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**National Skills Standards Authority**

**NATIONAL SKILLS STANDARDS AUTHORITY**

# **Quality Management Handbook**

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Prepared by:



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## 0. Revision History and Approval

<b>Created By &amp; Date</b>	<b>Revision No</b>	<b>Effective Date</b>	<b>Description of Changes</b>	<b>Prepared By</b>	<b>Approved By</b>
By GH & 05.7.19		05.07.19		Prof. Dr. Gebhard Hafer (GH)	
By GH & 15.7.19	1	15.07.19		Prof. Dr. Gebhard Hafer (GH)	
By .....					

# 1. Use of Quality Management Handbook

## 1.1 Introduction into the Quality Management Handbook

The quality assurance and management process includes four phases, each including a number of processes and features. As in many other models, such as the Plan Do Check Act (PDCA) cycle of continuous improvement, i.e. as described and used in the ISO 9001 standard for quality management systems, quality assurance and management (QM) for institutions such as NSSA can be described as a sequence of four fundamental activities or phases:



1. planning (setting goals) and leadership;
2. implementation of planned QM measures and activities to achieve planned goals;
3. evaluation and assessment of achieved outcomes;
4. review, e.g. the discussion of the results of quality assessments among users and continuous improvement of QM measures.

Framework	Quality Principles
<i>Methodology</i>	- Quality management
<i>Planning</i>	- Management responsibilities - Resource management - Design, development and revision of skills development programmes
<i>Implementation</i>	- Establishing skills standards ( <b>National Occupational Competency Standard</b> ) - Training, assessment and certification
<i>Evaluation</i>	- Evaluation and improvement of quality
<i>Revision</i>	- Monitoring, Evaluation, and Continuous improvement built in into the quality management system

Figure 1: Quality assurance at NSSA

As a condition to introduce quality assurance and management, a **Quality Management Handbook (QMH)** is needed. A QMH must contain the essential statements about the quality policies, the regulations of responsibilities within the organization, the procedures of realization of QM within the organization and a description of the most relevant processes and procedures for executing the services of the organization.

The target group of this handbook is/are -on the one hand- the person(s) in charge of internal quality management and -on the other hand- the leadership of the organization. For both groups the QMH is an essential tool to reach the purpose of quality management and to improve of the processes and procedures of the organization.

The handbook **could be integrated** into an existing QM Manual.

## 1.2 Terms and Definitions

NSSA adopts the following terms and definitions within its Quality Management System. Where no definition is provided, the organization typically adopts the definitions provided in *ISO 9000: Quality Management – Fundamentals and Vocabulary*. In some cases, specific procedures or documentation may provide a different definition to be used in the context of that document; in such cases, the definition will supersede those provided for in this Quality Manual or ISO 9000.

### General Terminology

<b>ACC:</b>	Assessment and Certification Committee
<b>CSDC:</b>	Competency Standard Development Committee
<b>DG:</b>	Director General ( Secretary of NSSA)
<b>ESDL:</b>	Employment and Skills Development Law
<b>Fund:</b>	Means the Skills Development Fund established in accordance with Employment and Skills Development Law (ESDL).
<b>IQM:</b>	Internal Quality Management
<b>JD:</b>	Job Description
<b>MSCO:</b>	Myanmar Standards Classification of Occupations
<b>NSSA:</b>	National Skills Standards Authority
<b>NOCS:</b>	National Occupational Competency Standard
<b>Process:</b>	Set of interrelated or interacting activities that use inputs to deliver an intended result
<b>QA:</b>	Quality Assurance
<b>QMS:</b>	Quality Management System
<b>QMH:</b>	Quality Management Handbook
<b>QMM:</b>	Quality Management Manual
<b>QP:</b>	Quality Procedure
<b>QR:</b>	Quality Representative
<b>QT:</b>	Quality Team
<b>TVET:</b>	Technical and Vocational Education and Training

## 2 Legal Basis, Standards and References

The quality assurance and management activities of NSSA are **mainly** based on the Employment and Skills Development Law (ESDL) of Myanmar, the ISO 9001:2015 standard and the NSSA Quality Management Manual, July 2018. **Its other references are MSCO, OSH law, TVET law (Draft) and Quality Assurance Guidelines for Competency in ASEAN.**

### 2.1 Employment and Skills Development Law (ESDL) of Myanmar

In the Employment and Skills Development Law (ESDL) from August 2013, several information are given about the duties and tasks of NSSA.

#### Chapter (4)

##### Forming of the Employment and National Skills Standards Authority and their Functions

7. The Central Committee shall lay down policy relating to the following work functions:-
  - (a) Creating employment opportunities
  - (b) Reducing unemployment
  - (c) Enhancing discipline and productivity of workers
  - (d) Developing skills of the workers
  - (e) Forming the Employment and National Skills Standards Authority (NSSA).
  
- (11) The duties and functions of the National Skills Standards Authority (NSSA) are as follows:-
  - (a) Drawing up and prescribing Occupational Competency Standards for the various categories of occupations.
  - (b) Making policy regarding skills development of workers taking into consideration priority of different skills areas.
  - (c) Prescribing procedures for the assessment of skills.
  - (d) Registering Training Centers or Skills **Assessment** Centers.
  - (e) Prescribing procedures for **assessment** and certification of skills.
  - (f) Establishing and administering a Skills Development Fund for workers.
  - (g) Supervising the Committees and sub-committees formed by itself.
  
- (12) (a) The National Skills Standards Authority (NSSA) shall form the following committees for the performance of its functions :-
  - (1) Skills Standards (**Occupational Competency Standards**) and Training Committee
  - (2) Skills Assessment and Certification Committee  
  - (b) The National Skills Standards Authority (NSSA) may form sub-committees as required under the Committees formed according to Section 12 (a).
  
- (13) Regarding the duties and functions of the Committees formed under Section 12 Sub-section (a)-
  - (a) Skills Standards (**Occupational Competency Standards**) and Training Committee and Skills **Assessment** and Certification Committee shall according to each Committee organize, coordinate and draw up their work programs.

(b) Skills Standards (**Occupational Competency Standards**) and Training Committee shall undertake the following:-

- (1) Drawing up, based on international standards, skills standards (**Occupational Competency Standards**) according to occupations and levels of skills.
- (2) Developing, in line with the skills standards, curricula and standards of training.
- (3) Prescribing the qualification of instructors.
- (4) Prescribing the standards of equipment and training aids of the training centers.
- (5) Registering of training centers and training programs.
- (6) Coordinating for the enhancing of the level of technology.
- (7) Checking the application for registration **or accreditation** of training centers and submitting the applications to the National Skills Standard and Authority (NSSA).

(c) Skills Assessment and Certification Committee shall undertake the following:-

- (1) Drawing up assessment standards based on skills standards/ occupational competency standards for skills assessment.
- (2) Accrediting of assessment centers and assessment programs.
- (3) Checking the application for accreditation of assessment centers and submitting the applications to the National Skills Standards Authority (NSSA).
- (4) Ensuring quality of assessment of assessment centers by prescribing forms of assessment and responsibilities of assessors.
- (5) Coordinating for the enhancing of the level of technology.
- (6) Holding skills competitions for the progress of occupational skills.
- (7) Awarding certificates to those who excel in the skills competitions.

## **Chapter (6)**

### **Establishment and Registration of Training Centers and Skills Assessment Centers**

16. (a) Employers and Service Providers who wish to establish Training Centers or Skills Assessment Centers shall apply for registration/accreditation of such centers to the National Skills Standards Authority (NSSA) through the concerned committees in accordance with prescribed procedures.
  - (b) In accordance with existing laws, foreigners who wish to establish Training Centers and Skills Assessment Centers shall apply for registration/accreditation of such centers to the National Skills Standards Authority (NSSA) through the concerned committees in accordance with prescribed procedures.
17. The National Skills Standards Authority (NSSA) shall:-
- (a) regarding the applications made under Section 16 , require the concerned committee formed under Section 12 to check if the application is in conformity with prescribed conditions and submit it to the National Skills Standards Authority (NSSA) which may then accept or reject the application.
  - (b) If the application for Registration/Accreditation is allowed, require the applicant to **pay the prescribed fee** and issue the Registration/accreditation Certificate.
  - (c) If the application for registration/accreditation is rejected allow the applicant to apply again within (3) months.

18. If the accredited Training Centre or the Skills Assessment Centre wishes to continue operation after the expiry of its Certificate of accreditation, application shall be made as prescribed, to the National Skills Standards Authority (NSSA) through the committee concerned for extension of the Certificate.

19. If the National Skills Standards Authority (NSSA) finds that the accredited Training Centre or the Skills Assessment Centre is not in compliance with the regulations of certification, it may revoke the Certificate of accreditation.

20. The duties of the Registered/Accredited Training Centre is as follows:-

- (a) Documenting the training program matters described below and submitting the same to the National Skills Standards Authority (NSSA) for approval :-
  - (1) Skills Standards (**occupational competency standards**)
  - (2) Curriculum
  - (3) Location of the Training Centre, buildings and facilities.
  - (4) Names of the Instructors and their qualifications
  - (5) Duration of the training course
  - (6) Training Methodology and Training Aids
  - (7) Certificates to be awarded
  - (8) **Training Fee**
  - (9) Other matters prescribed by the Skills Standards (**Occupational competency standards**) and Training Committee
- (b) Making Training Contract with the trainee
- (c) Maintaining the personal histories of the trainees
- (d) Within 15 days of completion of the training program, submitting to the National Skills Standards Authority (NSSA), a report of the training program.
- (e) If the Training Centre is to be handed over to another person who wants to establish a training centre, to inform the National Skills Standards Authority (NSSA) at least 30 days prior to such transfer.
- (f) If the Training Centre is to be closed down, to transfer the trainees together with the remaining training costs to another centre offering the same training course.

21. The person who establishes **Accredited** Training Centre may:-

- (a) employ in his Centre, foreign experts and foreign instructors who have , under the laws concerned, work permits issued by the concerned Ministry. The duration of their stay shall be in accordance with existing laws
- (b) import training aids in accordance with existing laws.

22. The duties of the **Accredited** Skills Assessment Centre are as follows:-

- (a) Submitting matters mentioned below to the National Skills Standards Authority (NSSA) for approval:-
  - (1) **Assessment** programs based on recognized skills standards
  - (2) Location of the **Assessment** Centre, buildings and facilities
  - (3) Name of assessors and their qualifications
  - (4) Duration of **Assessment**
  - (5) **Assessment** equipment and aids to be used in the **Assessment** Centre
  - (6) Nature of the assessment questions
  - (7) Standards on which **assessment** will be based and the method of **assessment**



- (8) **The assessment fee**
  - (9) Other matters prescribed by the Skills Assessment and Certification Committee
23. The **accredited** Skills Assessment Centre may:-
- (a) employ foreign experts who have, under the laws concerned, work permits issued by the concerned Ministry. The duration of their stay shall be in accordance with existing laws
  - (b) import skills **assessment** equipment and aids in accordance with existing laws. Applications can be made to the concerned Skills Assessment Centers to undergo skills assessment.

## **Chapter (7)**

### **Holding Skills Competitions**

24. Skills Assessment and Certification Committee shall hold skills competitions for the Skilled Occupations at various levels in accordance with stipulations. Research shall be made based on the results of the skills competitions.
25. Workers who have skill certificates are eligible for participation in the relevant local and international skills competitions.

## **Chapter (8)**

### **Establishing Workers' Skills Development Fund**

26. The National Skills Standards Authority (NSSA) shall establish , for the workers of Industrial and Service Enterprises, a Skills Development Fund and utilize it, in accordance with stipulations for the following purposes:-
- (a) Training of workers for development and upgrading of occupational skills.
  - (b) Retraining for occupational skills development of workers who for some reason have been retrenched and who want to change their occupation.
  - (c) Providing grants or loans for the purpose mentioned in sub-section (a) and (b).
27. The National Skills Standards Authority (NSSA) shall form, with representatives of Government, Employers and Workers, a Skills Development Fund Management Committee.
28. The duties and functions of the Skills Development Fund Management Committee are as follows:-
- (a) Supervising regular payment of contributions to the fund.
  - (b) Administering the fund with the approval of NSSA.
  - (c) Depositing in a bank account or purchasing Government Saving Certificates with the part of the fund that can be invested.
  - (d) Accepting, with the approval of NSSA, donations to the fund.
  - (e) Submitting the accounts of the fund for Auditing.
29. The Skills Development Fund Management Committee may, in accordance with the regulations made by NSSA, allow the use of the Fund for the purposes mentioned below:-
- (a) grants or loans to employers who send workers to any full time or part-time training courses

or for conducting courses or extending the programs of their training courses for the development of skills of workers.

- (b) Reimbursing employers who claim cost of training his workers for development of their skills.
- (c) other matters stipulated by the Skills Development Committee.

30. (a) The employers of Industrial and Service Enterprises shall pay contribution to the Fund every month amounting to 0.5% of the payroll of his workers up to the level of supervisors of the workers.

(b) The employer shall not deduct the contribution to the Fund from the wages of the workers.

31. The National Skills Standards Authority (NSSA) may:-

(a) fix, in accordance with Section 30 Sub-section (a) regarding the contribution, the amount payable based on the category of the enterprise, the type of the enterprise, the size of the enterprise and the number of workers employed.

(b) exempt an employer from paying contribution to the fund if there is a valid reason for doing so.

32. The National Skills Standards Authority (NSSA) shall supervise, in accordance with existing laws, the financial matters of training programs which are undertaken by persons who are from foreign countries.

33. The National Skills Standards Authority (NSSA) may form an Advisory Committee to get advice on matters relating to the management and utilization of the Fund.

## **2.2 TVET Law (draft version), 2019**

The Government of the Republic of the Union of Myanmar hereby enacts this law in order to nurture the technicians and skilled persons necessary for the Nation and to extensively and effectively implement the technical and vocational education activities. **This law will cover the followings**

- 1. Chapter IV-Formation of the Technical and Vocational Education Council and its Duties and Power**
- 2. Chapter V-Technical and vocational education and training system**
- 3. Chapter VI-Schools and Trainings**
- 4. Chapter VII-Curriculum**
- 5. Chapter VIII-Teachers/Trainers**
- 6. Chapter IX-Entrance, Issuing certification, Quality Evaluation and Assurance**
- 7. Chapter X-Finance**
- 8. Chapter XI- Management and Supervision of the Technical and Vocational Education**

## **2.3 OSH Law, Occupational Safety and Health Law, 2019**

## **NSSA takes the measures as a reference of the below provisions of OSH law**

- (a) evaluate the level of risk of machines, tools, any substances, and biological agents and chemicals that are used at the Workplace, and provide necessary protective measures so that the handling and use of any of them shall not impose any health hazards to the Workers. Such measures shall be carried out in line with the existing rules and regulations;
- (b) provide adequate and relevant personal protective equipment to Workers free of charge and make them wear it during work so as not to expose Workers to any serious Occupational Diseases or hazards;
- (c) develop a preventive plan and also a plan of action for any emergency situation;
- (d) set up a clinic and appoint a certified doctor and nursing staff and provide necessary medicines and facilities in Workplaces where the number of Workers is greater than the number prescribed by the Ministry;
- (e) arrange training and refresher training on safety and health relevant to the industry and the department for managers including himself or herself, and for Workers and their representatives;

## **2.4 Myanmar Standard Classifications of Occupations**

It is the revised version of the Burma Standard Classification of Occupations Compiled by the Department of Labour of the Ministry of Labour back in 1972, with the technical cooperation of the ILO/ UNDP.

In Drawing up the Myanmar Standard Classification of Occupations, it is retained the 5 – digit code system used in the Burma Standard Classification of Occupations as it was the system that was currently in use at the Employment Exchanges of the Department of Labour.

