The National Qualifications Framework: An Introduction

Section 1: Context and Rationale

1.1. Introduction – the concept of the Framework

A National Qualifications Framework (NQF) is a system which describes the types of qualifications, their levels and standards within the whole education and training system of the country. It is a structure of defined and nationally accredited qualifications, which are awarded at defined levels. It means, in other words, that a country has a single system to express the competencies of its workers. An NQF indicates the interrelationships of the qualifications and how one can progress from one level to another. It is therefore a route through which a country can bring education and training together in a single unified system. A qualifications framework is designed to provide quality assured, nationally recognized and consistent training standards. It is supported by a quality assurance system which ensures that qualifications are issued only to those individuals who have met the standards, no matter how the standards have been achieved. National Qualification frameworks stand on the twin pillars of national standards and quality assurance.

1.2. The International Context of Frameworks

The concept of a National Qualifications Framework is a fairly recent one. Since the early 1990s, various governments across the world have embarked on ambitious and far-reaching attempts to reform their education and training systems, with the intention of making the education and training on offer more relevant for the labour market. In many such cases, national qualifications frameworks (NQFs) have been the principal instrument used to facilitate the transformation processes of these systems. Though it owes its intellectual origins to educational developments in Britain, the first National Qualifications Authority was established in New Zealand a decade and a half ago, and from there it spread to other countries like Australia, Scotland, Singapore, South Africa, Brazil, Namibia and Mauritius to name but a few. There are country specific National Frameworks, but there are also ongoing projects for regional, or Meta, Qualification Frameworks, for example in Europe, and the SADC region. By 2006 more than 60 countries and four regions were in one way or another involved in NQF development. In the SADC region almost all of the countries have, by dint of region wide consensus, embarked on NQF development projects.

1.3. The Context of the Framework in Seychelles

It has been national policy since 2000 to develop a National Qualifications Framework, and therefore a National Qualifications Authority to administer and develop the framework. When the government started on this path five years ago the major rationale was that an NQF would form part of its "strategy to incorporate standards and quality into the national education and training system." In his budget address of 2004 the President underlined the commitment

of the government to an NQA, and stated that work would be done over the coming year to establish the groundwork for such an entity.

Accordingly, in 2005 the Ministry of Education and Youth assigned a team to the task of preparing the legislation, and to draw up a proposal pertaining to the nature of the qualifications authority that would be set up. Human resource capacity for the task was built partly through the assistance of the Canadian government, which provided the funds for framework related study visits and consultancies from 2004 onwards. The investment of the government of Seychelles government, from 1999 onwards, was of a similar nature. Such investments led to the development of much framework related material. This occurred against the backdrop of the review and standardization of the courses on offer in our post-secondary institutions to become competency-based courses (CBA). The CBA development made it that the need for a framework became more marked.

1.4. Objectives of the Framework

The National Qualifications Framework is designed to provide:

- quality assured, nationally recognized consistent training standards and qualifications
- recognition and credit for knowledge and skills acquired.

It aims to achieve the following:

- To ensure comprehensiveness in the recognition of learning and qualifications attained in the country, while ensuring parity for occupational qualifications
- To promote and regulate the development of qualifications based on unit standards which are linked to the workplace and society requirements
- To promote a more integrated approach to education and training, increased articulation of qualifications, and mobility of learners within a coherent and integrated learning system considering the need for both national and international portability and comparability

Section 2: Definitions

2.1. Definition of the framework

The Act setting up the Seychelles Qualifications Authority defines the **National Qualifications Framework** as "a framework for the development, recognition and award of qualifications based on standards of knowledge, skills and competence to be acquired by learners."

The Framework establishes the regulations and principles that guide the development of qualifications. It states the criteria to be met for qualifications to be recognized nationally. It defines the conditions for learners to be certified. It is also a set of policies and regulations which guides all providers of education and training about the conditions that need to be met to operate.

2.2. Architectural Features of the Qualifications Map

The qualifications map is the most visible aspect of the NQF. It is, in a sense, the public face of the NQF. For our purposes the **Qualifications Map** is defined as:

"The structure of nationally approved qualifications in terms of defined levels and their descriptors, qualifications types, notional hours and pathways."

