidates) and *costs* (per candidate).

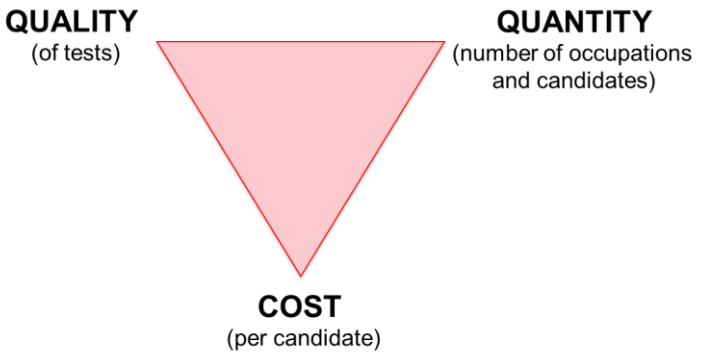

Figure 10: Balancing triangle

With this principle in mind, the project team undertooka cost planning and estimate to carry out the planned assessment activities within the set time frame. Initially, it was estimated that the total operational costs for the first round of the project would be 80,000 USD. The total costs for the first pilot project included the expenses related to the preparation and coordination of meetings and workshops; installation of necessary test equipment and tools at the sixassessment venues and accreditation procedures; preparation of test instruments/projects; implementation of assessor trainings; implementation of trial tests to validate the test instruments; conducting of orientation programs (refresher courses and familiarization) and actual assessments; design and printing of certificates;organization of a certificateawarding ceremony; meetings and workshops for the evaluation of the first round,as well asthe reporting.

Based on the cost items described above,the detailed analysis of the various cost components of the first round has been undertaken. The purpose of this analysis was to evaluate how the budget was spent to cover the costs of conducting the assessments for each occupation; this included an evaluation of costs related to fix investment and recurrent costs, so as to calculate the assessment cost per candidate.

The evaluation also allows the project team, for the purpose of budgeting, to project assessment costs per occupation for the second round andto review where the costs (per occupation and candidate) can be reduced so as to make it affordable for the candidates and replicable on larger scale.

Chapter 4: Recommendations for the Second Round

Thanks to theauthorities ofMoLES and NSSA for guiding to launch the pilot, chairing several consultation meetings and workshops, and also providing suggestions and guidance throughout the implementation, the first round of the pilot has been successfullycompleted within the set timeframe and budget.

The project also noted that agreements and approvals from the authorities of MoLES and NSSA were promptly granted based on the submitted reports and meeting outcomes from the project meetings and workshops. During the first round, two recognizable supports granted by the authorities of MoLES and NSSA are: The permission to open NSSA technical offices in Nay Pyi Taw and Yangon and allowing three MoLES officials to be members of the technical office. As a result, the cooperation between the actors

involved in the first round and NSSA authorities has been firmly established, which was evaluated as being instrumental in the successful implementation of the pilot project.

Overall, the evaluation of the first round of the pilot project revealed that it was a success. However, the evaluation also revealed that there is room for improvement concerning some aspects of the project,since the overall objective of the pilot project was to provide a sustainable model for the NSSA and an outline of how its services can be provided, proven and possibly scaled up. The key recommendations for the second round of the pilot project are therefore summarized below.

Technical and Operational Aspects

1) Further improvingassessment procedures, guidelines and test instruments developed
2) More consultations with UMFCCI and employers' organizations by concerned Sectorial Committees in selecting the priority occupations and candidates
3) Review and updating of existing occupational standards should be undertaken by the concerned Sectorial Committees which have been tasked to draw up the standards by the NSSA
4) For occupations in which occupational skills standards have not been drawn up as yet by the Sectorial Committees, third parties may draw up such standards according to industry needs and propose it to the NSSA for approval (with the acknowledgement)
5) Adopting a unified marking scheme format for all the occupations
6) Organizing refresher courses of a suitable duration (3 to 5 days) with the support of employers
7) Reviewing inspection guidelines developed in the first round by the ACC with the support of relevant occupational experts
8) Announcing the date and venue of the actual assessments at least 10 days in advance
9) A suitable period of work experience in the occupation at the level which assessment is made should be prerequisite for the candidates undertaking such assessment.

Organizational Aspects

1) Recruitment and training of assessors by the ACC (if necessary through cooperationwith Sectorial Committees concerned, UMFCCI and employers' associations)
2) Recruitment and training of inspectors bythe ACC (if necessary through collaboration with Sectorial Committees concerned, UMFCCI and employers' associations)
3) Proactive functioning of the members of the NSSA, the ACC and Sectorial Committeesand their capacity development
4) Improvement of the technical office with an increased number of technical and support staff including their capacity development
5) Raising awareness among employers and employees regarding competency assessments and certification by employers' associations, Sectorial Committees, and the technical working group
6) Strengthening the NSSA organization and its committees' capacities and resources (e.g. competent assessors, accredited assessment centers) and improving its visibility
7) Improvement of the administrative database for occupational standards, profiles of candidates, list of assessors and inspectors, assessment and assessor guidelines, accreditation guidelines, and profiles of assessment centers
8) Development of test item database including software, hardware, and training
9) Further development of the NSSA web portal
10) There is an urgent need to establish the Skills Standard Development and Training Committee. According to the Employment and Skills Development Law, the Skills Standards and Training

Committee (of the National Skills Development Body) and by delegation it's subsidiary sub-committees are authorized to draw up the occupational skills standards.

Costing Aspects

1) Reviewing the costs of assessmentsof each occupation, in orderto estimate the standard costs for the establishment of assessment centers
2) Designing assessment instruments to minimize the costs of materials and other overheads
3) Making the skills testing approach more cost effective, in order to make it affordable for the candidates and replicable on a larger scale
4) Developing cost sharing mechanism (an appropriate business model) among participating bodies and committees including employers

Improvements in these areas will lead to the establishment of a unified and consistent system for skills assessment and certification according to the ESD Law and the related rules and regulations, resulting in an enhancement of employability and the gainful employment for candidates.

Furthermore the following are recommended:

1) Testing and certifying an additional number of skilled workers in demanded occupations and widening the scope of occupations ready for testing and certification
2) Improving gender balance by encouraging the participation of female assessors and candidates
3) Includingdisadvantaged persons as candidates
4) Geographical dispersion of skills assessments
5) The name 'National Skills Standards Authority'(NSSA) and the Logo of NSSA are the sole property of the NSSA and as such should be registered with the appropriate authorities to prevent their unauthorized use.
6) Strengthening interaction between Candidates, Assessment venues, Companies, Development Partners through stakeholder dialogues should be promoted.
7) Regulations to be observed by the accredited Skills Assessment Venues should be prescribed by the NSSA, to ensure that the venues conduct assessments according to prescribed procedures for quality assurance of the assessment and certification process.

15 February, 2015