The Burma Standard Classification of Occupations listed (936) occupations. The Myanmar Standard Classification of Occupations has a list of (1401) occupations. **The Myanmar Standard Classification of Occupations are grouped according to the Major, Minor, Unit Groups and List of Occupations.**

## **2.5 Quality Assurance Guidelines for Competency Certification in ASEAN**

### **2.5.1 Principles of quality assurance**

Quality assurance systems may have explicit or implicit principles which inform the processes deployed by policy makers and/or competent bodies. The EAS TVET Quality Assurance Framework (EAS TVET QAF, 2012) indicates that any considerations of principles for quality assurance of a TVET system should reflect on the following principles.

#### **- *Transparency and accountability:***

Transparency and accountability are two key principles of good governance. Accountability refers to legal and reporting requirements whereas transparency relates to timely, reliable, clear and relevant public reporting of processes and performance.

#### **- *Comparability:***

Comparability refers to the acknowledgement that quality assurance measures may vary across countries and internally to a country's system. However, these measures need to be based upon comparable standards and expectations.

- ***Flexibility and responsiveness:***

Flexibility and responsiveness refer to quality assurance measures being flexible enough to foster innovation and flexibility of provision, and not built solely on a compliance or punitive model.

- ***Balance and integration:***

Balance and integration refer to quality assurance systems balancing set standards and the protection of the interests of stakeholders, with encouraging continuous improvement and innovation.

- ***Continuity and consistency:***

Continuity and consistency refer to providing continuity to maintain the confidence of stakeholders and being consistent in application.

- ***Minimum standards:***

This refers to TVET systems using set standards for both inputs and outputs.

- ***Assurance and improvement:***

Assurance and improvement refer to quality systems providing assurance of standards and promote improvement in delivery and outcomes.

- ***Independence:***

Good governance also includes independence of decisions and actions and avoiding conflicts of interest.

- ***Subsidiarity:***

Subsidiarity refers to quality assurance activities and judgements being made close to the delivery of TVET.

However, it is the responsibility of each AMS to identify the key underpinning principles that will inform the quality assurance of their competency certification system. Outlining principles in vision and mission statements for competent bodies, making public policy statements and decisions, and ensuring engagement by key stakeholders in policy directions will assist in promulgating and communicating these principles.

## **2.5.2 Elements of quality assurance**

Countries have different experiences and different approaches to quality assurance. However, the EAS TVET QAF (2012) notes that the elements for quality assuring TVET generally include:

1. The TVET product through the approval of standards (such as educational and/or competency standards as well as for certification of a qualification)
2. The training and/or assessment providers through approval processes based upon provider infrastructure, financial probity, staff qualifications and experience, management systems, delivery and assessment systems, and student support systems

3. The TVET processes through the auditing of provider processes and outcomes, including student learning and employment outcomes and student and user satisfaction levels
4. The TVET outcomes through control, supervision or monitoring of assessment and graduation procedures and outcomes
5. Provider or system-wide evaluations of TVET quality, including evaluations by external agencies
6. Provision of public information on the performance of provider, such as program and unit completions, student and employer satisfaction.

It is not always the case that all these aspects fall to the responsibility of one competent body within a country; however, the majority of functions listed above will be the responsibility of each competent body.

## **2.6 NSSA, Quality Management Manual, July 2018**

The NSSA Quality Management Manual was prepared for the purpose of defining the NSSA's interpretations of the ISO 9001:2015 international standard, as well as to demonstrate how NSSA complies with that standard.

### **2.6.1 Determining the Scope of the Quality Management System**

NSSA determines the scope of the Quality Management System by considering external and internal issues, requirement of relevant interested parties and Product & Service of the organization. The Quality Scope is as follows:

THE DEVELOPMENT OF THE NATIONAL OCCUPATIONAL COMPETENCY STANDARDS AND SKILLS ASSESSMENT AND CERTIFICATION.

### **2.6.2 Quality Management System and Its Processes**

#### ***Process Identification***

NSSA team determines the processes needed for the quality management system and their application throughout the organization in Process map & Interactions of processes. Moreover, NSSA team determines:

- the inputs required and the outputs expected from each processes,
- the resources needed for these processes and ensure their availability in documented information of Support process,
- the responsibilities and authorities for each processes NSSA team has addressed the risks and opportunities,
- the evaluating these processes and implementing any changes needed to ensure that these processes achieve their intended results and improve the processes, in order to Improve the processes and the quality management system

## *Process Controls & Objectives*

NSSA team is also maintaining documented information to support the operation of its processes and retaining documented information to have confidence that the processes are being carried out as planned.

## **2.7 ISO 9001:2015**

The NSSA Quality Management Manual was developed on the basis of ISO 9001:2015. ISO 9001:2015 specifies requirements for a quality management system when an organization:

- a) needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and
- b) aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of ISO 9001:2015 are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides.

### **2.7.1 The process approach in ISO 9001:2015**

In accordance with the requirements of ISO 9001 the following sequence of actions provides examples of how an organization may choose to build and control the processes of its quality management system. Performance can be managed and improved by applying the Plan-Do-Check-Act (PDCA) cycle. This applies equally to the system as a whole, to individual processes and to operational activities.<sup>1</sup>

<b>Steps in the process approach</b>	<b>What to do?</b>	<b>Guidance</b>
<b>PLAN</b>		
<b>Define the context of the organization</b>	The organization should identify its responsibilities, the relevant interested parties and their relevant requirements, needs and expectations to define the organization's intended purpose.	Gather, analyze and determine external and internal responsibilities of the organization to satisfy the relevant requirements, needs and expectations of the relevant interested parties. Monitor or communicate frequently with these interested parties to ensure continual understanding of their requirements, needs and expectations.

<sup>1</sup> ISO, International Standardisation Organisation, THE PROCESS APPROACH IN ISO 9001:2015; Geneva (Switzerland), 2015

<p><b>Define the scope, objectives and policies of the organization</b></p>	<p>Based on the analysis of the requirements, needs and expectations establish the scope, objectives and policies that are relevant for the organization’s quality management system.</p>	<p>The organization shall determine the scope, boundaries and applicability of its management system taking into consideration the internal and external context and interested party requirements. Decide which markets the organization should address. Top management should then establish objectives and policies for the desired outcomes.</p>
<p><b>Determine the processes in the organization</b></p>	<p>Determine the processes needed to meet the objectives and policies and to produce the intended outputs.</p>	<p>Management shall determine the processes needed for achieving the intended outputs. These processes include management, resources, operations, measurement, analysis and improvement.</p>
<p><b>Determine the sequence of the processes</b></p>	<p>Determine how the processes flow in sequence and interaction.</p>	<p>Define and describe the network of processes and their interaction. Consider the following:</p> <ul style="list-style-type: none"> <li>• The inputs and outputs of each process (which may be internal or external).</li> <li>• Process interaction and interfaces on which processes depend or enable.</li> <li>• Optimum effectiveness and efficiency of the sequence.</li> <li>• Risks to the effectiveness of process interaction.</li> </ul> <p>Note: As an example, realization processes (such as those needed to provide the products or services delivered to a customer) will interact with other processes (such as the management, measurement, procurement in the provision of resources).</p> <p>Process sequences and their interactions may be developed using tools such as modeling, diagrams, matrices and flowcharts.</p>
<p><b>Define people or remits who take process ownership and accountability</b></p>	<p>Assign responsibility and authority for each process.</p>	<p>Top Management should organize and define ownership, accountability, individual roles, responsibilities, workinggroups, remits, authority and ensure the competence needed for the effective definition, implementation, maintenance and improvement of each process and its interactions. Such individuals or remits are usually referred to as the Process Owners. To manage process interactions it may be useful to also establish a management system</p>

		<p>team that has a system overview across all the processes and may include representatives from the interacting processes and functions.</p>
<p><b>Define the need for documented information</b></p>	<p>Determine those processes that need to be formally defined and how they are to be documented.</p>	<p>Processes exist within the organization. They may be formal or informal. There is no catalogue or list of processes that have to be formally defined. The organization should determine which processes need to be documented on the basis of risk-based thinking, including, for example:</p> <ul style="list-style-type: none"> <li>• The size of the organization and its type of activities.</li> <li>• The complexity of its processes and their interactions.</li> <li>• The criticality of the processes.</li> <li>• The need for formal accountability of performance.</li> </ul> <p>Processes can be formally documented using a number of methods such as graphical representations, user stories, written instructions, checklists, flow charts, visual media or electronic methods including graphics and systemization.</p> <p>However, the method or the technology chosen are not the goals. They can be used to describe processes, which are the means to achieve the goals. Effective and organized processes can then deliver consistent and accountable operations and the desired objectives and results which can then be improved.</p> <p>Note: For more guidance see the ISO 9000 Introduction and Support Package module <i>Guidance on the Documented Information Requirements of ISO 9001:2015</i></p>
<p><b>Define the interfaces, risks and activities within the process</b></p>	<p>Determine the activities needed to achieve the intended outputs of the process and risks of unintended outputs.</p>	<p>Define the required outputs and inputs of the process.</p> <p>Determine the risks to conformity of products, services and customer satisfaction if unintended outputs are delivered.</p> <p>Determine the activities, measures and inherent controls required to transform the inputs into the desired outputs.</p> <p>Determine and define the sequence and interaction of the activities within the process.</p> <p>Determine how each activity will be</p>



		<p>performed.</p> <p>Ensure that the management system as a whole takes account of all material risks to the organization and users.</p> <p>Note: In some cases the customer may specify requirements not only for the outputs but also for the realization of a process.</p>
<b>Define the monitoring and measurement requirements</b>	<p>Determine where and how monitoring and measuring should be applied. This should be both for control and improvement of the processes and the intended process outputs.</p> <p>Determine the need for recording results.</p>	<p>Identify the validation necessary to assure effectiveness and efficiency of the processes and system. Take into account such factors as:</p> <ul style="list-style-type: none"> <li>• Monitoring and measuring criteria.</li> <li>• Reviews of performance</li> <li>• Interested parties' satisfaction.</li> <li>• Supplier performance.</li> <li>• On time delivery and lead times.</li> <li>• Failure rates and waste.</li> <li>• Process costs.</li> <li>• Incident frequency.</li> <li>• Other measures of conformity with requirements.</li> </ul>
<b>DO</b>		
<b>Implement</b>	<p>Implement actions necessary to achieve planned activities and results.</p>	<p>The organization should perform activities, monitoring, measures and controls of defined processes and procedures (which may be automated), outsourcing and other methods necessary to achieve planned results.</p>
<b>Define the resources needed</b>	<p>Determine the resources needed for the effective operation of each process.</p>	<p>Examples of resources include:</p> <ul style="list-style-type: none"> <li>• Human resources.</li> <li>• Infrastructure.</li> <li>• Environment.</li> <li>• Information.</li> <li>• Natural resources (including knowledge).</li> <li>• Materials.</li> <li>• Financial resources.</li> </ul>
<b>CHECK</b>		
<b>Verify the process against its planned objectives</b>	<p>Confirm that the process is effective and that the characteristics of the processes are consistent with the purpose of the organization.</p>	<p>The organization should compare outputs against objectives to verify that all the requirements are satisfied.</p> <p>Processes are needed to gather data. Examples include measurement, monitoring, reviews, audits and performance analysis.</p>

<b>ACT</b>		
<b>Improvement</b>	Change the processes to ensure that they continue to deliver the intended outputs	<p>Act on the findings to ensure improvement of process effectiveness. (NOTE: Organizations may also wish to improve process efficiency, though it is not a requirement of ISO 9001 to do so).</p> <p>Corrective action as a result of process failure should include the identification and elimination of the root causes of the problems. ‘System Thinking’ recognizes that an event in one process may have a cause or effect in a dependent process.</p> <p>Causes and the effects may not be within the same process.</p> <p>Problem solving and improvement typically follows the essential steps of:</p> <ul style="list-style-type: none"> <li>• define the problems or objectives</li> <li>• collect and analyze the data on the problem and relevant processes</li> <li>• select and implement the preferred solutions</li> <li>• evaluate the effectiveness of the solutions.</li> <li>• incorporate the solutions into the routine</li> </ul> <p>Even when planned process outputs are being achieved and requirements fulfilled, the organization should still seek to improve process performance, customer satisfaction and reputation. This can be achieved, for example, by small-step continual improvement (“Kaizen”), breakthrough improvements and/or by innovation.</p>

Table 1: The Process approach in ISO 9001:2015

### **3 Description of NSSA**

#### **3.1 Organizational Description**

The National Skills Standards Authority (NSSA), chaired by the Ministry of Labour, Immigration and Population (MOLIP), was formed by a Cabinet Order in 2007, with the purpose of establishing competency/skills standards to promote systematic skills development and certification of skilled workers. NSSA is headed by the Deputy Minister for MOLIP (Now Permanent Secretary), comprising of representatives of the various Ministries concerned as well as Non-Governmental Organizations.

Under NSSA, there are so far 15 Occupational Sectorial Committees that include members representing the respective ministries as well as the private sectors to draw up competency standards for the selected occupational areas.

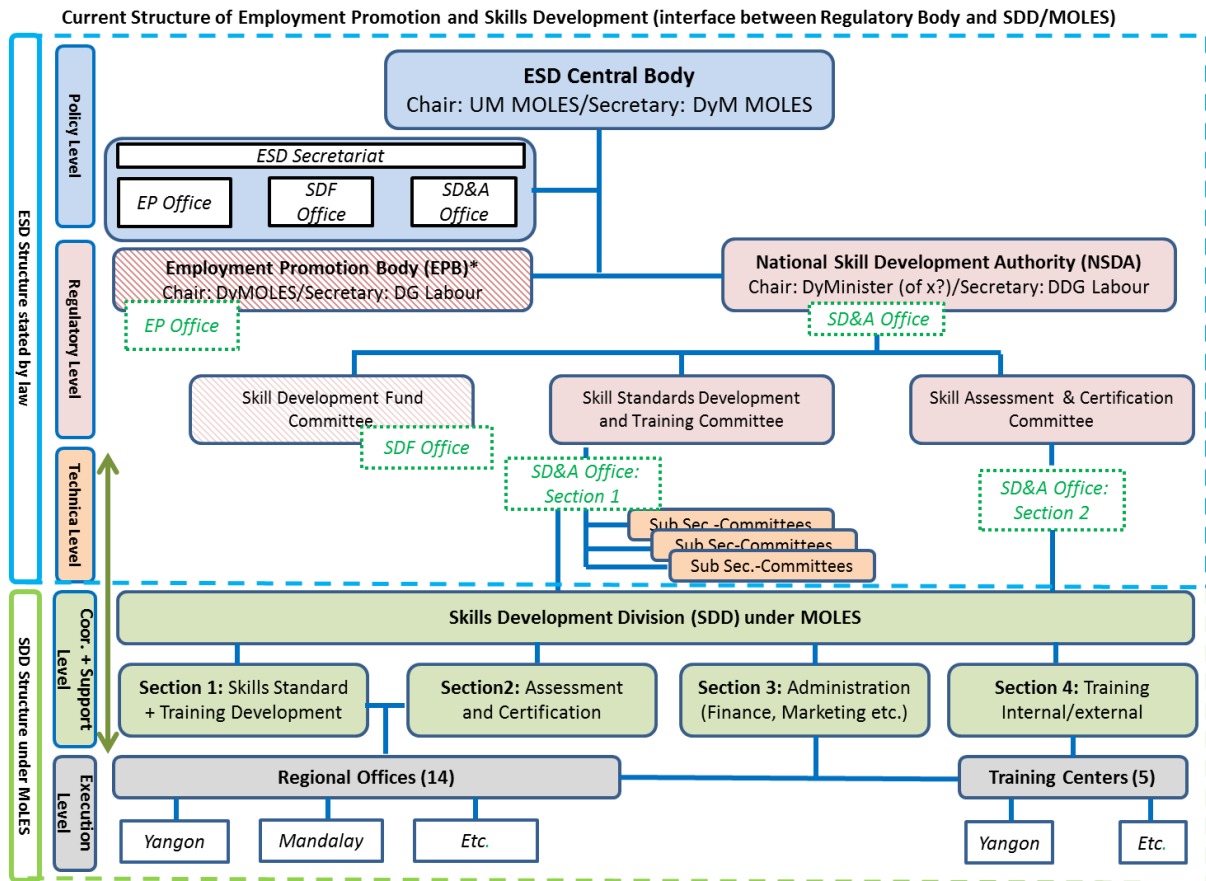


Figure 2: Current structure of Employment Promotion and Skills Development in Myanmar