The term **level** as used in the context of the qualifications map refers to "the particular level at which a unit standard or qualification is registered on the NQF." For example, all doctoral and post doctoral qualifications would be registered at level 10. The hierarchy of levels is built not only on the basis of increasing cognitive challenge but also on practical skills development and degree of autonomy. **Levels descriptors** are "statements used to describe a hierarchy of learning outcomes in terms of reasoning and problem solving, autonomy and responsibility, knowledge, and degree of complexity of tasks."

The term **Qualification Type** as used in the context of the qualifications map refers to "the specified nomenclature for qualifications at particular levels of the NQF." Thus from the qualifications type of Master at Level 9 can be derived, for example, Master of Public Administration, or Master of Science, as needed for that particular field or speciality.

The term **National**, as in for example, Advanced National Diploma is reserved to signify **"**a nationally recognized, endorsed, and validated qualification bearing the imprimatur of the Seychelles Qualifications Authority."

The term **Pathway** as used in the context of the qualifications map refers to the "access route to a specified qualification.**"** The pathway, for example, from Certificate to Advanced Diploma goes through the Advanced Certificate and the Diploma.

2.3. The Building Blocks of Qualifications on the Map

The Act setting up the Seychelles Qualifications Authority defines **Qualifications** as "the formal recognition of a learner's achievement of the required number and range of credits or other requirements at a specified level of the qualifications framework."

A Qualification is firstly a planned combination of learning outcomes which may include:

- **Essential Unit Standards**: Refers to generic knowledge, skills, attitudes and values deemed necessary for a particular qualification and include Communication, Numeracy, Information and Communication Technology and Life skills.
- **Specific Unit Standards**: Refers to standards which form part of a qualification and are directly related to the occupation, function and/or area of specialization.
- **Elective Unit Standards**: Refers to optional and/or specialized unit standards which form part of a qualification.

Secondly, a qualification in at post-secondary/further and higher education level consists of a minimum number of 120 credits. A **credit** is equal to ten (10) notional hours of learning. A **notional hour** includes direct contact time with teachers and trainers and non-contact time which is time spent on independent study, working on assignments and on other forms of assessment. A **unit standard** is equal to 3 credits. Unit standards are registered statements of desired education and training competencies and their associated performance criteria together with administrative and other information (e.g. standard and level numbers, number of credits etc.).

Qualifications established by the SQA can be built up from separate unit standards which the individual has taken or has demonstrated as having the competency. The SQA recognizes training which is one unit standard or more in duration. One unit standard under the mandate of the SQA refers to a programme of learning comprising:
- Credits
- Formal assessment
- A minimum of 30 notional hours

Section 3: An overview of the Qualifications Map

3.1. The Map in General
The SQA has adopted a 10 level Qualifications map. The lowest qualification type on the map is the Primary Qualification and the highest the Doctoral and Post-Doctoral Qualifications. Generally, the map builds on the hierarchy of competencies, with each level of qualification becoming increasingly more complex as progress is made up the pathway of the map. Qualification types follow an international orientation (as does much of the map). This hierarchy of competencies is best seen in the level descriptors. For the layman, a concise version of the level descriptors is attached to this document.

As can also be gauged, the map is geared towards the post-secondary/further and higher education level to a great extent. This is the case as the National Curriculum is already, in a sense, a framework for primary and secondary

education. For the time being the framework addresses principally the higher levels of education and training.

3.2. Notional Hours
Notional hours, for example, are given for the post-secondary/further and higher education level and not for General Education. A minimum number of notional hours is given for the qualification types so as to allow for some flexibility in the design and implementation of programmes. Hours are used rather than days or weeks to allow for different modalities in the implementation of courses. The shortest allowable length for the implementation of a qualification on the map is 1200 hours, amounting to 120 credits.

3.3. The Qualifications Map
The map of qualifications is shown below:

A summary of the level descriptors is presented below:

