European Training Foundation

Orientation Note on Regional Qualifications Frameworks

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Table of Contents

Tables

Table of figures

Acronyms

ACQF	African Continental Qualifications Framework (ACQF)
AQRF	ASEAN Qualifications Reference Framework
EQF	European Qualifications Framework
ASEAN	Association of Southeast Asian Nations
ETF	European Training Foundation
NQF	National Qualifications Framework
RQF	Regional Qualifications Framework
QF-EHEA	Qualifications Frameworks in the European Higher Education Area
PQF	Pacific Qualifications Framework
PQRS	Pacific Register of Qualifications and Standards
SADC	Southern African Development Community
SADCQF	SADC Qualifications Framework
TCCA	Technical Committee on Certification and Accreditation
TQF VUSSC	Transnational Qualifications Framework of the Virtual University of the Small States in the Commonwealth
VUSSC	Virtual University of the Small States in the Commonwealth

Introduction

This development and publication of this Orientation Note on RQFs in 2021 is timely, at a moment when two new Regional Qualifications Frameworks (RQF) are emerging, and others are reviewing progress in implementation and reflecting on new dimensions of adaptation to a world in transformation.

The African Continental Qualifications Framework (ACQF) is advancing in its development process (2019-2022), and in Latin America a new RQF is emerging. The ACQF development process is led by the African Union, working in partnership with the European Union and ETF, and beyond the ACQF policy and technical document with action plan, is delivering 10 Guidelines, mapping and thematic analyses, and supporting capacity development, networking and a specific website. This Orientation Note is a valuable reference point for development of ACQF Guidelines on level descriptors and on referencing, and for the design of ACQF policy and technical document, and it will be used in combination with contextualized information and views collected via research, surveys and stakeholders' discussions.

CINTERFOR facilitates the process of development of an RQF in Latin America, through a participative process, combined with capacity building and analysis.

The Southern African Development Community (SADC) is engaging a reflection on its RQF, and results of the analysis will feed into the discussion at the November 2021 meeting of SADC Technical Committee on Certification and Accreditation (TCCA).

The European Qualifications Framework (EQF) is advancing the reflection on a systematic approach for dialogue and comparison with National Qualifications Frameworks (NQFs) in other regions and continents.

The focus of this briefing paper is on the development of learning outcome level descriptors. Learning outcome level descriptors are seen as essential aspects of a qualifications framework; be it sectoral, national or regional. The perceived importance of level descriptors lies in how they compare in relation to another set of level descriptors in another qualifications framework and the information that can be derived from this comparison. However, level descriptors are only one aspect of a qualifications framework and in many respects their development is influenced by other aspects of the qualifications framework.

This Orientation Note is divided into three parts:

- Part One looks at regional qualifications frameworks (RQF), their role and key features and how these influence the level descriptors, as well the role of referencing.
- Part Two acknowledges that level descriptors are influenced by other aspects in the qualifications framework, and looks at commonalities of domains, considerations when developing level descriptors in a regional qualifications framework, and how the levels link to quality assurance.
- Part Three consolidates the lessons learnt from regional qualifications frameworks.

The process of conceptualization, drafting and dissemination of this Orientation Note was based on dialogue, review of literature and resulted in mutual learning. ETF acknowledges the excellent work of the author - Andrea Bateman – and cooperation with ETF project coordinator, Eduarda Castel-Branco.

1. RQFs: systemic view

1.1 Role of RQFs

The *Global inventory of regional and national qualifications frameworks* (2017) estimates that at that time there were over 150 national qualifications frameworks (NQFs) worldwide being developed or implemented. The *Global inventory of regional and national qualifications frameworks* (2019) does not indicate an increase in the number of NQFs but indicates that the 'numbers of frameworks, national and regional, remain stable, while implementation of most frameworks has deepened and widened since 2017' (p. 8). The *Global inventory of regional and national qualifications frameworks* (2019) recognises 'seven world regions qualifications frameworks' (p. 10), with the more recent comparative study of regional qualifications initiatives (ETF 2021) recognizing 15 regional initiatives in addition to the European Qualifications Framework (EQF) and the Qualifications Frameworks in the European Higher Education Area (QF-EHEA).

The EQF (Council of the European Union 2017, p. 6), defines a NQF as:

> *An instrument for the classification of qualification according to a set of criteria for specified levels of learning achieved, which aims at integrating and coordinating national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society.*

Definitions of an RQF tend to focus on what they do rather than what they are, however the ASEAN Qualifications Reference Framework (ASEAN 2015, p. 17) offers the following definition of a RQF:

> *A broad structure of levels of learning outcomes that is agreed by countries in a geographical region. A means of enabling one national framework of qualifications to relate to another and, subsequently, for a qualification in one country to be compared to a qualification from another country.*

Regional qualifications frameworks are sometime known as transnational qualifications frameworks, meta frameworks or common reference frameworks. These frameworks are developed in communities of countries mainly to facilitate mutual trust in qualifications and to make qualifications systems more understandable. In doing so they aim to enhance learner and worker mobility and to support other shared initiatives such as credit transfer systems or free trade agreements related to goods and services. For most of the RQFs the basis of these arrangements is within a geographical region (such as the EQF or SADC) and others are arrangement not in a geographical region (such as the VUSSC TQF) (Keevy et al 2010).

RQFs that are common reference frameworks or meta frameworks have very different functions to that of NQFs.

NQFs generally aim to make a country's qualifications system more transparent and coherent, either reflecting the current status or taking a reform and transformational function (Cedefop 2010). Cedefop (2010, p. 5) also acknowledges that 'designing and implementing an NQF implies something more than agreeing on a set of technical features, for example a hierarchy of levels of learning or a register of certificates and diploma. Setting up an NQF is about creating a platform for dialogue involving as broad a group of stakeholders as possible'.