### 3.2 Roles and responsibilities of the NSSA Technical office

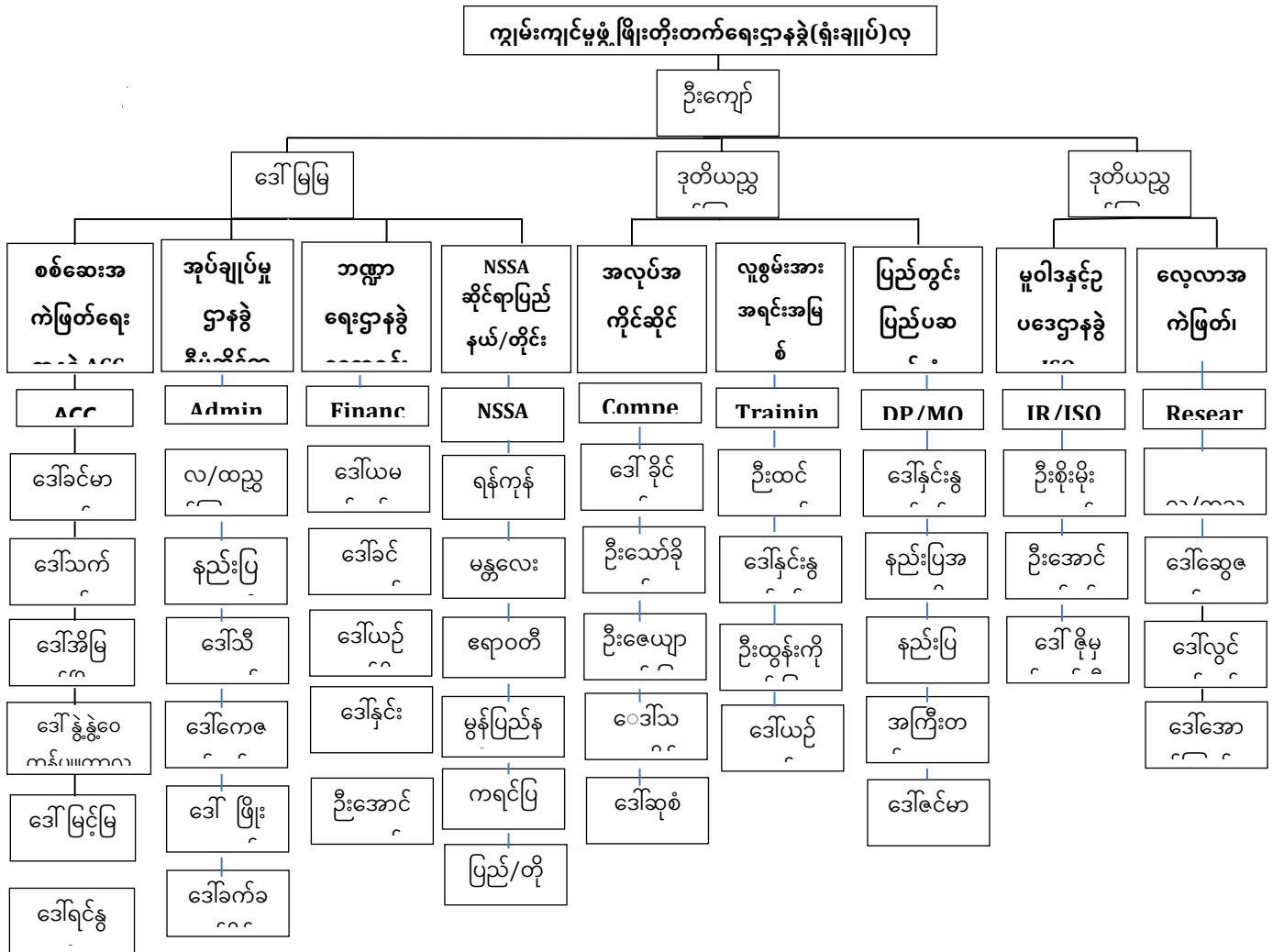


Figure 3: Current Organization chart - NSSA Technical Office

## 4 Products and Services of NSSA

### 4.1 Definition of skills and skills standards

**Skills** mean the ability to perform a task or job satisfactorily in accordance with specifications. The overall task of TVET is to enable young people to plan, execute and evaluate work related tasks within the scope of their occupational activity. Therefore foremost employability skills shall be developed. Employability skills within this context are defined as the readiness and ability of an individual person to conduct himself or herself in an appropriate, considered and individually and socially responsible manner in social, occupational and private situations.

Employability skills		develop within the dimensions of professional competence, human competence (personal competence) and social competence.
Technical and industrial competences	Professional competence	describes the readiness and ability to use specialist knowledge and ability as a basis to solve tasks and problems in a target oriented, appropriate, methodologically suitable and autonomous manner and to assess results.
Basic competences	Human competence	[Personal competence] describes the readiness and ability to act as an individual personality in clarifying, considering and assessing development opportunities, requirements and restrictions within the family, within an occupation and within public life, to evolve individual talents and to make and further develop life plans. It encompasses such personal qualities as autonomy, critical ability, confidence, reliability and a sense of responsibility and duty. It also particularly includes the development of considered values and self-determined loyalty to values.
	Social competence	describes the readiness and ability to develop and live out social relationships, to detect and understand areas of affinity and conflict and to deal with and reach understanding with others in a rational and responsible manner. It also particularly includes the development of social responsibility and solidarity.
	Methodological and learning competence	arise from a balanced development of these three dimensions.

**Table 2: Skills and competences in TVET**

**Skills Standards (National Occupational Competency Standard-NOCS)** mean the performance standards in accordance with levels of skills for the various occupations prescribed or recognized by NSSA.

**Skilled Workers** in this context mean workers who have been issued under this law Skills Recognition Certificates with the approval of NSSA.

## 4.2 Services of NSSA

According to the **Employment and Skills Development Law (ESDL)** of Myanmar the organization NSSA fulfills the following services:

### **1. NATIONAL OCCUPATIONAL COMPETENCY STANDARD DEVELOPMENT (NOCS)**

- NSSA is facilitating the development of the guidelines for competency standard development

- NSSA is organizing sectorial committees meetings and ensures an appropriate documentation and publishing of the meeting results
- (Sectorial committees are conducting the concerned sector meetings for NOCS development)
- (Sectorial committees are forming technical expert working groups for concerned NOCS development and facilitate the development process)
- (Sectorial committees are organizing the validation, review and revision of NOCS)
- NSSA is organizing and training the competency developer in collaboration with the sectorial committees
- NSSA is approving the NOCS
- NSSA is storing the NOCS in data room
- NSSA is publishing the NOCS booklets for assessment and training

## **2. SKILLS ASSESSMENT AND CERTIFICATION**

- NSSA is facilitating the development of guidelines for Assessors, Inspectors, AC Manager, Assessment Venue Management, Assessment centers application, verifier
- NSSA is organizing and training assessors, Inspectors, verifier and Assessment Center managers
- NSSA is issuing the national skill certificates for candidates in line with national occupational skill qualification framework which comprises of 4 levels
- NSSA is issuing the accredited certificates for assessors and inspector
- NSSA is handling complaints from candidates, which cannot be solved by ACC
- NSSA is issuing the training completion certificates for verifier and AC Manager
- NSSA (ACC) is deciding and monitoring the validation of accredited certificates
- NSSA is saving and monitoring the certificates in the registered books and data base
- NSSA (ACC) is organizing the validation and revision of the assessment questions.

## **3. SKILLS TRAINING AND CURRICULUM DEVELOPMENT**

- NSSA is forming the occupational training committees
- NSSA is organizing training committees meetings and ensures an appropriate documentation and publishing of the results
- NSSA is conducting the required capacity development training program for curriculum developer and TOT based on NOCS
- NSSA is developing the guidelines for training and curriculum and training centers application

## **4. ACCREDITATION OF TRAINING AND ASSESSMENT PROVIDERS**

- NSSA (ACC) is issuing the accredited certificates for assessment centers
- NSSA (Training Committee) is accrediting the skill training centers
- NSSA (ACC, Training Committee) is the responsible body for re-accreditation of training and assessment providers
- NSSA is facilitating the development of accreditation procedures for training and assessment providers, organizing the accreditation procedures and is issuing certificate accordingly

## **5. IN-COMPANY TRAININGS AND APPRENTICESHIPS**

- NSSA is the responsible body for issuing the regulations to set up standards for the in-company trainings and apprenticeships program and evaluations
- (NSSA Training committee is the responsible body for training the in-company trainers)
- NSSA is issuing the training completion certificates for the in-company trainers
- NSSA is the responsible body for registering the companies to participate in apprenticeships program
- NSSA is the responsible body for documenting the certificates and publishing the regulations

## **6. SKILLS COMPETITION:**

- NSSA is forming the skills competition committee, which comprise of several sub-committees
- NSSA is organizing the Myanmar skills competitions every two years including the marketing, Awarding and publication
- NSSA is organizing the Myanmar team to participate in Asian skills competition in every two years
- NSSA (skills competition committee) is carrying out the tasks related to the fund raising and sponsorship
- NSSA is responsible for internal documentation of skills competitions

## **7. SKILLS DEVELOPMENT FUND:**

- NSSA is forming a skills development fund management committee
- NSSA is issuing the required regulations for collecting and using the fund
- Skills development fund management committee is responsible for not only internal documentations and reporting to NSSA but also publishing annual reports. NSSA is responsible body for monitoring the internal documentations and reports

## **8. DATA COLLECTION AND SURVEYS:**

- NSSA is responsible for giving the guidance on data collection and surveys
- NSSA concerned committee is responsible for conducting and the data collection and surveys, analyzing these data and reporting to NSSA (quarterly of the year)
- NSSA is reviewing the reports and publishing the results
- NSSA is preparing the tracer study

## **9. SKILLS RESEARCH**

- In cooperation with research institutes and universities, NSSA is initiating and conducting the research about the future skills development of Myanmar
- NSSA is publishing the results of Research.

## **10. DATA BASE AND WEBPORTAL**

- NSSA is establishing and administrating its own web portal
- NSSA is establishing and administrating its own data base, including certification data base, test item data base and reporting and documentation data base
- NSSA is following the data safety regulations set by the ministry of communication (Cyber Security Department).

### **4.3 Customers of NSSA**

1. Accredited Assessment Centers (public and private)
2. Candidates (Workers and Trainees) through AC and TC
3. Employers/Enterprises (public and privates)
4. Training Centers (public and privates)
5. Ministries (Education, Industry, Electrical, Energy...)
6. Business association, professional association and chambers
7. External quality auditors

## **5 Processes and Procedures at NSSA**

The process approach includes establishing the organization's processes to operate as an integrated and complete system.

- The management system integrates processes and measures to meet objectives
- Processes define interrelated activities and checks, to deliver intended outputs
- Detailed planning and controls can be defined and documented as needed, depending on the organization's context.

### **5.1 Types of processes at NSSA**

- 1. Management processes (management processes/goal-oriented management of NSSA)**
  - Strategic management (strategy / mission statement)
  - Controlling of quality management procedures
  - Human resource management
  - Budgeting/ financial planning / financial management
  - Review and continuous improvement
- 2. Core processes (primary processes of NSSA)**
  - National occupational competence standard development (nocs)
  - Skills assessment and certification
  - Skills training and curriculum development
  - Accreditation of training and assessment providers



- In-company trainings and apprenticeships
- Skills competition
- Skills development fund
- Data collection and sureys
- Skills research
- Data base and webportal

### **3. Support processes (supporting processes for core processes)**

- Quality management and assurance
- Accounting
- Services for the committees
- Infrastructure / it
- Marketing, external and internal communication
- Analysis and reports

## **5.2 Description of processes at NSSA**

### **5.2.1. Management processes (management processes / goal-oriented management of NSSA)**

#### **(1) STRATEGIC MANAGEMENT (STRATEGY / MISSION STATEMENT)**

##### ***Quality standards***

NSSA has a mission statement that identifies it as a recognized and active quality assurance institute in Myanmar and internationally and that it is suitable to provide orientation for the institute in its daily work.

NSSA has a medium-term strategy that is based on the mission statement and is suitable for controlling the activities.

##### ***Activities***

Every four years, the relevant stakeholders are informed about the mission statement and the medium-term strategic orientation of NSSA.

##### ***Instruments***

Strategy workshop of the Director (Joint Secretary of NSSA) with the office. Report on the results of the workshops with recommendations for the continuation of the strategy.

##### ***Responsible***

Director (Joint Secretary of NSSA)

#### **(2) CONTROLLING OF QUALITY MANAGEMENT PROCEDURES**

##### ***Quality standards***

NSSA is planning the implementation of quality management procedures and regularly analyzing these procedures in order to enable effective and efficient use of resources.

### ***Activities***

Half-yearly planning meeting of the management with the responsible quality manager(s) of NSSA, the schedule of activities is updated for an eighteen months period.

### ***Instruments***

- Semi-annual surveys on planned quality assurance procedures.
- Lists of ongoing and planned quality assurance procedures and other activities.
- Predictive allocation of procedures etc. to employees.

### ***Responsible***

Director (Joint Secretary of NSSA)

## **(3) PERSONEL MANAGEMENT**

### **Strategic Personal Management**

#### ***Quality standards***

Based on forecasts of official quality management procedures and of other quality assurance and management procedures, NSSA plans the annual quantitative and qualitative personnel requirements and includes them in the financial planning.

#### ***Activities***

Half-yearly, in May and November, the schedule of activities is updated for an eighteen month period.

#### ***Instruments***

- Semi-annual surveys on planned quality management procedures
- Lists of ongoing and planned quality management procedures and other activities
- Predictive allocation of procedures etc. to employees
- Planning tool

#### ***Responsible***

Director (Joint Secretary of NSSA)

### **Recruitment**

#### ***Quality standards***

NSSA occupies vacant positions in the office with qualified persons in a transparent and professional selection process

#### ***Activities***

The management defines a requirement profile and creates a job advertisement on this basis.

A staff proposal will be drawn up in a multi-stage selection procedure with two guided interviews

### ***Instruments***

Tender text, communication with applicants (confirmation of application including timetable, etc.), discussion guidelines, report selection procedure

### **Human resource development**

#### ***Quality standards***

The employees take advantage of opportunities to develop the skills required for their job.

#### ***Activities***

Personnel introduction: New employees undergo a standardized induction program, which includes the components knowledge transfer, mentoring and shadowing.

#### ***Instruments***

Information package, interviews with the management, information visits to key stakeholders, mentoring of first own procedures by experienced colleagues, feedback discussions with mentor and management.

#### ***Responsible***

Deputy Managing Director (Joint Secretary of NSSA)

### **Continuing Education**

#### ***Activities***

On the basis of the annual staff discussions, further training measures are agreed as necessary, which can be supplemented during the year. In addition, employees use opportunities to develop subject expertise by participating in relevant specialist events or working groups

#### ***Instruments***

Individually tailored measures based on employee discussions, informal jour fixe

#### ***Responsible***

Deputy Managing Director (Joint Secretary of NSSA)

### **Personnel administration**

#### ***Quality standards***

NSSA carries out all personnel management processes including compliance with the contractual agreements in a standardized procedure.

Personnel administration includes all administrative activities such as registration / deregistration of social insurance, management of the personnel file, working time records, holiday administration, salary statements, employment law, etc. and is carried out with the participation of the management of the area.

***Instruments***

14-day employee meetings; area meetings;

***Responsible***

Deputy Managing Director (Joint Secretary of NSSA)

**(4) FINANCIAL PLANNING / FINANCIAL MANAGEMENT**

***Quality standards***

NSSA prepares and approves the financial plan in due time in compliance with the process steps (comparison with the previous annual financial statements, explanations on income / expenses, etc.).