Summary of qualifications

Qualification type	Descriptors	Type of Occupation
PhD, Post-Doctorate	• Conduct cutting edge research in the field of study • Develop new techniques, ideas or approaches • with complete autonomy	Doctor, Researcher
Master	• Mastery of knowledge in the field of study • Propose solutions based on critical analysis of complex issues and research • Involving management of resources and supervision of others.	Expert/Specialist
Post Graduate	• In-depth specialized knowledge in the field of study • Apply specialized skills and principles based on systematic analysis of data in the field of study • Within broad autonomy	Specialist
Degree	• In-depth knowledge in the field of study • Apply well-established principles, requiring a wide variety of data to solve problems in different contexts • within broad autonomy	Manager/supervisor
Advanced Diploma	• Specialized knowledge in the field of study • Apply varied and specialized procedures and techniques in the field of study requiring basic research • within broad parameters and a certain autonomy	Technician specialized
Diploma	• Broad knowledge in the field of study • Apply varied procedures and techniques, to solve concrete problems, in non-routine contexts • under broad guidance	Technician
Advanced Certificate	• Operational knowledge in the field of study • Apply a range of procedures and techniques in the field of study, to solve familiar problems in fairly routine contexts • under general supervision	Trades person/ Specialized at intermediate level
Certificate	• Basic operational knowledge in the field of study • Apply basic procedures and techniques in response to precise instructions • under direct supervision	Apprentice/ skilled at basic level

| General | • In-depth knowledge in particular subject areas | Specialized general |

Advanced Certificate	• Apply a range of procedures and techniques in the field of study, to solve problems in a wide range of contexts • under general supervision	education
Secondary Certificate	• Broad-based knowledge • Apply basic procedures and techniques • in a controlled environment and under direct supervision	General education
Primary Certificate	• Basic knowledge • Apply basic procedures and techniques related to literacy, numeracy and IT skills involving development of desirable attitudes and values • under continuous guidance, regular checking and limited autonomy	Basic educational foundation

A more comprehensive version of the level descriptors can be found in the Annex.

Section 4: Issues Arising from the Implementation of the Map

4.1. Implications for Learners.
The map informs learners as to the nature of qualifications on the framework. It indicates recognized qualifications types and the pathways to these. For learners with foreign certificates, the map is the main tool used to measure the "local currency" of their qualification.

4.2. Implications for Training Providers
The map clarifies for providers the nature of qualifications that are on offer and their levels. Training providers developing courses are guided by the descriptors and the notional hours, as well as other attendant regulations (for example, that of the definition of training under the SQA). Courses are validated using these criteria. Providers are to incorporate required unit standards for particular levels to allow for the articulation of qualifications. In subjecting qualifications to validation, providers are to ensure that the required resources and policies are in place. This is especially critical for the process of accreditation of the provider to deliver the qualification.

4.3. Implications for Policy makers
As the map becomes a reality the policies or current practices that need adjustment will be thrown into relief. Some of these, for example, the implications of the use of notional hours rather than days is immediately evident. Other policies, for example, that of student selection into and progression within institutions may require alignment. Resource implication, for example, to cater for the essential unit standards (if these were not already being covered) will need to be addressed. The implementation of the map will also, amongst others, make

for a rationalised qualifications landscape, and in this scenario, salaries and schemes of service can also be rationalised and aligned with a national system where the value of qualifications is no longer be uncertain.

4.4. Implications for Employers
The map shows at a glance the qualifications, their various levels, and clarifies the value of each qualification. It shows employers what their employees need to attain to arrive at certain levels of education and training and it provides a useful tool around which they can develop their schemes of service.

4.5. Implications for Professional Organizations
Organizations regrouping professionals have a guide as to the qualifications landscape from which they can develop qualifications in their own area. However, in the development of standards for qualification these organisations have a role to play in deciding with the SQA as to the professional competencies that should be included in the qualification. Similarly professional organisations will need to assist the SQA in accrediting training providers.

Annex:

Qualifications Map

NQF level	Band	Qualification type	Level descriptors			
			Degree of complexity of tasks	**Reasoning and problem solving**	**Knowledge**	**Autonomy and responsibility**
10	Higher Education and Training	PhD, Post-Doctorate	Carry out processes that: require originality and mastery in the application of in-depth and specialized knowledge involve substantial contribution to the development of new techniques, ideas, or approaches in research and enquiry in the field of study demonstrate initiative and employ a wide range of advanced research skills applied to complex tasks in highly specialized contexts	Generate new knowledge and applications through conceptualizing, designing and implementing a research project at the forefront of the field of study Make sound judgement on and provide new insights into complex issues based on systematic and supported analysis in specialist fields involving aspects of uncertainty Demonstrate interpersonal communication skills in the context of consultation and dissemination of new findings to specialist and non-specialist audiences	Demonstrate evidence of creating and interpreting new knowledge based on original and advanced research at the forefront of the field of study, to satisfy peer review and merit publication Analyze and synthesize comprehensively and critically a substantial body of knowledge in the field of study in order to elicit and establish relationships between the elements of the subject in the area of research Conceive, write, critically analyse, discuss, compare specialized texts, propose new insights into the field of study and generate new knowledge Understand the limits of the knowledge and the necessity for further research and continuous development in the field of study	Operate in accordance with broad development or strategic plan and budget in a completely self directed manner with full responsibility and accountability for all aspects of advanced research work and including management of resources and supervision of others
9		Master, Post Graduate	Carry out processes that: require a measure of originality and mastery in the application of in-depth and specialized and/or broad knowledge Involve the use of established techniques of research and enquiry, to internationally recognized standards, to create and interpret knowledge in the field of study	Evaluate critically the appropriateness of different problem solving approaches, the underpinning methodologies, and where appropriate, propose new hypotheses or solutions Make sound judgement on complex issues based on systematic and innovative analysis in contexts involving aspects of uncertainty	Demonstrate evidence of critical and systematic understanding of knowledge and current problems and/or insights at the forefront of their field of study or area of specialization Analyze and synthesize comprehensively and critically current research and advanced scholarship in the field of study	Operate in accordance with broad development or strategic plan and budget in a completely self directed manner with responsibility and broad ranging accountability for management of resources and supervision of others.

Level		Qualification	Applying knowledge and skills	Problem solving	Knowledge	Autonomy and responsibility
			require the application of a wide range of skills applied to tasks in highly varied and/or highly specialized contexts.	Demonstrate interpersonal communication skills in the context of consultative and/or supervisory role	Conceive, write, critically analyse, discuss, compare specialized texts, propose new insights into the field of study and possibly generate new knowledge Understand limits of the knowledge and the necessity for further research and continuous development in the field of study	
8		Post Graduate	Carry out processes that: require a mastery in the application of in-depth and specialized knowledge Involve the development and adaptation of procedures to specific and professional context in the field of study require the application and the consolidation of a wide range of skills applied to tasks in highly specialized contexts.	Evaluate critically the appropriateness of different problem solving approaches and where appropriate, propose a range of solutions Make sound judgement on complex issues based on systematic analysis in specialized contexts involving aspects of uncertainty Demonstrate interpersonal communication skills in the context of consultative and/or supervisory role	Demonstrate knowledge and intellectual independence in the critical and systematic understanding of ideas, principles and concepts of their area of specialization Analyze and synthesize critically current research and advanced scholarship in the field of study Conceive, write, critically analyse, discuss and compare specialized texts Understand limits of the knowledge acquired, its influence on analysis and interpretation and explore lines of research	Operate in accordance with broad development or strategic plan and budget Within a context of broad autonomy with responsibility and broad ranging accountability for management of resources and supervision of others.
7		Degree	Carry out processes that: require self-directed application of knowledge with substantial depth in some areas. involve the development and adaptation of standard procedures to specific context in the field of study. require the application of a range of technical and other skills to tasks in both varied and highly specific contexts.	Evaluate critically the appropriateness of different problem solving approaches in the field of study. Provide appropriate responses to new situations requiring synthesis and evaluation of heterogenous data in contexts involving aspects of uncertainty. Demonstrate interpersonal communication skills in the context of supervisory and collaborative role.	Demonstrate knowledge and intellectual independence in the critical understanding of ideas, principles and concepts of the field of study, and of area of specialization Analyze, synthesize and evaluate rigorously a wide range of information including consideration of areas of uncertainty. Conceive, write, critically analyse, discuss and compare specialized texts.	Involved in the planning, resourcing, managing processes and guiding or supervising the work of others. within a context of broad autonomy with complete accountability for determining, achieving and evaluating personal and /or group outcomes.