On the other hand, RQFs are seen more as a translation device by which countries can compare their qualifications (Bateman and Coles 2015, p. 15). They aim to develop a common understanding and strengthen transparency of member country qualifications, seek commonalities, and build mutual

trust across the community of countries. RQFs, have grown out of communities of countries with an aim 'to facilitate mutual trust in qualifications and promote student and worker mobility; therefore, they are linked to other initiatives related to mutual recognition of qualifications, of goods and of services' (Bateman and Coles 2015, p. 19). Countries that have a regional, economic or social identity, or wish to see one develop, have cooperated in the development of regional qualifications frameworks (RQFs).

The table below outlines the differences between national and regional qualifications frameworks.

Table 1: Functions and rationales of national and regional qualifications frameworks

	Qualifications framework	
Area of comparison	**National**	**Regional**
Main function…	To act as a benchmark for the level of learning recognised in the national qualifications system	To act as a translation device to enable comparison of levels of qualifications across member countries
Developed by…	National governments, in many cases through national agencies set up for this purpose	Countries in a region acting jointly, mostly facilitated by a regional body or regional association
Sensitive to…	Local, national and regional priorities (e.g. levels of literacy and labour market needs)	Collective priorities across member countries (e.g. enabling mobility of learners and workers across borders)
Currency/value depends on…	The extent of regulatory compliance required; the level of buy-in from key role-players (such as industry, learning institutions and professional associations); the perceived or real value to the broad population	The level of trust between member countries; the transparency of national quality assurance systems; mutually agreed regional priorities
Quality is guaranteed by…	Adherence to nationally agreed quality assurance systems, exemplified in the practices of national bodies and learning institutions	The common application of the referencing criteria and guidelines, as well as the robustness and transparency of the national referencing process, and national quality assurance systems
Levels are defined by reference to…	National benchmarks which may be embedded in different learning contexts, e.g. school education, work or higher education	General levels of learning complexity across all contexts that is applicable to all countries

Source: Adapted from Coles et al 2014

A key underpinning concept of any RQF is that they support and add value to NQFs or national qualifications systems. There appears to be an acceptance that the regional initiatives (that is the development and implementation of an RQF) provides a strong avenue for facilitating policy learning across the community of countries (Bateman and Coles, 2015, Grootings 2007). Bateman and Coles (2015, p. 19) indicate that RQFs 'have a coordinating effect and this is often due to the guidance

offered to countries on the commonalities and differences between the national approach and the approaches in other countries'.

RQFs do not replace NQFs or reduce in anyway the scope of the national approach, nor do they diminish the sovereignty of the individual members within the community of countries. Tuck (2007, p.6) indicates that RQFs respect 'well established national traditions'. Bateman and Coles (2013, p. 21) note that RQFs 'are different to bilateral, trilateral and multilateral agreements between national qualifications agencies, professional bodies and education providers for qualifications standards and recognition. Regional qualifications frameworks do not replace or undermine these agreements, but should support and enhance them'.

1.2 Overview of RQFs

The recent ETF report (ETF 2021) identified and studied 15 regional initiatives (excluding the EQF and EQ-EHEA) which are summarised below.

Table 2: List of RQF initiatives identified

RQF initiatives identified and investigated	
1. African Continental Qualifications Framework (ACQF)	9. Intergovernmental Authority on Development (IGAD) in Eastern Africa
2. Arab Qualifications Framework for Higher Education (AQF; ANQAHE Model)	10. Marco de cualificaciones Alianza del Pacífico (Pacific Alliance) (MCAP)
3. ASEAN Qualifications Reference Framework (AQRF)	11. Marco de Cualificaciones para la Educación superior centroamericana (MCESCA)
4. CARICOM Qualifications Framework (CQF)	12. Pacific Register of Qualifications and Standards/Pacific Qualifications Framework (PQF)
5. Conseil Africain et Malgache pour l'Enseignement supérieur (CAMES)[8]	13. Southern African Development Community (SADC) Qualifications Framework
6. ECOWAS Regional Qualifications Framework of West Africa	14. South Asian Association for Regional Cooperation (SAARC) Regional Qualifications Framework
7. East African Qualifications Framework for Higher Education (EAQFHE)	15. Transnational Qualifications Framework for the Virtual University for Small States of the Commonwealth (TQF VUSSC)
8. Gulf Qualifications Framework (GQF)	

It is not the intention of this briefing paper to address each of the 15 RQFs initiatives but to provide an overview of RQFs and in particular the level descriptors. This briefing paper focuses on five regional frameworks (that is the European Qualifications Framework [EQF], the Pacific Register of Qualifications and Standards/Pacific Qualifications Framework [PRQS/PQF], the ASEAN Qualifications Reference Framework [AQRF], the Southern African Development Community Qualifications Framework [SADCQF], and the Transnational Qualifications Framework for the Virtual University for Small States of the Commonwealth [TQF VUSSC]). These frameworks are all in various stages of implementation, with the EQF being an inspiration to other frameworks.

The table below outlines member countries for the five RQFs reviewed, and the date of endorsement or approval. In some RQFs it is not made clear from the documentation the date of formal endorsement, which often reflects the iterative process of development of an RQF and the increased understanding of the member countries over time.

Table 3: Summary of RQFs member countries and legal basis

RQF	Endorsement	Member countries
AQRF	2015, agreement endorsed by the ASEAN Economic Ministers, ASEAN Education Ministers, and Labour Ministers	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
EQF	2008, The Council of the European Union recommendation	EU Member States, plus 11 countries that are working towards implementing the EQF - Iceland, Liechtenstein and Norway (European Economic Area countries), Albania, North Macedonia, Montenegro, Serbia and Turkey (candidate countries), Bosnia & Herzegovina, Kosovo (potential candidates) and Switzerland
PRQS/PQF	2011 initial agreed version, no formal agreement noted	States of the Pacific Island Forum: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Australia and New Zealand do not formally engage with the framework.
SADCQF	Established by ministers in 2011 and launched in 2017 as SADCQF, no legislation	Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania, Zambia, Zimbabwe
TQF VUSSC	2008 concept paper endorsed by VUSSC interlocutors	Antigua and Barbuda, Barbados, Belize, Botswana, Brunei Darussalam, Cyprus, Dominica, Fiji, Grenada, Guyana, Jamaica, Kiribati, Lesotho, Maldives, Malta, Mauritius, Namibia, Papua New Guinea, Samoa, Seychelles, Sierra Leone, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Swaziland, The Bahamas, The Gambia, The Solomon Islands, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu

Source: https://europa.eu/europass/en/european-qualifications-framework-eqf, ASEAN 2015, ETF 2021, Bateman et al 2016, Commonwealth of Learning 2015, Council of the EU 2017, PQF 2011, SADCQF 2017,

Most RQFs act as a common reference framework (e.g., AQRF, EQF) whereas others are extended and include other structures or initiatives, such as:

- Common achievement standards, be they qualifications or competency standards (e.g., Southern African Development Community (SADC))
- Common quality standards for quality assurance agencies and for providers regional/common qualifications, and a national qualifications framework for small island states (i.e., the Pacific Register of Qualifications and Standards (PRQS)).[1]

1.3 Key features of an RQF

1.3.1 Introduction

This section aims to outline the key features of an RQF. Although RQFs vary in their design and use, in general, they include both technical aspects and operational aspects. These features include clearly articulated purpose and scope, underpinning principles, a set of level descriptors, specified linkages to quality assurance criteria or arrangements, and governance arrangements.

1.3.2 Purpose and scope

RQFs by design are an agreement among member countries. Tuck (2007) considers that the first step in developing a qualifications framework is to clearly articulate its purpose and objectives. Tuck

[1] ACQF 2021, p. 40

(2007, p. 11) states that there are two main reasons for developing and NQF (and is also true for RQFs): 'promoting lifelong learning; and quality assurance and recognition'.

The importance of the purpose and scope in the RQF should not be ignored in an RQF's design process as it is these factors that influence the development of the level descriptors (including the determination of levels and domains).

In establishing an RQF, member countries should agree on the purpose and scope of the initiative. RQFs generally have more than one objective or purpose but they generally aim to:

- 'deepen integration and harmonisation
- create a common identity
- facilitate:
    - transparency of multiple complex systems
    - mobility of workers and students
    - recognition and credit transfer
- support economic imperatives such as removal of barriers to trade'.[2]

The recent RQF study (ETF 2021, p. 20) groups the objectives into three partially interlinked areas:

- 'Mobility of (workers and learners
- Quality/quality assurance
- Harmonisation towards comparability and transparency'.

All RQFs aim to have some transformational influence on NQFs or systems. Most RQFs aim to promote lifelong learning, a learning outcomes approach to qualifications, improve the quality of qualifications, and encourage harmonization. However, it is possible that RQFs may wish to influence aspects of qualifications frameworks within member countries and in turn the qualifications formulated. Regardless, the aim to transform NQFs or systems is by mutual agreement and articulated in the design of the RQF.

The scope of learning that the RQF addresses across the member countries is often specified in terms of formal learning (education and training sectors), non-formal learning and informal. Some however are silent on the scope of the RQF, possibly deliberately so. Generally, RQFs aim to be all encompassing of all learning, regardless of how it has been achieved as a means to encourage lifelong learning and equity in the recognition process. At a RQF level it is not useful to refer specifically education and training sectors, as these sectors (and any divisions made) are the remit of the members of the community in their NQF or qualifications system.

The table below summarises the purpose and objectives as well as the scope of each of the five RQFs under review.

Table 4: Purpose and scope of RQFs

RQF	Purpose	Objectives	Scope
AQRF	Common reference framework, acts as a device to enable comparisons of qualifications	• Support recognition of qualifications • Promote learner and worker mobility • Encourage qualifications frameworks that can facilitate lifelong learning	Education and training - informal, non-formal and formal learning (includes but is not limited to post compulsory schooling, adult and community education, TVET and higher education)

[2] Coles personal communication cited in Bateman and Coles (2013)

RQF	Purpose	Objectives	Scope
		• Encourage national approaches to validating learning gained outside formal education • Lead to better understanding of qualifications systems • Promote higher quality qualifications systems	
EQF	Common reference framework, translation device	• Support lifelong learning and better link formal, non-formal and informal learning • Improve transparency, comparability and portability of qualifications	Qualifications within frameworks or systems
PRQS/PQF	Common reference framework, act as a translation device	• Establish comparability • Facilitate recognition of qualifications for portability of learning and integration of labour mobility	Comprehensive - formal (school, higher education, technical and vocational education and training) and non-formal learning
SADC QF	Mechanism for comparability and recognition of qualifications	• Providing a mechanism for comparability and recognition of qualifications in SADC, • Facilitating mutual recognition of qualifications in all Member States • Harmonising qualifications wherever possible • Promoting the transfer of credits within and among Member States and even beyond • Creating SADC regional standards where appropriate	General education, technical and vocational education and training (TVET), higher education, lifelong and out-of-school or non-formal education
TQF VUSSC	Common reference framework; act as a translation instrument for the classification of VUSSC qualifications, and for the promotion of lifelong learning	• Deepen integration and harmonization Support economic imperatives such as removal of barriers to trade • Create a common identity • Facilitate: o Transparency of multiple complex systems o Mobility of workers and students o Recognition and credit transfer	TQF has been approved as a unified qualifications framework that includes higher education qualifications and post-secondary technical and vocational qualifications offered through the VUSSC. TQF encompasses adult basic education and training, vocational education and training, as well as higher education.

Source: ASEAN 2015, ETF 2021, Bateman 2021, Commonwealth of Learning 2015, Council of the EU 2017, PQF 2015, SADCQF 2017.

1.3.3 Principles

Most RQFs state underpinning key principles, either implicit or explicit, which outline core values or limitations to the framework. In many respects, the principles should acknowledge that the RQF does not impinge in anyway on national sovereignty and on the national approach to qualifications. They should aim in the main to develop a relationship that is mutually beneficial to the RQF and to the national qualifications frameworks or systems.