Therefore NSSA uses professional procedures for financial management, which includes the planning, management and ongoing control of the use of financial resources. The management has a data-driven insight into the most important inputs and issues as well as the liquidity.

***Activities***

The financial accounting is carried out together with an accounting firm. understood the entire process planning and control with regard to the use of financial resources

The management prepares a quarterly report on the financial situation of NSSA - these include a plan-actual comparison (revenue - expenditure) and an outlook for the full year. This quarterly report, including explanations, will be presented to MOLIP for discussion.

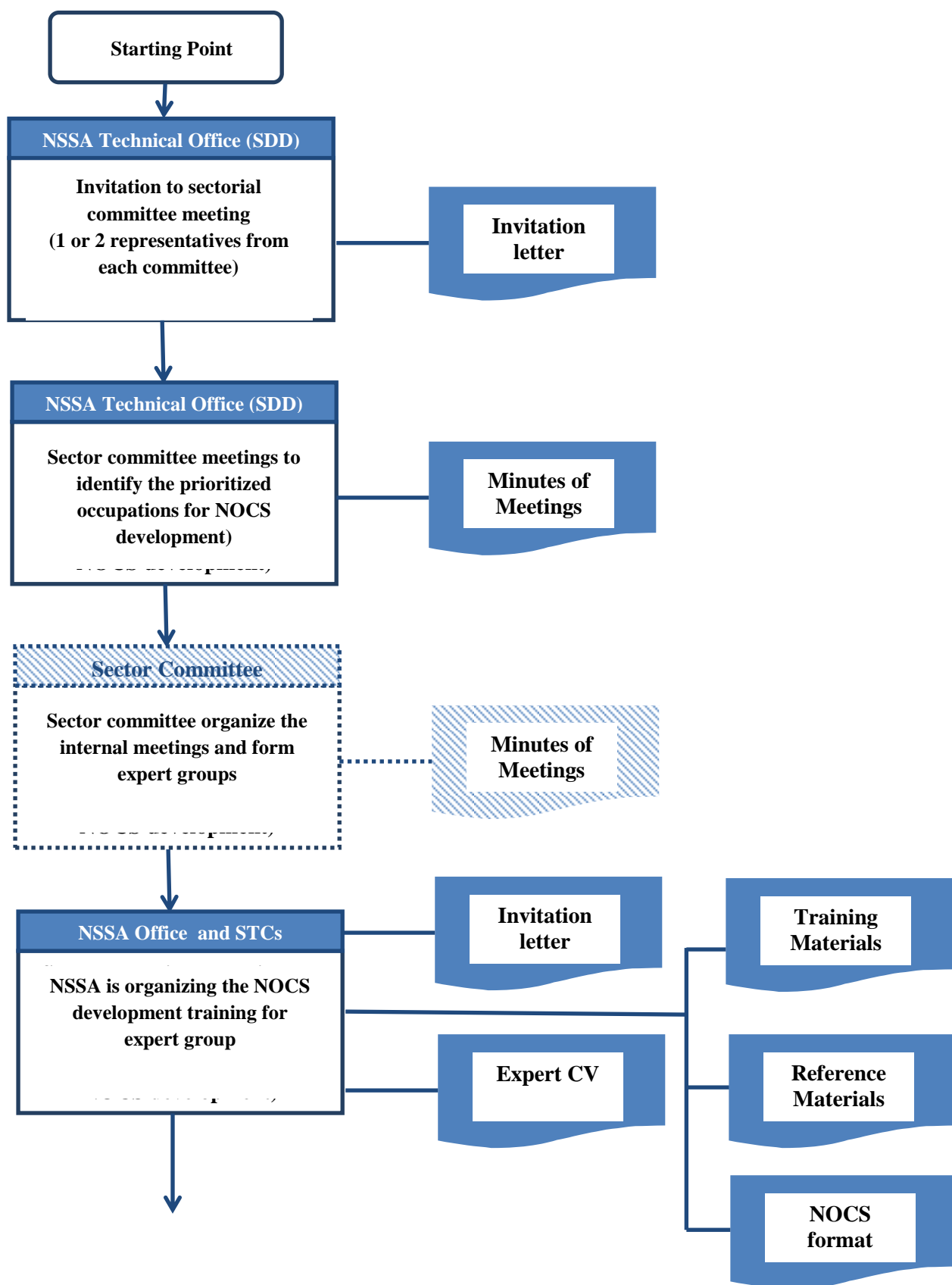
Instruments: quarterly reports.

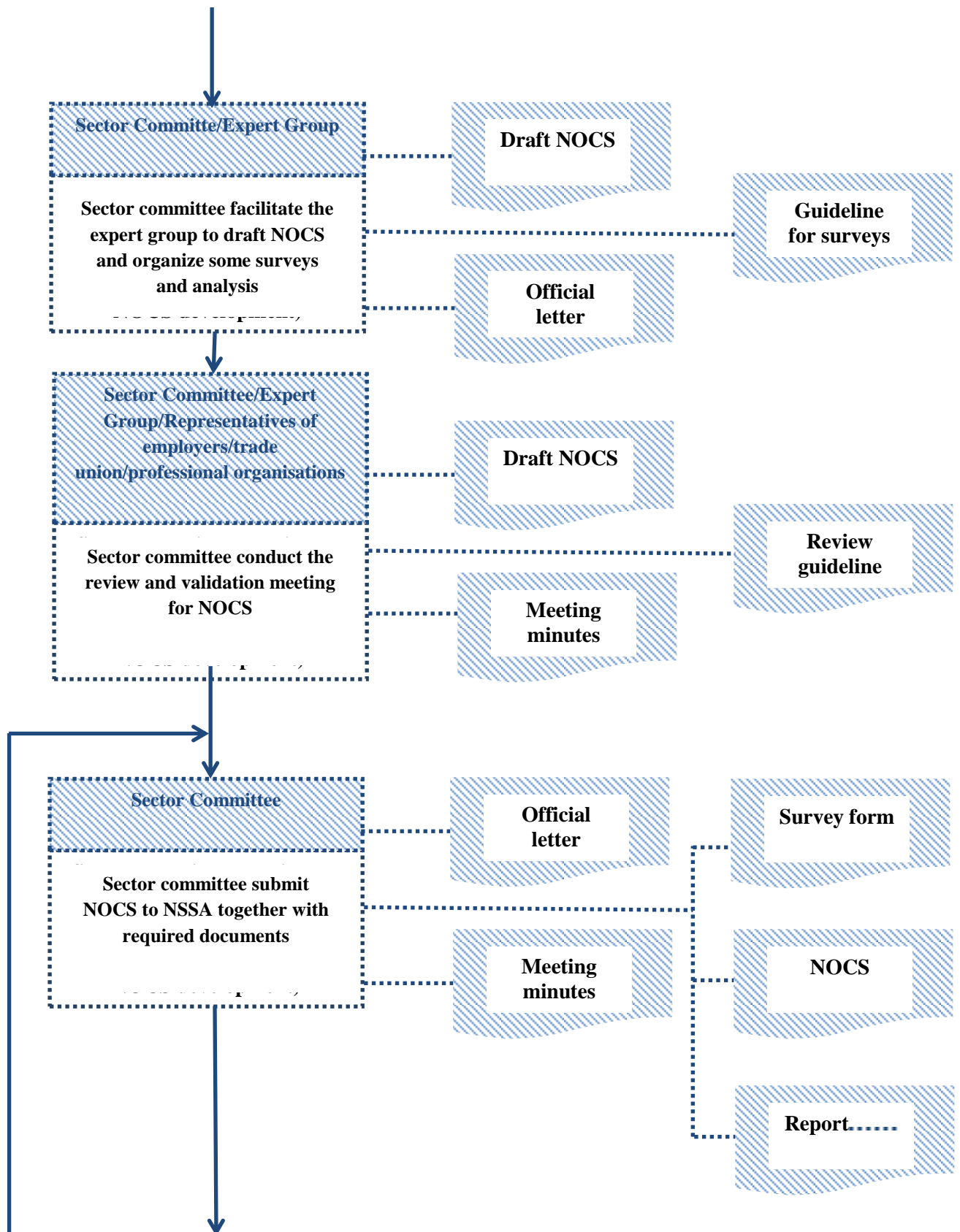
***Responsible***

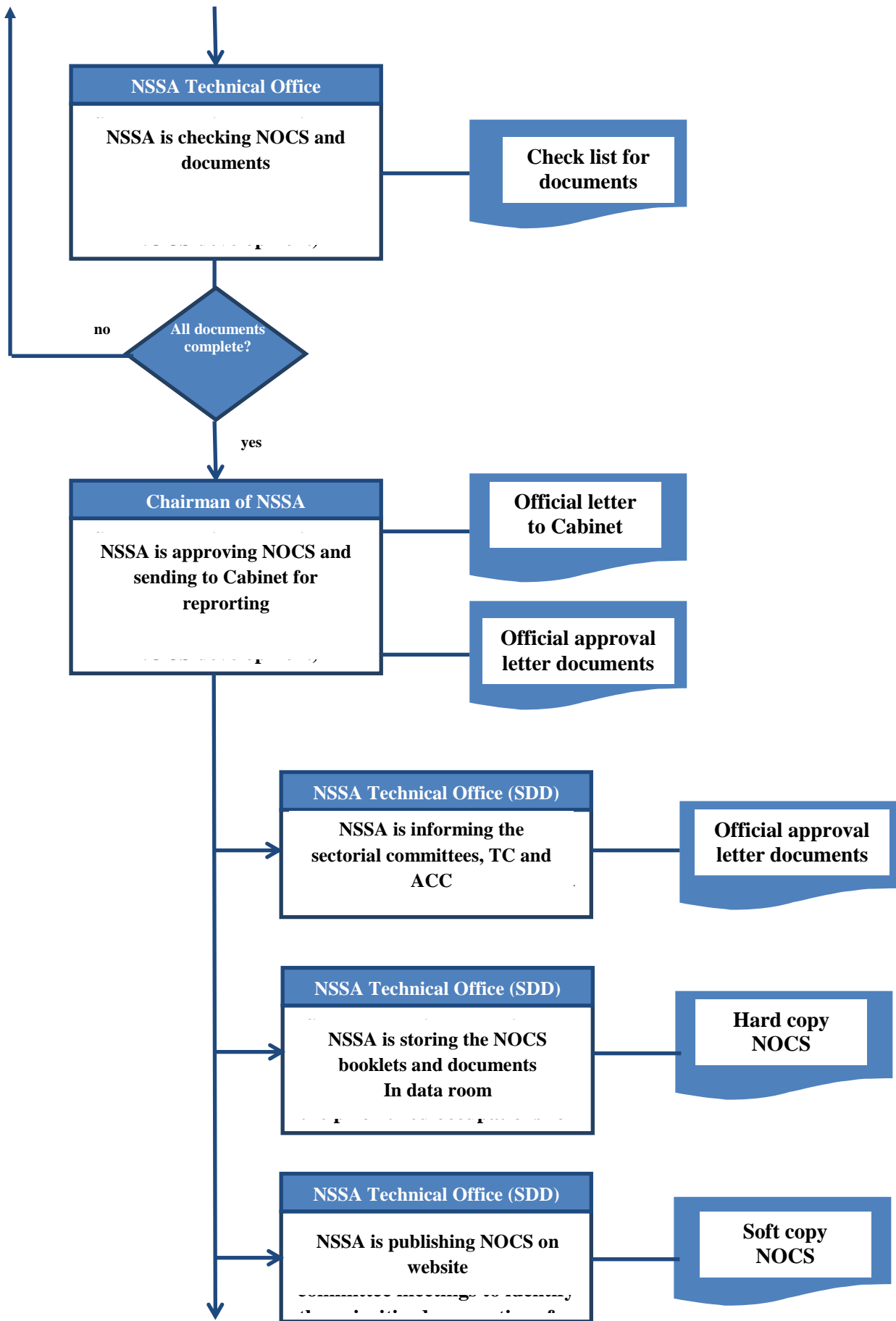
Deputy Managing Director (Joint Secretary of NSSA)

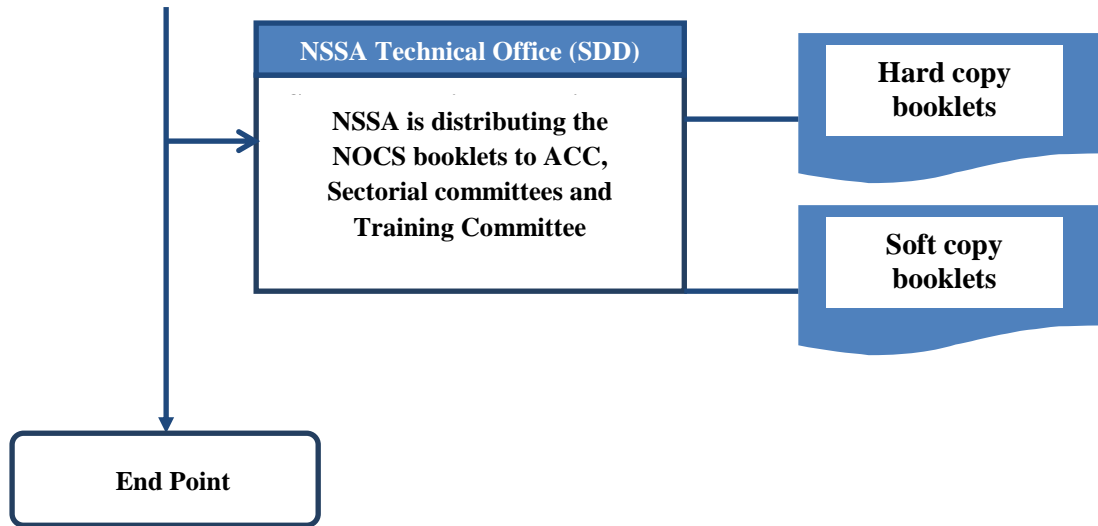
## 5.2.2 Core processes (primary processes of NSSA)