					Understand the limits of the knowledge acquired and its influence on analysis and interpretation.	
6	Further Education and Training	Advanced National Diploma	Carry out processes that: require a command of highly specialised technical or academic, and basic research skills across a particular branch of a field of study. involve the application of a full range of procedures in the branch of study. are employed in highly variable routine and non-routine contexts	Propose appropriate responses to resolve given or contextual abstract problems. Provide adequate responses to unfamiliar situation requiring synthesis and consideration of heterogeneous data. Demonstrate interpersonal communication skills in the context of professional consultation	Demonstrate specialised knowledge with depth in a particular branch of a discipline Analyse, reformat and evaluate a wide range of information Conceive, write and discuss specialised texts Understand and interpret fundamental and highly technical information in a particular field of study	Involved in planning, resourcing and managing processes within broad parameters and functions with responsibility for determining, achieving and evaluating personal and / or group outcomes.
5		National Diploma	Carry out processes that: require a wide range of specialized technical and/or academic skills involve a wide choice of standard and non-standard procedures are employed in a variety of routine and non-routine contexts	Research, adapt and implement innovative and creative processes Determine appropriate methods and procedures in response to a range of concrete problems and with reference to some theoretical concepts. Demonstrate interpersonal communication skills in order to train or supervise	Employ broad knowledge base with substantial depth in some areas Analyse and interpret a wide range of data and make informed judgement Prepare, present and discuss oral and/or written reports Understand and interpret relatively complex technical information	Involved in activities with full responsibility for the nature, quantity and quality of outcomes, under broad guidance, with possible responsibility for the achievement of group outcomes with some responsibility for the supervision of others.
4		Advanced National Certificate	Carry out processes that: cover a range of well developed technical and/or academic skills involve a significant choice of procedures are executed within a range of familiar contexts.	Use a range of known responses to solve familiar problems Have a range of sometimes innovative responses to concrete but often unfamiliar problems. Demonstrate interpersonal skills in order to communicate information, to convince or care for others	Employ broad knowledge base incorporating some theoretical concepts Analyse and interpret information and make informed judgement. Prepare oral and written reports on work done or on incidents Understand working instructions and simple technical documents	Involved in directed activities, with some autonomy, under general supervision, with some responsibility for the quantity and quality of output for self and others with possible responsibility for supervising others.
3		National	Carry out processes that: cover a range of specialized technical	Apply procedures and/or techniques in response to precise instructions in	Employ basic operational knowledge	Involved in directed activities

		Certificate	skills in a precise field of study involve repetitive and familiar procedures are executed within closely defined parameters	order to obtain expected results Propose new solutions, adjustments and adaptations Exchange factual information	Refer to readily available information Use known solution to familiar problems Fill in working forms or other relevant formats Understand working instructions	under general supervision and quality control with limited responsibility for the quantity and quality of their work with no responsibility for guiding others
4	General Education	Advanced level	Carry out processes that: deal with advanced hypothetical propositions which will be directly linked to a concern, topic or theme require developed abstract thinking skills to solve complex problems Involve a wide range of procedures, often in non -standard combinations	Demonstrate the ability to gain and apply a range of knowledge, skills and understanding at a detailed level Show evidence of the ability to analyze, synthesize a range of data and to comprehend material of reasonably complex nature Determine the proper methods and procedures to respond to a variety of problems Articulate the results of their study and research clearly, accurately, and in a balanced and rational manner	Demonstrate wide -ranging understanding of the subject(s) at hand but with in depth knowledge of certain areas Prepare oral and written essays with coherency on research done	Involves a high degree of independent learning, but will often require input or guidance from others to complete of tasks Displays qualities and transferable skills useful in situations requiring the exercise of some personal responsibility and judgement
2		Secondary	Carry out processes that: deal with hypothetical propositions involving abstract thinking and requires the combination of elements in a systematic way	Apply procedures and/or techniques related to language, mathematical, ICT, scientific, historical, socio-cultural and environmental domains Transfer skills in multiple contexts according to set procedures and use them to learn more effectively Apply critical and creative thinking to solve problems Communicate information,	Acquire broad-based knowledge and skills and develop desirable attitudes, to provide the basis for independent and future learning, and application of learning.	Involved in directed learning under guided autonomy and with close supervision with limited responsibility aiming towards increased autonomy by taking positions

				instructions, ideas and feelings in a range of different cultural, language and social contexts		
1		Primary	Carry out processes at a concrete (hands-on) level based on familiar content and involving logical groupings	Apply basic procedures and techniques related to language, mathematical, ICT, scientific, historical, socio-cultural and environmental domains Apply repetitive and other learning skills to instill sound elementary knowledge, attitudes and values Demonstrate basic communication skills to inform, recall and express facts, ideas, views, opinions and feelings	Acquire basic, broad-based knowledge and skills (operational literacy in terms of Reading, Writing and Arithmetic) and develop desirable attitudes and values.	Involved in basic directed learning under continuous guidance with close supervision with limited responsibility and autonomy