In the AQRF (2015, p. 3), these principles are explicit, noting that the framework:

- Invites voluntary engagement
- Aims to be a neutral influence and does not require any changes to national qualifications frameworks or systems
- Respects each member state's specific structures and processes
- Acknowledges that member states will determine when they will undertake the referencing process.

The SADCQF (2017) also outlines key principles important to the community, including (but not limited to):

- Promotion of regional solidarity and co-operation, peace and prosperity
- Equity in and among member states
- Respect for regional and multilateral decisions
- Respect for legislation in place in member states.

The EQF (2017, clause 27 and clause 29) makes it clear noting that:

> *This recommendation does not replace or define national qualifications frameworks or systems. The EQF does not describe specific qualifications or an individual's competences…*
>
> *Given its non-binding nature, this recommendation confirms to the principles of subsidiarity and proportionality by supporting and supplementing Member State's activities…It should be implemented in accordance with national law and practice.*

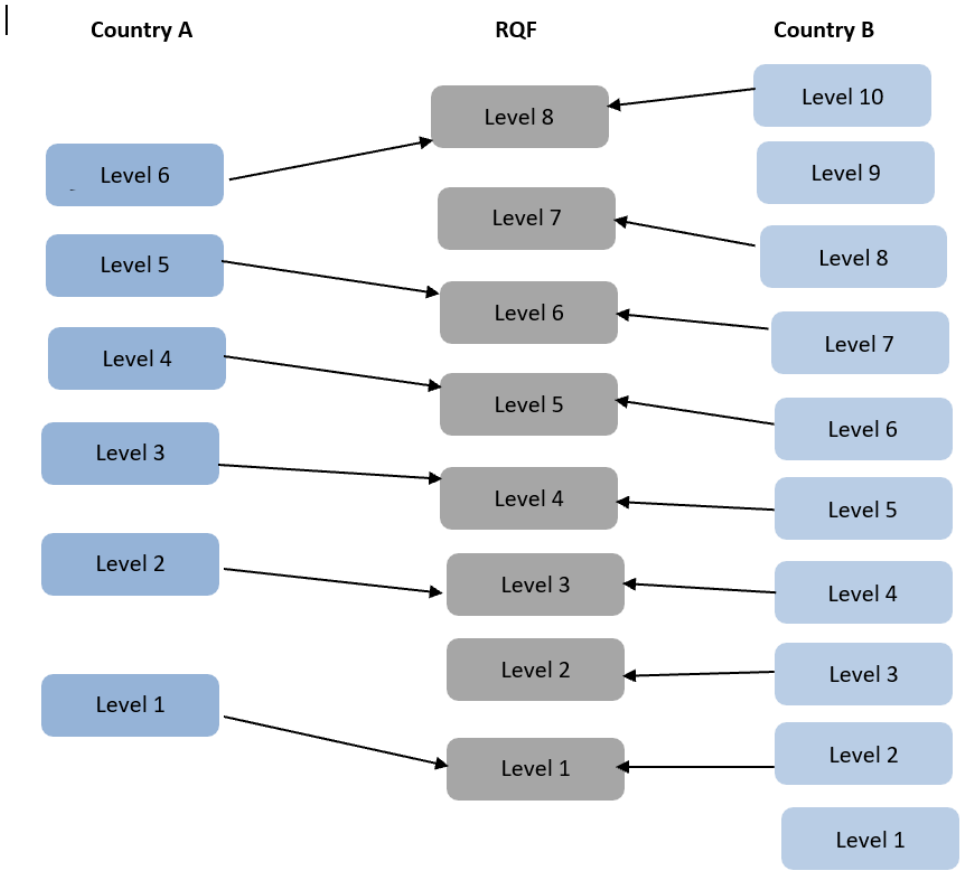
Within an RQF these principles may directly influence the development of level descriptors and may also directly influence the engagement of the community, the implementation of the framework, and the approach to referencing process.

1.3.4 Level descriptors

Within the design of an RQF much emphasis is placed on the level descriptors, as they are seen as the key structure that enables 'NQFs and national qualifications systems to align with or "talk to" each other' (Burke et al 2009). Both the EQF and the AQRF encourages participating members to referencing their NQFs (or qualifications systems) and not individual qualifications or qualification types to the framework.

It is these level descriptors to which national qualifications frameworks or systems are referenced and on which transparency is based. The following figure summarises this concept.

Figure 1: RQF as a translation device



Many RQFs make clear statements that the framework is based on learning outcomes, e.g. PQF, EQF. The EQF (Council of the EU 2017, p. 6) defines learning outcomes as:

> *Statements regarding what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and responsibility and autonomy.*

RQFs not only incorporate learning outcomes into their design they in turn encourage national qualifications to also be based on learning outcomes, both in the design of the NQF and also in the qualifications aligned to the NQF.

Within the RQF, the level descriptors are written as generic learning outcomes that can be applied across the education and training sectors. These learning outcomes may reflect some or all of the domains of the participating NQFs or include aspects that they wish to encourage in NQFs within the community of countries.

The ETF report (ETF 2021) indicates that across the 15 regional initiatives there was a predominance of 10-level RQFs.

The table below summarises the number of levels and domains on which the descriptors are based. Chapter 2 of this briefing paper provides a more detailed discussion of the level descriptors of these frameworks, a discussion on what may influence the decision on how many levels and the domains used, as well as guidance on development of level descriptors.