### (1) NATIONAL OCCUPANCIONAL COMPETENCY STANDARD DEVELOPMENT (NOCS)\_FLOW CHART:





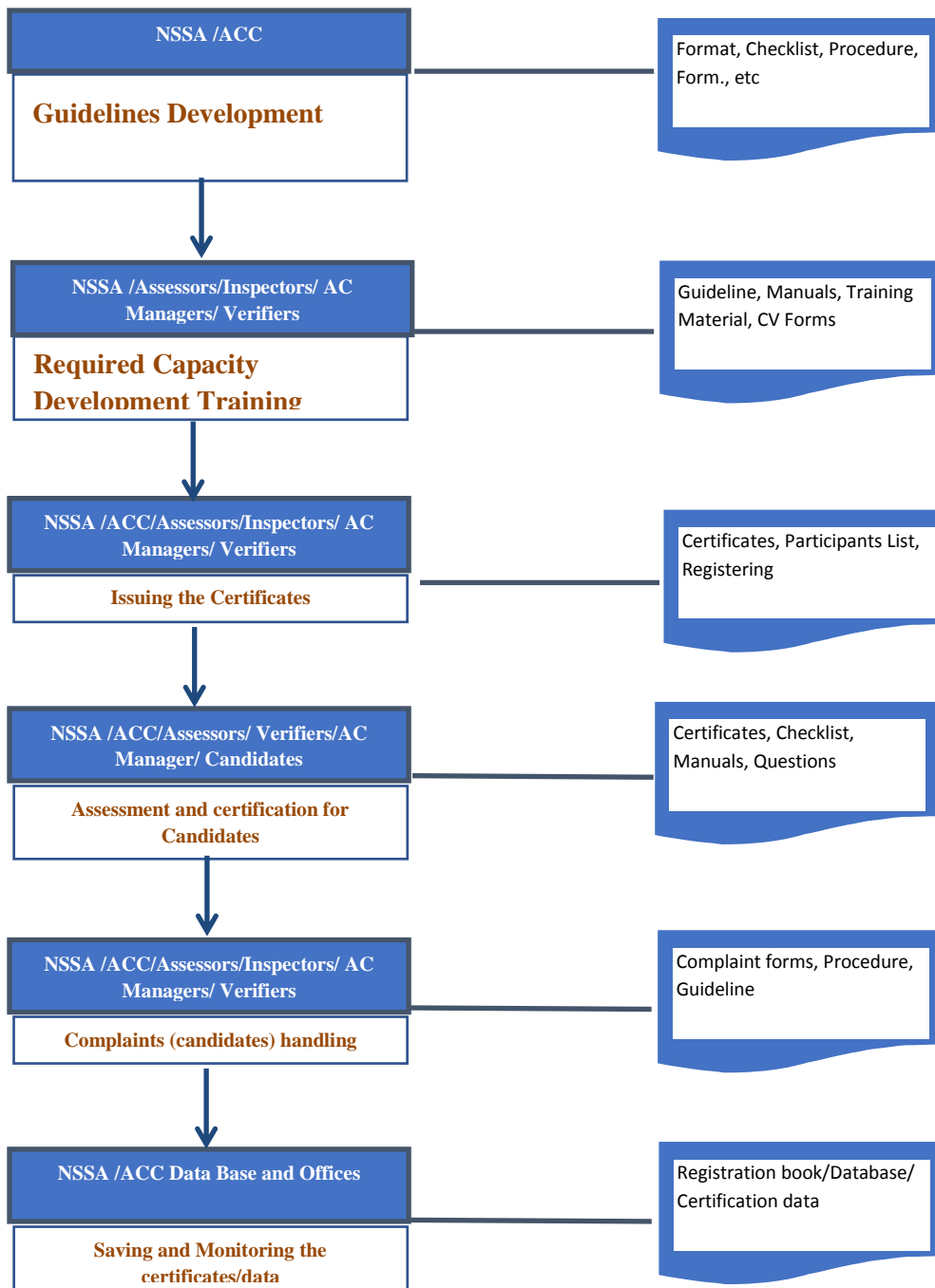




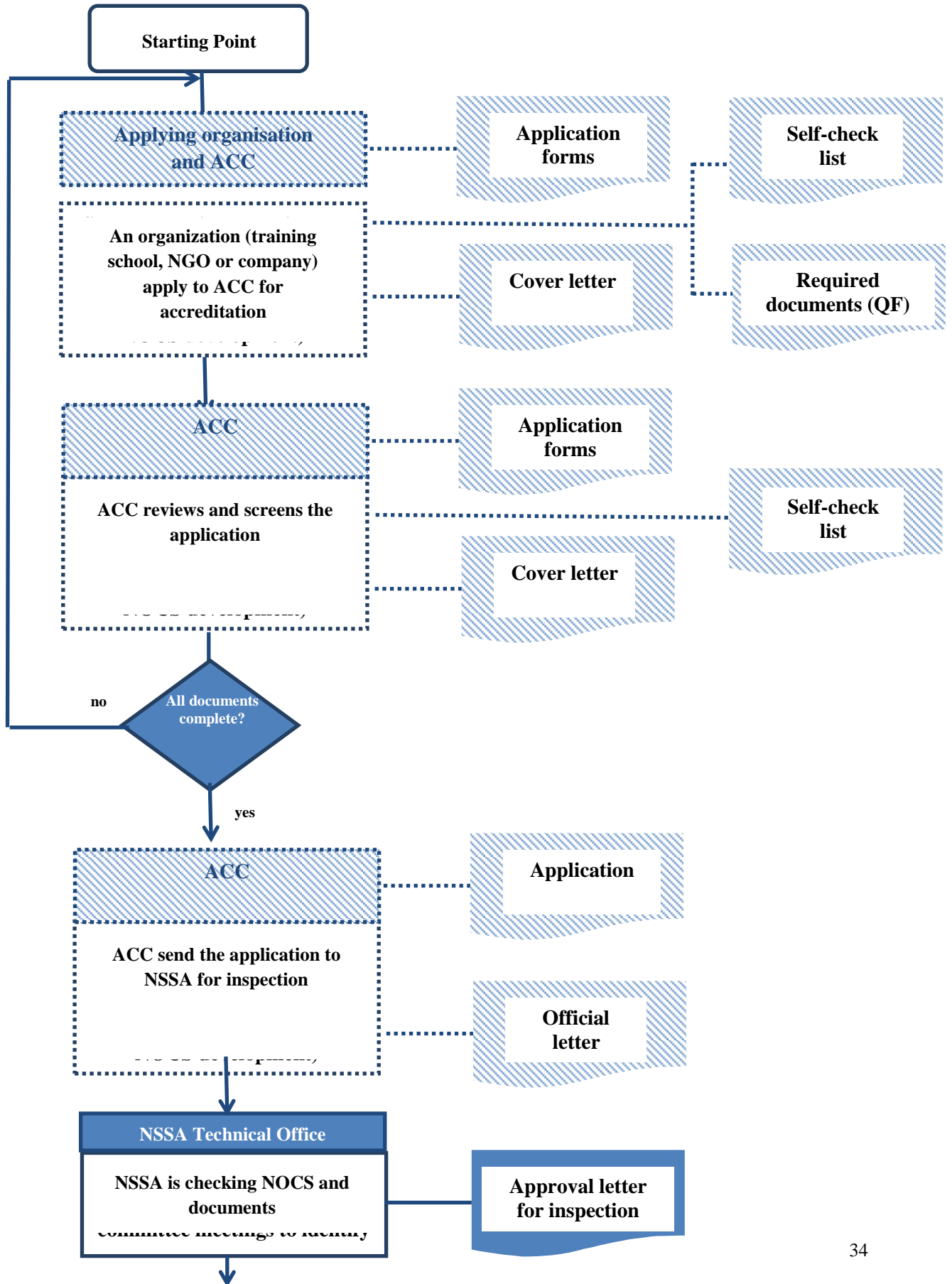


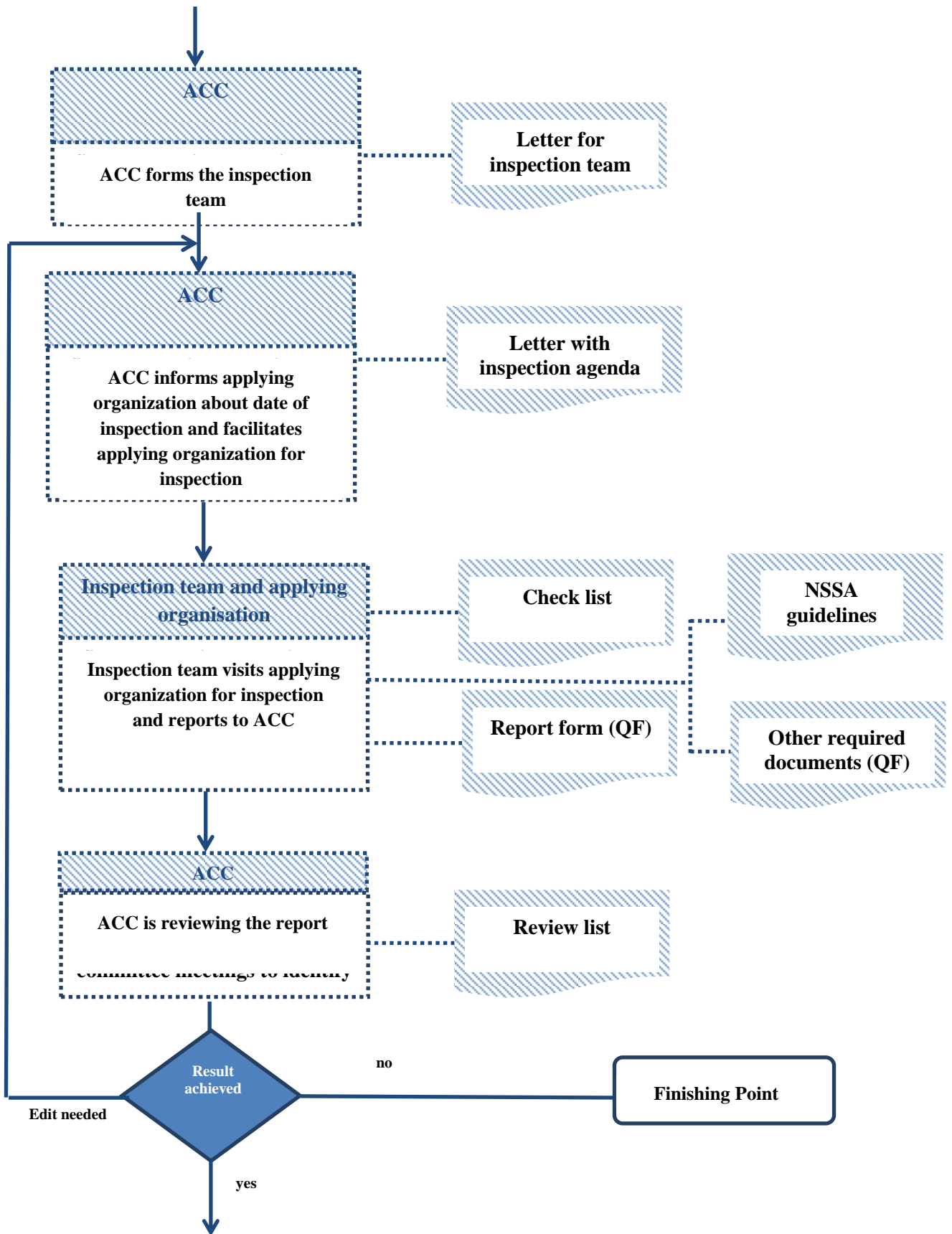
## (2) SKILLS ASSESSMENT AND CERTIFICATION

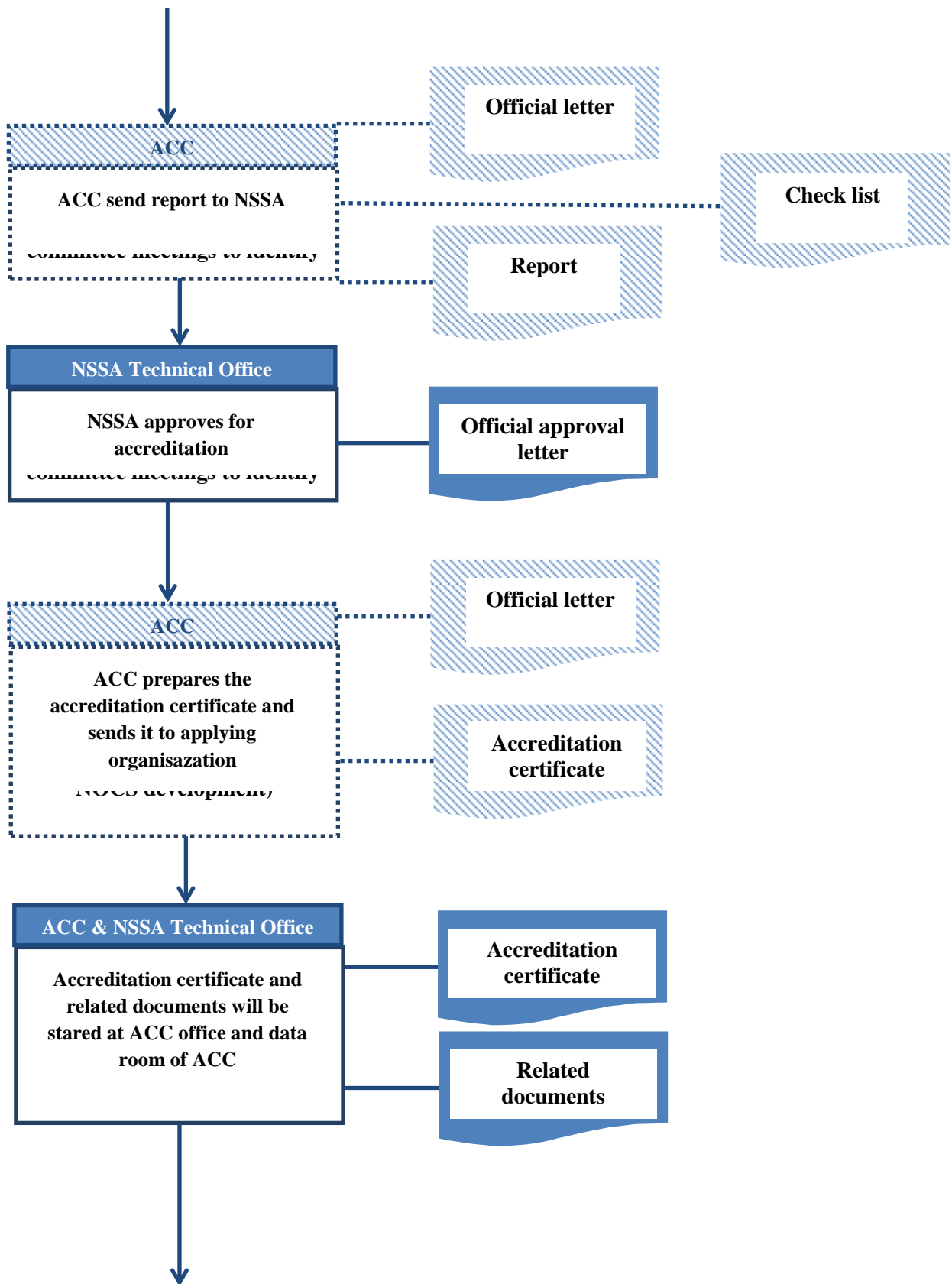
### PROCESS FLOW CHART

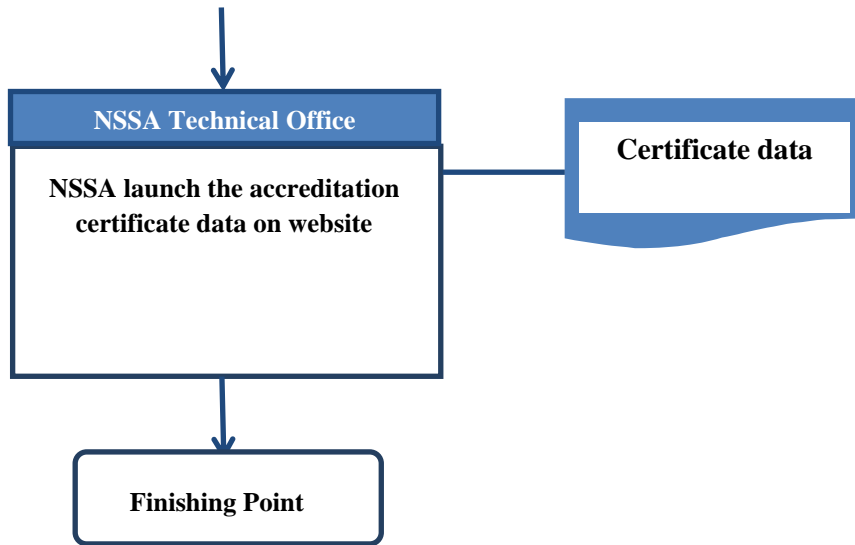


**(3) ACCREDITATION ON ASSESSMENT CENTERS (AC) - FLOW CHART:-**





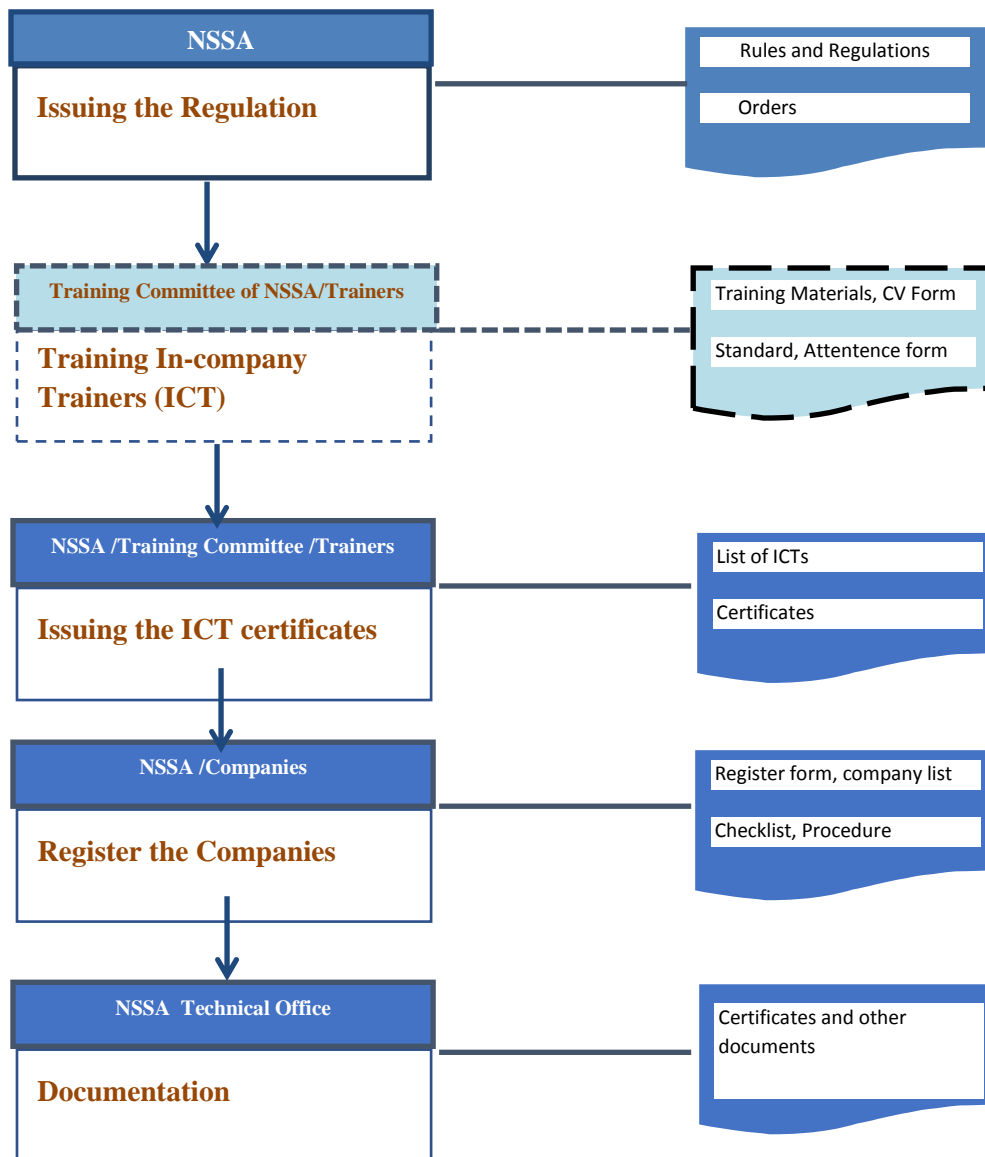




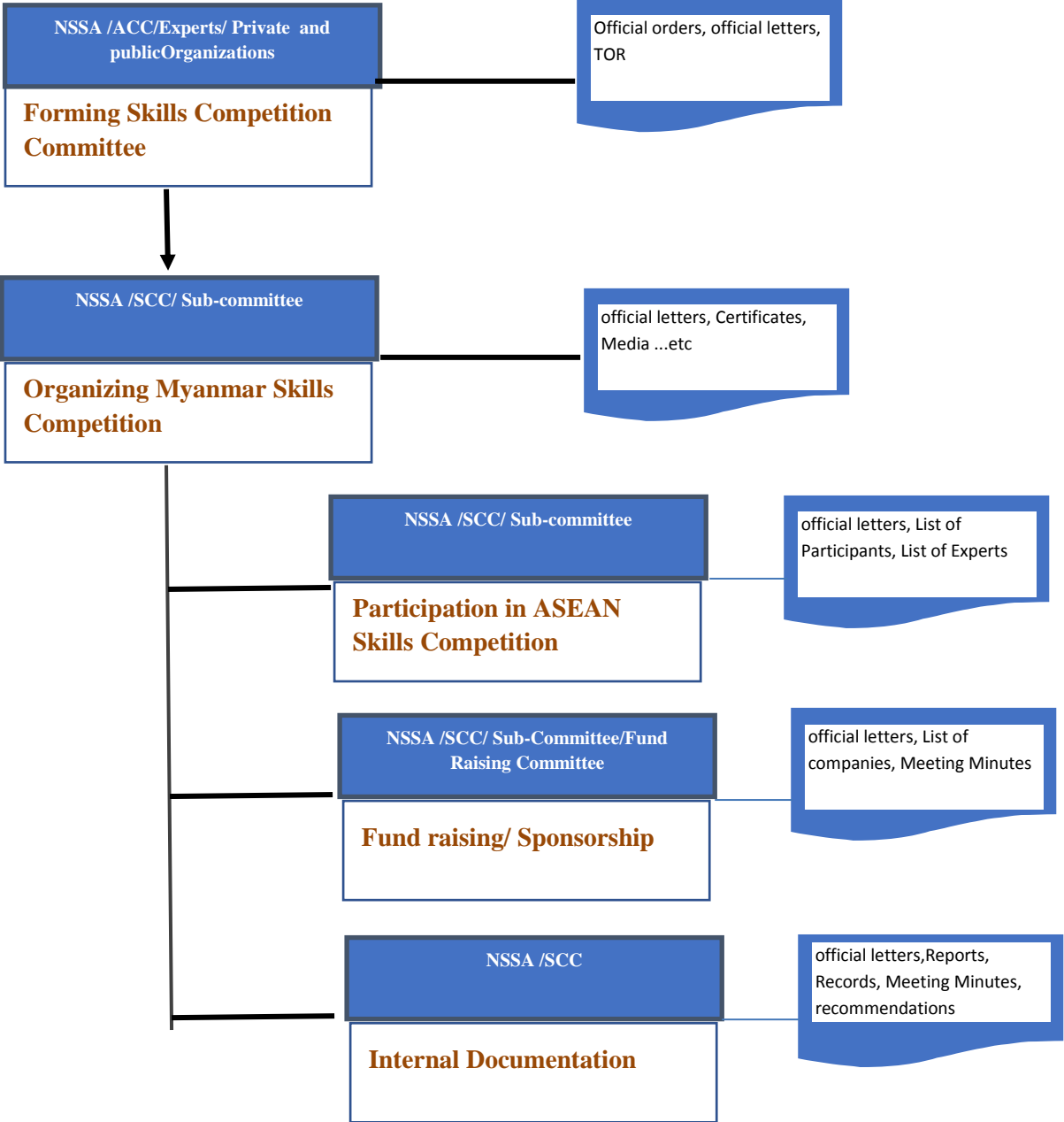
#### (4) IN-COMPANY TRAININGS AND APPRENTICESHIPS

##### PROCESS FLOW CHART

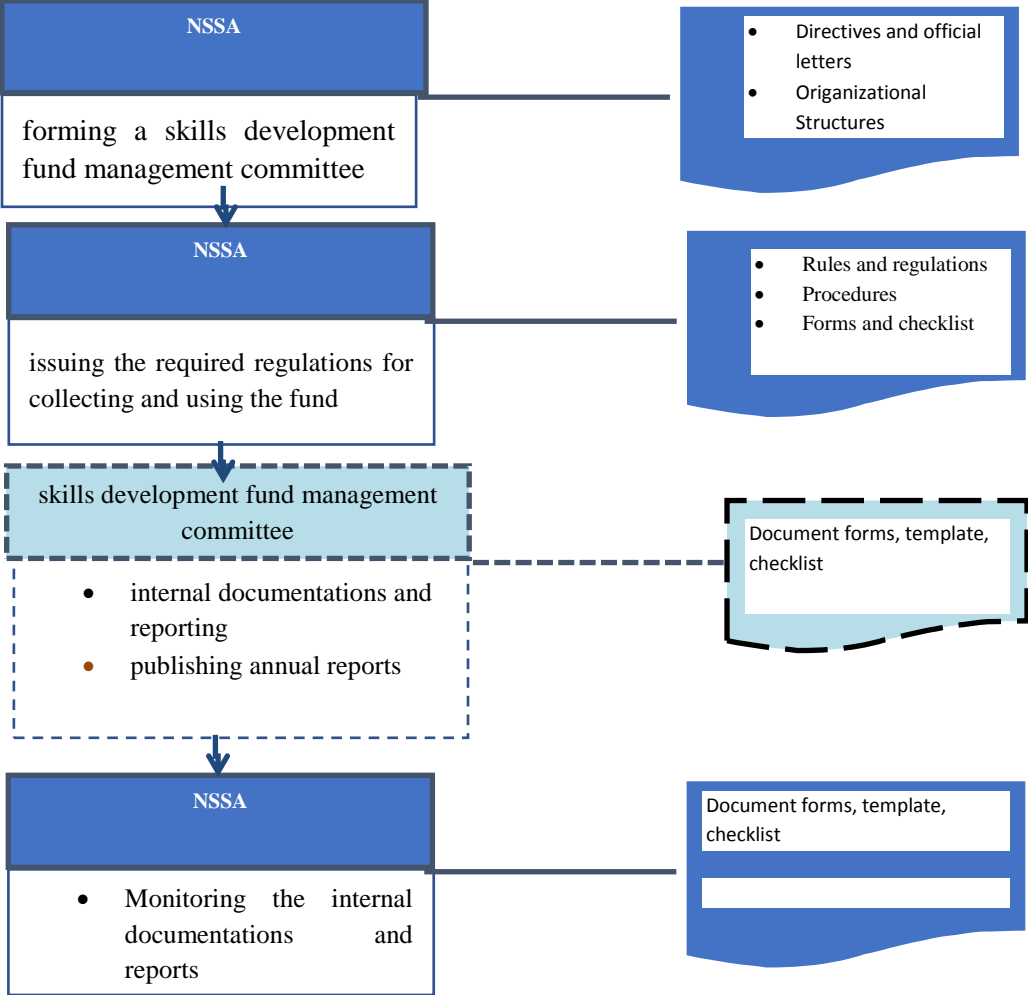
##### (2) IN-COMPANY/APPRENTICE-:



**(5) SKILLS COMPETITION**

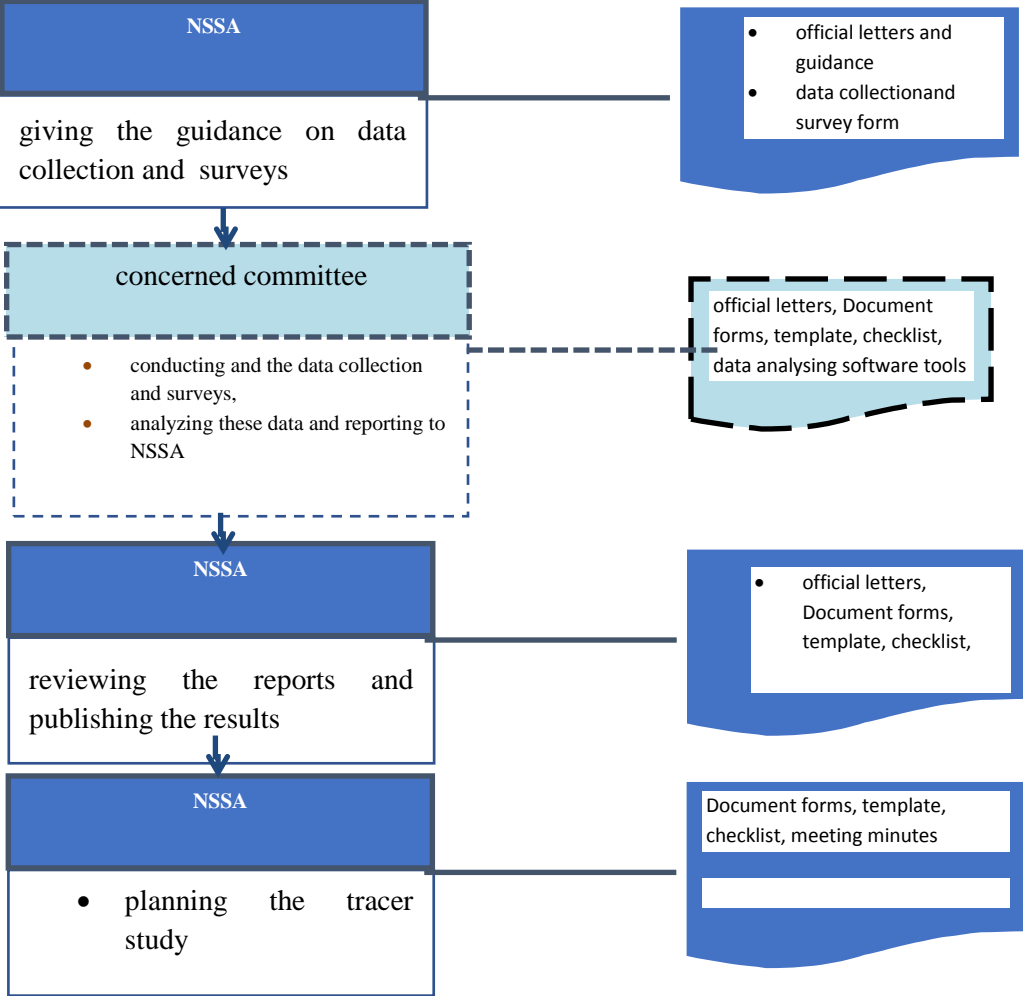


**(6) SKILLS DEVELOPMENT FUND**

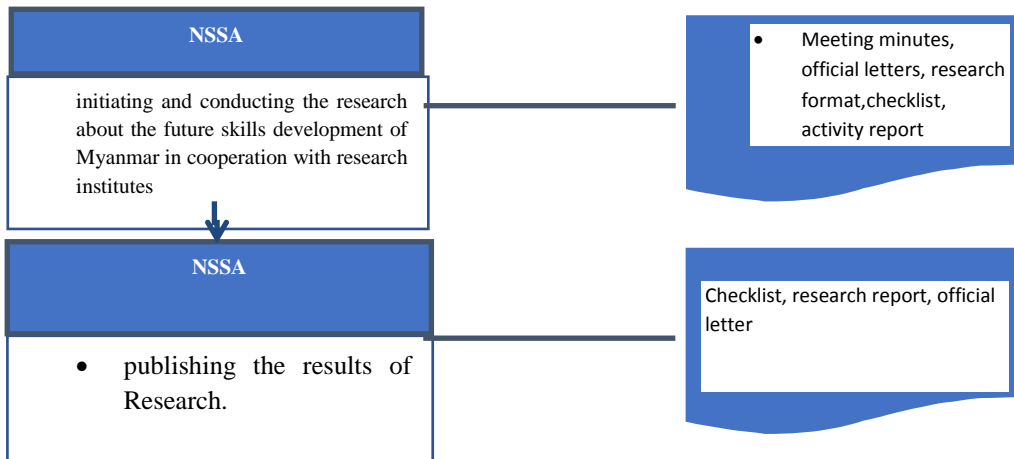




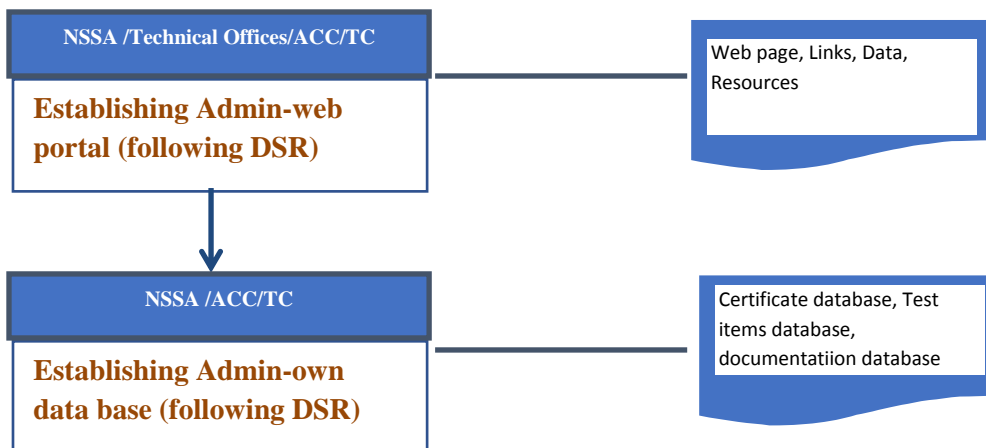
**(7) DATA COLLECTION AND SURVEYS**



## (8) SKILLS RESEARCH



## (9) DATABASE AND WEBPORTAL



### 5.2.3 Support processes (supporting processes for core processes)

#### (1) QUALITY MANAGEMENT AND ASSURANCE

##### **Overall quality claim**

The procedural rules are suitable for the fulfillment of the procedural purposes, comply with the legal and ISO 9001:2015 requirements, implement in an appropriate manner and are easy to understand and apply for all concerned.