Table 5: Levels and domains of the RQFs

RQF	Levels	Domains
AQRF	8	Knowledge and Skills, Application and Responsibility
EQF	8	Knowledge, Skills, Responsibility and Autonomy
PRQS/PQF	10	Knowledge and Skills, Application, Autonomy
SADC QF	10	Knowledge, Skills, Autonomy and Responsibility
TQF VUSSC	10	Knowledge and understanding, skills and wider personal and professional competencies

Source: ASEAN 2015, Council of the EU 2017, PQF 2015, Commonwealth of Learning 2015, SADCQF 2017

The EQF, AQRF and the SADC QF do not align their level descriptors to qualification types as the focus is on levels of learning complexity and allowing members of the community to determine their own qualification types and how they align to the RQF level descriptors. However, the TQF VUSSC, which has a focus on classifying VUSSC qualifications, aligns qualification types (such as Bachelor or Advanced Diploma). The TQF VUSSC notes that these qualification types are 'illustrative examples which encourage flexibility of assignment of qualifications to levels on the framework' (TQF VUSSC 2015, p. 1). The PRQS/PQF was originally designed with the RQF only using the level descriptors, with the PQF qualification type descriptors to be used by the Small Island States as an NQF (PQF 2011, p. 38):

> *The qualification type descriptors are included for explanatory purposes for those PICTs[3] that do not have a national qualifications framework. The PQF may function as a national qualifications framework for those PICTs that choose to adopt it as a national qualifications framework. The qualification types have been assigned a level on the framework.*

However, later iterations of the PQF indicate that the PQF qualification type descriptors are now an accepted component of the RQF, and overtime have signaled a change in design and focus of the RQF.

1.3.5 Linkages to quality assurance arrangements

Quality assurance can be defined as planned and systematic processes that provide confidence in services by providers under the remit of responsible bodies (Bateman et al 2009, Bateman & Coles 2017a, Bateman et al 2012).

Building mutual trust and strengthening transparency across the community of countries is predicated not only on the transparency of qualification structures and outcomes, but also on the quality assurance arrangements that apply to qualifications formulation and approval and the provision of those qualifications by education and training providers. Trust in qualifications provides confidence to the holder of that qualification and to stakeholders that the individual has actually acquired the learning outcomes associated with the qualification.

Quality assurance arrangements are built into the RQF design in essentially two different ways: as criteria used within the referencing process, or as associated quality assurance framework that is agreed to by the member countries. The table below summarises the approaches to quality assurance across the five RQFs under review.

Table 6: Approach to quality assurance in RQFs

RQF	Approach
AQRF	The referencing process includes 11 criteria. Criterion 6 notes that the national quality assurance system(s) are described. It names three benchmarks for evaluating quality assurance processes within the member state: East Asia Summit Vocational Education

[3] Pacific Island Countries and Territories

RQF	Approach
	and Training Quality Assurance Framework (which includes the quality principles, agency quality standards and quality indicators), International Network for Quality Assurance Agencies in Higher Education (INQAAHE) Guidelines of Good Practice for Quality Assurance and the ASEAN Quality Assurance Network (AQAN) ASEAN Quality Assurance Framework for Higher Education.[4] The ASEAN Quality Assurance Framework outline standards for external quality assurance agencies and for provider (internal) quality assurance.
EQF	The referencing process includes 10 criteria and procedures (Annex III). Criterion 5 notes that the national quality assurance system/s are consistent with the principles in in Annex IV. Annex IV includes 10 quality assurance principles. These principles are included in Appendix 1 of this report.
PRQS/PQF	The PQF is part of regional register for Pacific qualifications –the Pacific Register of Qualifications and Standards. The register and the framework are accompanied by a set of quality assurance standards for agencies (including the registration of providers and accreditation of qualifications) and minimum standards for providers. The quality assurance standards are supported by various policies and procedures, guidelines and criteria. All qualifications accredited by recognised responsible bodies in the member countries may be entered onto the register and are to be aligned to the PQF.
SADCQF	Includes 16 quality assurance guidelines agreed by the member countries. The document does not describe how these quality assurance guidelines will be applied, for example within a referencing process or as an agreed set of quality principles that will be strived for in each country. For example, Principle 2: Ensure the planning for and provision of adequate financial resources for the provision of high quality education and training at all levels in the region.
TQF VUSSC	This RQF notes that the quality assurance mechanisms adopted is a flexible rather than prescriptive approach. The TQF relies on the quality assurance system/s of the national quality assurance agencies (or other recognised agencies) of the member states. It is proposed that the providers and quality assurance agencies will subscribe to the guidelines. There are 7 principles related to providers, and 7 principles related to the national the national quality assurance agencies (or other recognised agencies) of the member states. There are 7 principles related to the TQF Management Committee.

Source: ASEAN 2015, Council of the European Union 2017, PQF 2015, SADC QF 2017, Commonwealth of Learning 2015

All approaches acknowledge that quality assurance is the responsibility of key stakeholders at all levels of the qualifications system. This includes, within the member countries, primarily the national quality assurance agency (or other responsible body) and the provider. However, it is also acknowledged that responsibility for quality assurance is at all levels of a qualifications system be it international, regional, national agency, the provider and social partners; which are often connected and interrelated (Bateman & Coles 2017b).

1.3.6 Governance arrangements of the RQF

As RQFs are based on mutual agreement they vary in terms of the basis of their agreement and governance arrangements, often reflecting the overarching governance and structure of its community of countries. For example:

- The EQF is based on a formal recommendation adopted by the European Parliament and the Council on April 23, 2008 (European Union 2008), which was reviewed and strengthened in 2017 (European Union 2017). An EQF Advisory Group ensures the overall coherence and transparency of the implementation of the EQF. The EQF Advisory Group is also responsible for the follow-up of implementation of the EU Validation of Non-Formal and Informal

[4] This is now known as the ASEAN Quality Assurance Framework.

Learning (RPL) Recommendation. Its membership include: a representative from the 27 member states plus 11 other countries, 16 other representatives from other public entities, 11 organisations that represent European social partners and stakeholders.[5] At a national level, National Coordination Points are responsible to support and coordinate the referencing of the national qualifications systems to the EQF. The European Commission coordinates the implementation of the EQF workplan, initiates the planned evaluations of the EQF and chairs the EQF Advisory Group, and drafts the technical notes for the Advisory Group meetings.[6] Cedefop and ETF are tasked with the organisation of research activities and co-facilitation of special EQF working groups.