The rules of procedure are applied correctly, decisions to be made are correct and comprehensible.

All participants are informed about timetables, procedural basics and tasks.

##### ***Quality standards***

The organization and stakeholders of NSSA are fully informed about the self-image of NSSA, the purpose of the procedures and the rules of procedure and, if necessary, apply the rules in their decisions in an appropriate, correct and consistent manner.

##### ***Activities***

Staff and relevant stakeholders of NSSA are given comprehensive information about the self-image of NSSA, the purpose of the procedures and the procedural rules upon taking office. This happens on a case-by-case basis in individual cases.

##### ***Instruments***

Information package with all relevant information, induction seminar

##### ***Responsible***

QM- Representative

#### (2) ACCOUNTING

##### ***Quality standards***

The conduct is according to the principles of legality, economy and expediency. The accounting system is transparent and comprehensible.

Invoices (incoming invoice / outgoing invoices) are paid on time; the financial statements including the report of the annual audit and limited proof of examination will be submitted on time.

##### ***Activities***

-All incoming invoices are stamped, recorded in the invoice book (serial number, date, invoice amount, vendor, purpose, date of payment), forwarded to the responsible employee for review (factual and accounting) and clearance (by signature), entered in the telebanking system and forwarded to the management to release the payment (by signature). This means that NSSA is made by the employee Accounting (allocation to budget item, accounting area, sector, cost center, account number) and is countersigned by the management.

Outgoing invoices are issued in three ways:

1. Payment requests in the form of notices

2. Payment requests in the form of invoices for voluntary, non-governmental procedures
3. Reimbursement of fees and travel expenses for participation in events, other reimbursements such as user agreements

***Instruments***

Quarterly reports on board  
Quarterly reporting to federal ministries  
Clearance and audit

***Responsible***

Deputy director (Joint Secretary of NSSA)

**(3) SERVICES FOR THE COMMITTEES**

***Quality objective***

The committee members are fully informed about the tasks of NSSA. The committees can perform their tasks on the basis of relevant information.

The sessions are prepared professionally.

***Activities***

-The members of the committees are given comprehensive information on the procedural rules of NSSA. This happens on a case-by-case basis in individual cases.

-The documents will be distributed before the meetings at least one week before the committees' meetings.

***Instruments***

- Information package with all relevant information
- Written / oral reports in meetings

***Responsible***

Deputy Director (Joint Secretary of NSSA)

**(4) INFRASTRUCTURE / IT**

***Quality objective***

The office of NSSA has a professional, up-to-date working environment and IT infrastructure  
The employees have up-to-date workplaces.

***Activities***

- *Updating the information in Office Data base*
- *Updating the information in Certification Data base*
- *Updating the information in Test item Data base*

- *Updating the information in web portal*
- *Managing and Monitoring the required infrastructure which includes the computer, media and related facilities*

***Instruments***

Description of equipment workplace; Description acquisition cycles and annual targets; Regular inspections with occupational physicians, safety expert

***Responsible***

Deputy Director (Joint Secretary of NSSA)

**(5) EXTERNAL AND INTERNAL COMMUNICATION**

***Quality standards***

The internal and external communication is clearly regulated and oriented towards efficiency and effectiveness. Suitable instruments are used, checked and optimized.

Goals:

External communication:

In the context of external communication, tools such as homepage, specific events such as committees' meetings, newsletters, documents such as Accreditation Ordinance, NSSA Annual Report, publications, preliminary talks and presentations are used.

Internal communication: informing the employees

Within the framework of internal communication, instruments such as strategy meetings, jour fixe and individual discussions with employees are used.

***Responsible***

Deputy Director (Joint Secretary of NSSA)

**(6) ANALYSIS AND REPORTS**

The preparation of analyzes and reports is usually organized in project form. For projects the principles of the connection to the procedures of NSSA, connection to international developments and relevance of the results apply.

***Activities***

Before work begins, the project objective and project plan are defined.

In order to ensure the connectivity of the results, where appropriate, stakeholders and, in particular, research institutes, e.g. universities, will be involved throughout the project.

***Responsible***

Deputy Director (Joint Secretary of NSSA)

## 6 Quality Management System of NSSA

### 6.1 Responsibilities for QM in NSSA organization

Within the organization of NSSA a position for a quality representative was allocated. As key responsibilities of the quality representative are defined:

- Reviewing and determining the performance and outcome of NSSA's services and office personnel from the Quality Management point of view.
- Observation of daily operations & its processes and give a guidance/advises and corrective action when necessary.
- Committing to achieve clients' satisfaction and Organizational Development.
- Checking of daily in/out QM-relevant mails & emails, including circulars, notifications, orders and etc., and shall make the decisions and take appropriate action to develop QMS.
- Maintaining ISO 9001:2015 -Quality Management System (QMS) within an organization whenever applicable.
- Writing, editing and amending the QMS's documents and its related other documents as necessary so that to maintain and improve the quality management system of NSSA.
- Arranging, overseeing and conducting an internal audit which in line with the "Internal Audits" and "Management Review" requirements of ISO 9001:2015. Prepares the reports accordingly.
- Organizing and participating in the Management Review Meetings.
- Preparing the reports accordingly.
- Requesting and arranging for the external audit from a "Third Party Auditor" from a recognized assessment agency when the results of the internal audits are satisfactory, in order to gain and maintain ISO 9001:2015 certifications & Registration.
- Thorough knowledge of Risk & Opportunity Assessment in order to identify possible threats to health and safety within the workplace.
- Consulting and Dealing with NSSA's operations as necessary in order to align with QMS of ISO 9001:2015.
- Maintaining the QMS to the Operational & Logistics area of the NSSA's core processes.
- Communicating with clients, comply the requirements of ISO 9001:2015 standards.
- Advising some opinions/ recommendations to the Management team in the relations to the improvement of QMS as per ISO 9001:2015 standards.

The QM-Representative reports directly to the Director (Joint Secretary of NSSA). He/she has the following key authorities:

- Can check all department to follow the Quality Management System and submit to Management Team for any changes
- Have full authority for quality documents control and distributions
- Can prepare and update the quality documents after approve by Director (Joint Secretary of NSSA)

### 6.2 Audits and Reviews

NSSA conducts internal audits, management reviews and external audits. Audits and management reviews seek to ensure that the management system has been effectively implemented and is

maintained.

### 6.2.1 Internal quality audits

NSSA conducts internal audits at planned intervals to determine whether the management system conforms to contractual and regulatory requirements, to the requirements of ISO 9001, and to management system requirements.

Internal quality audits are based on self assessment reports. The focus of this chapter is on the self-assessment report as it is the primary information source for external reviewers. Based on the report as well as the information and evidence gathered at the site-visit the reviewers evaluate the subject (e.g. programme, institution) against the standards/criteria.

The requirements for self-assessment reports depend on the policy of the quality assurance agency: it might provide a guideline for the structure of the report, an obligatory template, length restrictions or more general advice on conducting the report, together with a deadline for submission to the agency.

In general, the focus of the self-assessment report is determined by the subject, e.g. a quality management system of the institution, of the external quality assurance procedure. Reporting about the implemented IQM-procedure would thus be only one part in a self-assessment report.

In the following, (1) some general aspects are mentioned, which should be kept in mind when writing self-assessment reports for external quality assurance and (2) aspects in relation to the documentation of the IQM-procedure.

#### **General considerations for writing self-assessment reports**

##### **• *What is the purpose of the report?***

The self-assessment report is the primary information source for panel members. It should therefore provide a concise description of the assessed subject. ‘Self-assessment’ means that the report should furthermore provide as much analysis and evaluation about the subject as possible, considering not only the current situation of the assessed subject (descriptive parts of the report), but also the suggestions for improvement, if any (self-assessment parts of the report).

##### **• *What information is relevant?***

We recommend to put yourself in the position of an external auditor for anticipating what is relevant to understand your institution, the services and procedures etc. and to assess it against the given standards/criteria. This might help you to keep the balance between detailed and complex descriptions of internal processes, systems, etc. and what is enough for external auditors to put themselves in to context. Consider also how information can be provided comprehensibly.

For example, an overview of a system or a process provided in a figure might be more helpful than a long running text.

##### **• *Which existing information and documents could be used?***

Check out disposable information and documents (e.g. annual reports, internal reports about quality management measures) to minimize extra work for reporting. You might decide to add, for example

basic strategic documents, curricula, existing internal procedures related to the subject of the evaluation, in an appendix and include the most relevant information in the report body.

• ***Who and how will it be written – writing process?***

Think about the project management of the writing process. For example, define in advance the responsibilities for content delivery, editing and revising. It is advisable that stakeholders (staff and students in the institution) are involved in conducting the report, e.g. by revising and endorsing the information supplied in the self-assessment report.

**Reporting about the IQM-procedure within the self-assessment report**

The relevance of the single aspects provided for reporting about the IQM-procedure might differ depending on the external quality assurance approach, e.g. accreditation or quality audit.

• **Comprehensible description of the procedure:** Keep in mind the quality cycle (Plan-Do-Check-Act):

PDCA (plan–do–check–act or plan–do–check–adjust) is an iterative four-step management method used for the control and continual improvement of processes and products.

The activities of the internal audit at NSSA are defined in the document *according to internal audit procedure*. (Ref: NSSA-QP-006)

### 6.2.2 Management reviews

The Director (Joint Secretary of NSSA) reviews the management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. The review includes assessing opportunities for improvement, and the need for changes to the management system, including the *Quality Policy* and quality objectives.

Management review frequency, agenda (inputs), outputs, required members, actions taken and other review requirements are defined in the documented procedure. Records from management reviews are maintained. (Ref: NSSA-QP-007-Management Review Procedure).

### 6.2.3 External quality audits

In annex 2 to this handbook there is a complete check-list for the preparation for the external audit.

## 6.3 Instruments for QM-management

QM-Managers have to translate QM-relevant tasks and areas of responsibility into specific actions using “management instruments”.

The following instruments help the manager to do his or her job well:

- self-management
- meeting management
- job design and assignment control
- delegation
- budget and budgeting



- planning systems
- performance appraisal
- reports

### **Management instrument 1: Self-management**

Self-management is comprised of the abilities, skills and techniques needed for a person to effectively organise their own work. It is important for managers for three reasons.

Firstly, a manager will only be able to fulfill their tasks by means of effective self-management. Secondly, good self-management will help him or her to make adequate use of all the other management instruments. Thirdly, the manager acts as a role model for his or her employees and colleagues. If the manager exercises good self-management skills, others will be inspired to do the same – which in turn will help the manager to do his/her job.

The most important areas of self-management are:

- time management;
- work organisation;
- information management.

### **Management Instrument 2: Meeting Management**

*"The best meetings are those that don't have to take place at all!"*

This slightly exaggerated quotation can be found in almost any book that deals with meeting management. It stems from the fact that most managers spend too much time in unproductive and ineffective meetings. By the way, have you calculated the costs of meetings? Just think about the last meeting you attended and roughly sum up the salaries of all people present during the meeting. Surprised? Or just think of how many hours you spend in meetings per week, per month or per year. Managers spend up to 60% of their working time in meetings.

No doubt there are good reasons to make meetings more effective. Needless to say that the meetings are important for reaching desired results and accomplishing managerial tasks, as they are able to facilitate:

- exchange of information;
- collection of ideas and opinions;
- analysis of difficult situations;
- planning and decision-making in complex areas;
- organisation of necessary processes for implementing agreed activities.

Each meeting, however, demands a considerable amount of work and time of all participants. This additionally required work can have a negative influence on the organisation's performance as a whole. Thus, it is the manager's responsibility to make meetings effective and efficient.

### **Management Instrument 3: Job Design and Assignment Control**

Managers must design the tasks properly, not only according to the objectives but also according to the individual talents and needs of their employees. This is why job design is an important management instrument. It matches people with tasks! Another important factor is the influence that job design has on employee motivation.

However, job design is usually not subject to frequent changes. In order to achieve results, a more dynamic instrument is needed that focuses on the deployment of employees for specific assignments, the so called assignment control.

A manager's task is to clearly define and prioritise assignments – preferably jointly with the concerned employees, who know their job - and to check whether these assignments are being effectively fulfilled through proper deployment of employees.

In short, by using job design and assignment control, a manager is able to steer his or her employees' jobs and tasks in order to achieve specific results.

#### Management Instrument 4: Planning Systems

In order to organise a group of people in a way that enables them to produce positive results, it is necessary to do some planning. Different planning types and planning systems can be used according to the expected results and the level of management being involved.

Reflect for a moment: What kind of planning is used in your organisation?

#### Challenges regarding planning systems

The great challenges when using planning systems are:

- **to choose the right planning system and find the right measure.** Not everything has to be planned in detail, so don't overdo it. On the other hand, too little planning leads to unproductive "muddling through". Choosing the right method guarantees great part of the planning success.
- **to be realistic.** It doesn't help to have great plans which then cannot be implemented, because objectives are too ambitious or resources are lacking.
- **to be aware that planning is not "doing".** Many plans are put into a drawer and never looked at again. Part of the planning therefore has to be an agreement on how implementation will be carried out.

Managers have the "choice" among different planning approaches and systems depending of the complexity of the situation, the level of planning detail required and preferences for certain ways of thinking.

Some of the widest spread planning systems are:

- planning systems adopting the approach of "planning by objectives" like "log frame";
- project planning;
- strategic planning with scenario development.

**Logframe** stands for "Logical Framework", and is essentially a very simple method of tying goals and objectives into inputs, processes and outputs. It is widely used by development agencies. Logframe was developed in the 1970s mainly for infrastructure development projects, dating back to a mixture of strategic planning and management by objectives models, nowadays it is used for all kinds of projects.

**Project planning** is about defining how to complete a project within a certain timeframe, usually with defined stages, and with designated resources. Possible steps of project planning are: setting objectives (which should be measurable), identifying deliverables, planning the schedule and setting up supporting plans.

**Scenario development** is a *process* to elaborate and then evaluate several scenarios of equally *plausible* futures. Scenario planning is about making *choices* today with an understanding of how they might turn out in the future.

### Management Instrument 5: Delegation

Delegation is an instrument that is closely related to job design and assignment control. It is the temporary or indefinite assignment of responsibility and implies the transfer of decision-making authority.

Delegation offers several advantages:

- It lightens the burden on management and allows them to focus on strategic aspects.
- It ensures that decisions are made where their effects are felt most directly.
- Delegation of responsibility and decision-making authority can be very motivating and for the employees and allows them to make use of their capabilities.
- Delegation can be part of a larger process of empowering and developing employees.

Being a manager, it is your task to identify, prepare and supervise delegates. Be aware that each employee needs an individual delegation setting with different levels of precision and supervision – according to his or her “maturity”.

The instrument of delegation is likely to develop its full potential when guided by the management principles of the “cooperative approach” and “positive thinking”, using the strengths of the people you are delegating to for a continuous learning process.

### Management Instrument 6: Budgeting

A **budget** is a list of all planned expenses and revenues that exists at different levels – the organisation as a whole, departments, etc. On the organisational level, a budget can be seen as the translation of the (annual) organisational plan into monetary terms.

According to Peter Drucker, budgeting is not only an instrument for financial departments, but for general management as well. A manager should therefore be familiar with the basic budgeting concepts.

Basic budgeting skills serve two main purposes:

- **Planning:** The budget contains valuable information about needs and activities. Drawing up a budget means planning activities and foreseeing performance.
- **Monitoring:** Budgeting also provides key information about deployed resources. Monitoring budget expenses and revenues enables the manager to revise plans in a timely manner.

### Management Instrument 7: Performance Appraisals

Performance appraisals include methods of evaluating an employee’s performance. Performance appraisal is usually carried out as part of a regular and often standardised review. Using the instrument of performance appraisals on a regular basis, that is, holding the respective meetings and interpreting the outcome, helps the manager to fulfil his task of “developing people”.

Performance appraisal

- provides employees with feedback on their performance;
- identifies an employee’s training needs and his opportunities;
- forms a basis for personnel decisions: salary increases, promotion, disciplinary actions, etc.;
- provides the opportunity for organisational diagnosis and development;
- facilitates communication between employee and manager.

Performance appraisal can be carried out not only from the top down, of course. It is useful for the development of the entire organisation – although not yet very widespread– that upward appraisal also take place, as well as 360° feedback. Performance appraisal should always be guided by the management principles you already know – especially by “the focus on core results” and “positive thinking”.

### **Management instrument 8: Reporting**

Many people don't like to write reports, however, reporting is more than an inconvenient necessity. Most companies and organisations have a reporting system, the purpose of which is storing and distributing information. In this sense, a reporting system supports an organisation's knowledge management. In addition, reports can be used in order to exert a certain effect on their recipient.

Communication generally implies that information, transmitted by a sender, has an effect on its recipient (be it clients, colleagues or the board of Director (Joint Secretary of NSSA)). Written communication in particular has the time advantage: Writing allows the author to consider carefully

- the effect the document should have on its recipient and
- how this effect can be ensured.

If used properly, a report can be just as effective a communication instrument as any other form of written correspondence.

For management, it is therefore important to use a well-functioning reporting system. They should use their own reports (to top management, board of Director (Joint Secretary of NSSA) or official annual reports) for strategic and communication purposes. And they should monitor closely the reports of their staff and promote technical writing skills among their employees.

## Annex 1

### Implementation Plan

There are four main steps for the implementation of the QM-system in the organization of NSSA:

1. Complete (and review) of the QM-Handbook
2. Get prepared and manage the internal audit procedures
3. Get prepared and execute the Management Review
4. Get prepared and manage the external audit procedures

#### 1. Complete (and review) the QM-Handbook

The QM-Handbook is a “living” document. This concerns especially the organizational chart of NSSA and the processes and procedures. Before getting prepared for the internal audit, management review and external audit the remaining core processes have to be visualized and the organizational chart updated with a clear indication of the responsible quality manager in the organization of NSSA.

#### 2. Get prepared and manage the internal audit procedures

The purpose of an **internal audit** is to assess the effectiveness of the organization’s quality management system and the organization's overall performance. The internal audits demonstrate compliance with the ‘planned arrangements’, e.g. the Quality Management System (QMS) and how its' processes are implemented and maintained.

#### Why perform Internal Audits?

The organization will likely conduct internal audits for one or more of the following reasons:

1. Ensuring compliance to the requirements of internal, international and industry standards & regulations, and customer requirements
2. To determine the effectiveness of the implemented system in meeting specified objectives (quality, environmental, financial)
3. To explore opportunities for improvement
4. To meet statutory and regulatory requirements
5. To provide feedback to Top management

#### Principles of Internal Auditing

Auditing relies on a number of principles whose intent is to make the audit become an effective and reliable tool that supports NSSA’s management policies and policies whilst providing suitable objective information that NSSA can act upon to continually improve its performance.

Adherence to the following principles are considered to be a prerequisite for ensuring that the conclusions derived from the audit are accurate, objective and sufficient. It also allows auditors working independently from one another to reach similar conclusions when auditing in similar circumstances.

The following principles relate to auditors.

1. **Ethical conduct:** Trust, integrity, confidentiality and discretion are essential to auditing

2. **Fair presentation:** Audit findings, conclusions and reports reflect truthfully and accurately the audit activities
3. **Professional care:** Auditors must exercise care in accordance with the importance of the task they perform;
4. **Independence:** Auditors must be independent of the activity being audited and be objective
5. **Evidence-based approach:** Evidence must be verifiable and be based on samples of the information available.

### Preparing for the Audit

Before the audit, prepare thoroughly! Spending time in preparation will make NSSA much more effective during the audit - NSSA will become a better auditor. Auditors should not skip this step as it provides much needed value to the audit. Taking the time to prepare and organize actually saves time during the audit.

NSSA should have an up-to-date audit schedule and a well defined audit plan for each process. Be sure to communicate the audit schedule to all parties involved as well as to top management as this will help reinforce NSSA's mandate.

Gather together all the relevant documented information that relates to the process NSSA will be auditing. Look at process metrics, work instructions, turtle diagrams, process maps and flowcharts, etc. If applicable, collect and review any control plans and failure mode effects analysis work sheets too. Review these thoroughly and highlight the aspects that NSSA plan to audit. Using the documented information in this way ensures they become audit records.

NSSA organization's documented information may not cover all of the requirements that may be relevant to the process. If certain information is not available, it may become NSSA's first audit finding, not bad for the pre-audit review!

Certain information and linkages should be audited. Some are required and some are simply good audit practice. Putting these sections into a worksheet format gives auditors a guide to follow, to ensure the relevant links are audited.

### Definition of Internal Auditing

"Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

### Types of Internal Audit

Internal audits are commonly referred to as 'first-party audits' and are conducted by an organization to determine compliance to a set of requirements which might arise from standards like ISO 9001:2015, as well as customer or regulatory requirements.

There are four common methods of internal auditing that may be used to determine compliance:

1. System Audits
2. Process Audits
3. Product Audits

## System Audits

The system audits are best undertaken using the internal audit checklist. This type of audit focuses on the organization's quality management system as a whole, and compares the planning activities and broad system requirements to ensure that each clause or requirement has been implemented.

## Process Audits

The process audit is an in-depth analysis which verifies that the processes comprising the management system are performing and producing in accordance with desired outcomes. The process audit also identifies any opportunities for improvement and possible corrective actions. Process audits are used to concentrate on any special, vulnerable, new or high-risk processes.

## Product Audits

The product audit may be a series of audits, at appropriate stages of design, production and delivery to verify conformity to any specified product requirements, such as dimensions, functionality, packaging and labelling, at a defined frequency.

### Step 1. Perform an Internal Audit Checklist

The internal audit checklist will help NSSA to determine the extent to which NSSA's organization quality management system conforms to the requirements by determining whether those requirements have been effectively implemented and maintained. The templates will help NSSA to assess the status of NSSA's existing management system and identify process weakness to allow a targeted approach to prioritizing corrective action to drive improvement.

The internal audit checklist is just one of the many tools which are available from the auditor's toolbox that helps to ensure each internal audit addresses the necessary requirements. It stands as a reference point before, during and after the audit process and if developed for a specific audit and used correctly will provide the following benefits:

1. Checklists can be used as a reference for planning future audits
2. Checklists can be provided to the auditee prior to the audit
3. Checklists can provide a means of communication
4. A completed checklist provides evidence the audit was performed
5. Ensures the audit is conducted systematically and consistently
6. Ensures a consistent audit approach
7. Actively supports the organization's audit process
8. Provides a repository for notes collected during the audit process
9. Ensures uniformity in the performance of different auditors
10. Provides reference to objective evidence
11. Audit checklists provide assistance to the audit process

The internal audit checklist comprises tables of the certifiable ('shall') requirements, from Section 4.0 to Section 10.0 of ISO 9001:2015, each requirement is phrased as a question. This audit checklist may be used for element compliance audits and for process audits. If NSSA wish to create separate process audit checklists, select the clauses from the tables below that are relevant to the process and copy and paste the audit questions into a new audit checklist..

## Step 2 - Prepare the Report

A good summary report is the output which is the value of the audit. It deserves an appropriate amount of attention and effort. As NSSA moved through the audit, NSSA should have noted the issues and improvements NSSA saw. These should have been marked clearly so NSSA are now able to quickly review and capture them as NSSA write the report.

These findings and conclusions should be formally documented as part of the summary report. Too often, the audit report only recites back facts and data the managers already know. The value is in identifying issues and opportunities they do not know! This summary should be reviewed first with the lead auditor, then the Process Owner and Management Team. Make final revisions and file the audit report and all supporting audit materials and notes.

Gather the whole audit package together, in an organized manner. The rest of the work instructions, flowcharts, notes and relevant papers should be gathered into the audit package as supporting records. All findings should also be documented on NSSA's corrective action forms. The audit summary and the corrective action forms should be attached to the audit package, which now becomes the audit record. Only the summary report and corrective actions need be given to the process owner.

## Elementary Audit Questions

These basic audit questions will help guide the audit in the right direction since the answers they provide often unlock the doors to information the auditor requires in order to accurately assess the particulars of a process.

Consider these common audit questions:

1. What are NSSA's responsibilities?
2. How do NSSA know how to carry them out?
3. What kind of training is given to new employees?
4. How is the effectiveness of training evaluated?
5. Are training records maintained?
6. What are the objectives of NSSA's processes?
7. What is the quality policy and where is it found?
8. Which documents do NSSA use and are they correct?
9. What outputs does NSSA's process create?
10. How are NSSA's records maintained?
11. How do NSSA ensure that products meet the stated requirements?
12. Is customer satisfaction data analyzed?
13. How do NSSA ensure that products meet the stated requirements?
14. What happens when changes are made to product requirements?
15. What are the responsibilities/authorities for dealing with non-conformances?
16. Are there trends in non-conforming products and what's being done about it?
17. Is the non-conformance procedure linked to the corrective action process?
18. Are employees made aware of the quality policy and objectives?
19. Are policies and objectives available and relevant?
20. How are quality objectives determined?
21. Is there a clear link between the policies and objectives?
22. How is progress towards objectives measured and communicated?
23. Has the number of customer complaints changed over time?



24. What tools are used to identify the causes of complaints?
25. How are improvement efforts and successes communicated to employees?

### Getting the Most from the Audit Schedule

The audit schedule is divided up to reflect each section of ISO 9001 NSSA should determine which of these sections are of greatest relevance to NSSA's business; in other words, which processes, should there be problems, will affect NSSA's customers the most. These are the processes that NSSA's company must make certain remain stable and consistent. NSSA might wish to schedule these key processes for additional audits, perhaps two or even three times per year.

The audit schedule provides the following benefits:

1. Provides a visual plan of the audit programme
2. Demonstrates coverage of the whole standard
3. Provide current status of the audit programme
4. Promotes awareness

### 3. Get prepared and execute the Management Review

The management review process requires top management to periodically review the QMS to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization.

#### Why undertake management reviews?

1. Determine and evaluate QMS performance
2. Determine the need for change and improvement
3. Determine the suitability of the policies and the objectives

The purpose and final outcome of the management review should be continual improvement of the QMS. As NSSA's organization's QMS increases in its effectiveness and efficiency, NSSA's performance will likewise increase.

#### When should a management review be scheduled?

The frequency or intervals of reviews must be defined in the QMS.

**Aim to do a management review at least once a year** or more often if appropriate. Little and often is best; there is nothing to say that NSSA have to go through the full agenda each time, nor is there any need to duplicate effort if NSSA cover certain aspects as part of other management meetings.

#### What should be reviewed?

Internal and external issues should be discussed - and their potential effect on the strategic direction of the organization.

#### Internal

1. Minutes from previous management reviews
2. The policies, objectives and targets
3. Results of QMS and process audits
4. The extent to which objectives and the numeric targets were met
5. Assessment of risk management actions

## External

1. New or proposed legislation or regulations
2. External providers and suppliers performance
3. Changing expectations/requirements of relevant interested parties
4. New or modified activities, products, or services
5. Advances in technology and science
6. Changing market preferences of buyers

## Management Review Inputs (Agenda)

The management review process must ensure that the necessary information is collected ahead of time to allow management to effectively perform the review.

The management review process should focus on the following inputs:

1. Risks and opportunities
2. Possible changes that might affect the system
3. External provider and suppliers performance
4. Customer satisfaction and perception
5. Audit results
6. Non-conformity and corrective actions

## Management Review Outputs (Minutes/Actions)

*All management reviews must be documented.* Observations, conclusions, and recommendations for further necessary action from the review must be recorded. If any corrective action must be taken, Top management should follow up to ensure that the action was effectively implemented.

Auditors should note that the results of management reviews can now be held in any format that the organization chooses.

Typical outputs might include:

1. Process improvement actions
2. QMS improvement actions
3. Product improvement actions
4. Resource provision actions
5. Revised business plans and budgets
6. Changes to quality objectives and policies
7. Management meeting minutes

Management review meeting minutes should be retained as documented information.

## How's best to document management reviews?

It is not a mandatory requirement to document the management review procedure for achieving ISO 9001:2015 certification, however, if the management review process is vital in achieving product quality; NSSA may find a documented procedure useful.

**Develop and implement a management review procedure** that defines:

- Management review responsibilities
- Management review scheduling

- Management review inputs
- Management review outputs

#### **Measuring management review effectiveness**

The management review process can be measured by assessing the effectiveness of key decisions/outputs; e.g. budgetary changes, forecasts, revised resources plans or changes to the quality policy or objectives.

Management review outputs are intended to improve NSSA's business; auditors will look for evidence that this is being achieved.

#### **4. Get prepared and manage the external audit procedures**

In annex 2 of this QM-handbook a comprehensive check-list for external audits can be found.

## **Annex 2**

### **Check list for external audits**

## Annex 3

### Future Skills

A Future Skills Framework was developed by Stifterverband für die Deutsche Wissenschaft e.V. (and McKinsey), that distinguishes between three skill categories:<sup>2</sup> (The following skills categories are required in industry and basic competency areas of future Myanmar National Skills Qualification framework)

CATEGORY	CAPABILITY	DESCRIPTION
<b>Technological capabilities</b>	Complex data analysis	Investigate large amounts of data efficiently with analytical methods to gain information; this includes the development of Artificial Intelligence (AI)
	Smart hardware/robotics development	Physical components for "intelligent" hardware-software systems
	web development	Master programming languages for back-end and front-end development for web applications (especially mobile)
	User-centric design (UX)	Design products in such a way that they aim at optimised functionality with intuitive usability and thus an attractive user experience.
	Conception and administration of networked IT systems	Set up complex IT infrastructure, also in the cloud, with interfaces to other IT systems and continuously manage and further develop it.
	Blockchain technology development	Decentralized databases ("Distributed Ledgers") using the
	tech translation	Moderating between technology experts and involved non-specialists
<b>Digital</b>	Digital Literacy	Master basic digital skills, e.g. careful handling of digital personal data, use of common software, interaction with AI
	Digital Interaction	Understand and behave appropriately towards others when interacting via online channels ("Digital Etiquette")
	collaboration	Work together effectively and efficiently on projects, regardless of geographical proximity and across different disciplines and cultures, in order to achieve better results as a team than individuals.
	Agile working	In an iterative team responsible for an end product ("Rapid
	Digital Learning	Build valid knowledge on selected topics from a wide range of digital information
	Digital Ethics	Critically question digital information and the effects of one's own digital actions and make appropriate ethical decisions.
<b>Classical Skills</b>	problem-solving ability	Solve concrete tasks for which there is no ready-made approach through a structured approach and judgement
	creativity	Original improvement ideas (e.g. for existing business processes)
	Entrepreneurial action & initiative	Work independently and on your own initiative in the sense of a project or an organization
	adaptability	Be able to engage in new (technological) developments, use them to advantage and transfer them to different situations

<sup>2</sup> Stifterverband für die Deutsche Wissenschaft e.V. (and McKinsey), Future Skills Report, Essen (Germany) 2019

staying power

Perform tasks taken on, e.g. challenging projects, in a focused, responsible manner and even against resistance.

Figure 6: Future skills