- The ASEAN Charter, which was signed by the ten ASEAN Leaders in Singapore on 20 November 2007, provides the legal basis for an ASEAN Qualifications Reference Framework (AQRF). The AQRF was endorsed by ASEAN Ministers in 2015 (ASEAN 2015). The governance structure to provide operational oversight of the AQRF is documented in the agreed governance structure. The AQRF Committee leads the process and is considered a high-level committee to engage with the complex policy and technical issues, including AQRF meetings and referencing report reviews. Each member state is to establish a National AQRF Committee, which is the body that is the interface between the national policymaking bodies and national qualifications agencies and that of the AQRF Committee. Providing oversight, are the three ministerial groups (economic, education and labour) from the member states (ASEAN 2017).

- In the Pacific, the island nations are those from the Pacific Island Forum[7]. The PQF is led by a secretariat working on behalf of the ministers of education and training of the Pacific island nations. The quality assurance agencies within the participating nations do not have a direct voice or representation on the regional committee (Bateman et al 2016).

- SADCQF is formalised under the 1992 SADC Treaty, and especially the Protocol on Education and Training 1997-2020. The SADC Secretariat and Implementation Unit was to have overall responsibility to coordinate, drive the implementation of the SADCQF and report progress of implementation to the Technical Committee on Certification and Accreditation (TCCA), TCAA that provides overall technical oversight, advocates and oversees its implementation. Finally, the SADC Council of Ministers; and Ministers responsible for Education and Training and Science, Technology and Innovation that provide strategic policy leadership and monitor implementation of the SADCQF. At this point in time the SADC has not established an Implementation Unit, due to financial constraints. The intermediary solution found was to distribute the workload among member states and the SADC Secretariat: 6 implementation programs have been planned and are led by South Africa, Namibia, eSwatini, Zambia and Botswana + Secretariat

- The VUSSC is a network of small states, and the TQF VUSSC is managed by the TQF Management Committee. The Committee is an elected with a chair and 2 vicechairs, with a total of six members. The TQF Management works closely with the VUSSC Management Committee (Commonwealth of Learning 2015).

[5] https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?do=groupDetail.groupDetail&groupID=2107 accessed July 2021

[6] Funding: EU budget, especially from Erasmus+: support the regular activities of the National Coordination Points, the research and analytical activities, peer learning activities, maintenance of the EQF website in the new Europass platform. Other EU programmes fund development of NQFs and national qualifications registers and databases.

[7] Noting that Australia and New Zealand do not formally engage with the framework.

How the community of countries are governed affects how the RQF is governed and managed, and the protocols and principles valued by the member countries will affect any decisions related to governance, meeting protocols, and underpinning philosophy.

1.4 RQFs and Referencing

'Referencing is the process that results in the establishment of a relationship between the levels of national qualifications, usually defined in terms of a national qualifications framework, and the levels of the [RQF]' (European Commission 2013, p. 6). The referencing process is a means to build trust and transparency of a member countries' qualifications system and qualification across the member countries. The success of the RQF in building trust comes from 'an open and rigorous referencing process that reflects the collective view of national stakeholders' (European Commission 2013, p. 6).

1.4.1 Approach to referencing

The referencing process is not necessarily uniformly applied across the different RQFs and in some respects reflects the level of implementation of the member countries' NQFs or systems and each member's readiness to reference (ASEAN 2020), as well as 'resource constraints (technical, financial and institutional) for implementation' (ACQF 2021 p. 123).

Table 7: Approach to referencing

RQF	Referencing approach and support documents
AQRF	Within ASEAN, the AQRF, the participating member states are to reference their NQF level descriptors to the AQRF levels, and also for those countries without a NQF to be able to reference key qualifications to the AQRF. There are 11 referencing criteria, refer to Appendix 3. Four AMS have successfully submitted referencing reports (Malaysia, Philippines, Thailand and Indonesia). The AQRF is supported by the AQRF Referencing Guidelines (2020), two concept notes (related to nonformal and informal learning, and learning outcomes) and one briefing paper on qualifications frameworks and quality assurance systems.
EQF	Within the European Union (EU), the EQF referencing process requires participating member states to reference their qualifications levels or qualifications system to the EQF levels. There are 10 referencing criteria and procedures, included as Annex III of the EQF Recommendation of 2017, refer to Appendix 2. EQF published a series of five EQF technical notes on key themes and issues of referencing to EQF.
PRQS/PQF	There is little documented on the process of referencing or aligning NQFs to the PQF. However, the process includes an alignment activity led by the secretariat. No public reports are available.
SADCQF	For SADCQF the process for comparing NQFs or systems has been trialed as an alignment process. There are 10 alignment criteria (refer to Appendix 4) accompanied by steps for the alignment process (which is a self-assessment exercise) and an adjudication process (ACQF 2020). Alignment activities have been undertaken by Mauritius, Seychelles, and South Africa; with the reports publicly available.[8]
TQF VUSSC	The RQF makes it clear that the 'referencing process essentially draws on the commonalities of NQFs, in that most NQFs have reference levels describing types of skills and knowledge in various qualifications, quality assurance principles and guidelines, and methods for recognizing learning gained in different programmes and contexts' (Commonwealth of Learning 2015, p. 27). In addition, it is noted that the process needs to be clear and that established criteria will strengthen the process. Referencing criteria were affirmed in 2017 (Commonwealth of Learning 2017, and refer to Appendix 5).

[8] Note that only Seychelles and South Africa have their alignment reports validated; Mauritius still awaits final validation.

The AQRF referencing process requires an international expert plus an observer from one of the other AMS to be involved in the national referencing process to not only strengthen the referencing process but also to build capability within the region. Both the EQF and the AQRF require an extensive report to be submitted with descriptions of the broader education and training system and more specifically, the qualifications system. These reports are reviewed by the member countries, affirmed and finally made public. The referencing activity includes:

- Responding to criteria and procedures, and responding to quality assurance principles (EQF).
- Responding to criteria and procedures, and responding to a recognised quality assurance framework (AQRF).

The most recent information on the SADC QF indicates a similar process, although it is stated to be an alignment, preceded by a self-assessment. Within the PRQS/PQF processes, the national quality assurance body is to meet the Pacific Quality Assurance Framework for their qualifications to be entered onto the register. TQF VUSSC outlines seven criteria for referencing an NQF or system to the TQF but there is no clear process documented.

It is in the referencing process that the critical importance of the level descriptors in aligning or referencing levels of an NQF to an RQF cannot be denied, as it is the levels that provide an understanding of the member country's qualifications. However, the referencing process is more complex than that. Although the referencing process implies that the level descriptors of the NQF are compared to the level descriptors of the RQF, the referencing country must also respond to other criteria and submit a full and complete report to the community of countries. The referencing (alignment) report must demonstrate and provide evidence that all criteria have been addressed and accurately reflect the status in the referencing country.

In the case of the EQF, each country informs the EQF Advisory Group of the upcoming referencing through a "state of play" presentation; the submission of the actual referencing report is done one month before the official presentation, and all Advisory Group members are invited to provide written comments. Many countries are presenting their second referencing reports, covering new developments and reforms of their qualifications frameworks and systems (e.g. Estonia, France, Ireland, The Netherlands). The 2017 EQF Recommendation encourages countries to update their referencing reports. An important consequence of EQF referencing is the use of EQF levels on qualifications documents and databases, next to the country's NQF level. The indication of EQF levels is voluntary.

1.4.2 Analysis of referencing criteria

Three RQFs have documented referencing criteria and procedures. Within all three frameworks, there are criteria that can only be responded to in the report (black text), and criteria that are more process or procedural orientated (blue text) and a post referencing obligation of the referencing country to provide for certification documentation that makes a reference to the appropriate RQF level.

The table below summarises the commonalities of the referencing criteria across EQF, AQRF and SADCQF. The influence of the EQF is evident. It also identifies the three types of criteria within each list that potentially could be treated differently in the referencing process.

Table 8: Analysis of referencing criteria

EQF	AQRF	SADCQF
	1.The structure of the education and training system is described.	
1.The responsibilities and/or legal competence of all relevant national bodies involved in the	2.The responsibilities and legal basis of all relevant national bodies involved in the referencing	1.Responsibilities of relevant national bodies involved in the alignment process are

EQF	AQRF	SADCQF
referencing process are clearly determined and published by the competent authorities.	process are clearly determined and published by the main public authority responsible for the referencing process.	determined and published by the relevant competent authorities
2.There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF.	4.There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the AQRF.	2.There is a clear and demonstrable link between qualification levels in the NQF/ National Qualification System (NQS) and level descriptors of the SADCQF
3.The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems.	5.The basis in agreed standards of the national framework or qualifications system and its qualifications is described.	3.The NQF/ NQS is based on learning outcomes and links to non-formal and informal learning and credit systems (where these exist)
4.The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.	3.The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent.	4.Procedures for including qualifications in the NQF or describing the place of qualifications in the NQS are transparent
5.The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation.	6 (part a). The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system are described.	5.The National Quality Assurance System for education and training refers to the NQF or NQS and is consistent with quality assurance guidelines of the SADCQF
6.The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.	6 (part b). All of the bodies responsible for quality assurance state their unequivocal support for the referencing outcome.	6.There is a clear indication of the relevant national authorities responsible for the verification of the qualifications obtained in the national system 7.The alignment process shall include a stated agreement of relevant quality assurance bodies
7.The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.	8.People from other countries who are experienced in the field of qualifications are involved in the referencing process and its reporting.	
8.The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out	7.The process of referencing has been devised by the main public authority and has been endorsed by the main stakeholders in the qualifications system.	8 (part a). Competent national bodies shall certify the alignment of the NQF/ NQS with the SADCQF.

EQF	AQRF	SADCQF
the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.	9.One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies and shall address separately and in order each of the referencing criteria.	
9.Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.	10. The outcome of referencing is published by the ASEAN Secretariat and by the main national public body.	8 (part b). A comprehensive report on alignment and its evidence must be published by competent national bodies
10.Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.	11.Following the referencing process all certification and awarding bodies are encouraged to indicate a clear reference to the appropriate AQRF level on new qualifications certificates, diplomas issued.	10.Clear plans have been made to make changes to legislation and policy supporting alignment to SADCQF levels on new qualification certificates, diplomas and other documents issued by competent authorities
		9.The official platform of the country must provide for a public comment process for the alignment report

Note: Black text = referencing criteria. Blue text = process or procedural criteria. Green text = post referencing obligations.

A review of AQRF referencing reports, the South African Qualifications National Qualifications Framework to the SADCQF alignment report, and a number of EQF referencing reports indicate that all referencing countries provide a response to all criteria. For the procedural criteria, responses are generally short and concise providing some information against each criterion. For the post-referencing obligation (green text) the responses often provides an update on the current status of the certification documentation and a plan to implement the criteria.

There has been issues expressed by some countries referencing to the SADCQF, and consideration could be given to reducing the referencing criteria to those that focus on building on trust and transparency, and separating the other criteria into referencing country obligations. Reducing the

criteria with this focus may alleviate some of the concerns but still provide the basis for a robust process.

2. Level descriptors

2.1 Introduction

Level descriptors are the essential elements to the RQF and to which much focus is directed. By focus, it is meant the interest and energy in the drafting process. Within an NQF, level descriptors are statements that describe the complexity of learning of qualifications (or qualification types) within the national qualifications system. It is stated that the purpose of level descriptors in an NQF is 'to indicate the location of a particular qualification' (Cedefop 202018, p. 9). Within an RQF, which works as a translation device, there is no such direct link to qualifications (or qualification types).

2.2 Considerations for guiding the drafting of the level descriptors

2.2.1 Contextual considerations

A common question when designing a RQF is how many levels and what domains should the RQF have? There is no one right answer to this query. It depends on a range of factors and is ultimately dependent on the discussions and consensus of the community of countries.

RQF considerations

When considering the development of an RQF it is crucial to go back to the purpose, principles and scope of the framework as it is these that drive all decisions, such as the number of levels and the orientation of the domains.

It is known that in the early stages of discussions for an EQF, that the model was 'to be a simple one, sufficiently general for Member States to be able to relate their systems and NQFs to it, and for it to cover all forms of learning (formal, non-formal and informal)' (Markowitsch and Luomi-Messerer 2007/2008, p. 17). A similar approach was agreed by the community of countries for the PQF and AQRF models.

If the purpose of the RQF is to bring the countries into the community and for the countries to be able to enable their NQF (or qualifications system) to relate to the RQF, then the level descriptors will broadly reflect aspects of the country NQFs (or qualifications system). However, if the purpose of the RQF it to promote a relationship with one or more external NQFs or another RQF then the level descriptors will reflect aspects of these frameworks.

As mentioned previously all RQFs have a transformational aspect to them. However, their role is not to impinge on national approaches to qualifications, but to provide the basis for dialogue between and NQF and the RQF, and to provide for reflection and change in improving NQFs, qualifications systems, and qualifications. It is this dialogue and interaction which enables this transformational aspect to be realised.

The initial draft of the EQF was based on significant research, on an analysis of those countries that had already developed a NQF or were in the process of developing an NQF, and on extensive consultation. Similar work was undertaken in ASEAN to gain an understanding of NQFs and qualifications systems of participating Member States and also involved extensive discussion amongst the Member States.

It is important for RQF developers to undertake research of their participating member states and where they exist, identify and map the number of levels of the NQF and the domains (and understand the domain definitions). The research would also include identifying the various

qualification structures within countries, such as the number and variety of qualification types and the hierarchy of these qualification types within the qualifications system.

Within the proposed ACQF the identification of levels and domains is more complex, given the number of member countries and the existence of RQFs within the African continent, proposed or realised, e.g. SADCQF, East African Framework for Higher Education (EAQFHE), Economic Community of West African States Regional Qualifications Framework (ECOWAS RQF), and the Arab Qualifications Framework (AQF).

The current status of frameworks is summarized below.

Table 9: Summary of QFs in Africa

QFs	Number	Comments
NQF 10 levels	12	11 in SADC, 1 Kenya
NQF 8 levels	6	in West, East, North Africa
NQF 7 levels	1	Tunisia
Sector QF 6 levels	1	Nigeria (TVET)
Sector QF 5 levels	1	Senegal (TVET)
RQF 10 levels	1	SADCQF
RQF 8 levels	1	EAQFHE

Source: ACQF 2021a, ACQF 2021b, ETF 2021

In addition, the ACQF mapping study (2021a) and the ACQF feasibility report (2021b) have provided updated information on 41 countries, and classified them in 5 stages of NQF development and implementation. In short, 19 countries do not have an NQF (i.e. are in an early stage of thinking or in design and consultation) and 22 countries have NQFs (i.e. approved, or implementation started, advanced or reviewed).

The proposed ACQF, given that it aims to bring together a community of 55 members, must accommodate and enable countries to reference their NQF. Member countries within the ACQF have a predominance of 10 level NQFs, however all but one is concentrated within one RQF. In addition, further research would be needed to understand those qualifications systems without an NQF. Determining the number of levels of complexity and domains of the descriptors for the ACQF should reflect its underpinning purpose of bringing a community of countries together. Therefore, the determination of the number of levels of learning complexity should aim to maximise this purpose. Too few a number of levels may result in lack of discrimination in the alignment process, i.e. that is too many levels of an NQF are aligned to one level of the RQF. However, too many levels may lead to an underutilization of an RQF level in the alignment process. Regardless, it is a decision that only the member countries can resolve.

NQF considerations

NQFs should reflect the needs of the country's qualification system, or be a catalyst for change of the system. If the NQF aims to reflect the qualifications system, then the hierarchy (in terms of complexity) of existing qualification types will influence the number of levels of learning complexity required to accommodate the hierarchy. If the aim of the NQF is to transform the qualifications system (specifically in terms of qualification types) then the number of levels of learning complexity will be influenced by the hierarchy of proposed qualification types.

With the emergence of RQFs within a community of countries, the influence of the RQF cannot be ignored. Although RQFs, such as the EQF and the AQRF, state clearly that they aim to be a neutral influence and therefore not impinge of national sovereignty, it is evident that countries developing

NQFs post the development of a RQF tend to reflect the number of levels of learning complexity and the domains. For example, in the remit of the EQF countries developed 8 level NQFs, and several countries designed their NQF and their domains differently from the EQF (e.g. Germany and Belgium-Flanders). The influence of the AQRF can also be seen in the NQFs developed in ASEAN member states, whereby countries developing NQFs beyond the endorsement of the RQF developed 8 level NQFs with similar domains, e.g. Thailand and Vietnam. There is very little literature exploring whether the NQFs that have been strongly influenced by the RQF also support the internal needs of the country's qualifications system. However, it should be that the needs of the country's qualifications system should dominate any decision of the number and construction (domains or sub-domains) of the NQF's levels of learning complexity.

It is important to note that even if two country members have the same number of levels on their NQF, this does not mean that each of these levels can be interpreted as similar in complexity (unless an alignment activity is undertaken and confirms this) or that the same levels of complexity are interpreted and applied the same way within a country's qualifications system. In addition, it cannot be assumed that the qualification type in one NQF is similar too or applied in the same way as that in another NQF.

Qualification type descriptors outline the types of qualifications (such as Bachelor, Certificate, Diploma) that will be issued within the qualifications system. Qualification types descriptors are usually described using two main metrics (that is level of complexity, volume of learning measure) and additional fields of interest (such as entry requirements, purpose, pathways, relationship to other qualifications, examination details [especially for PhD]). Within some NQFs the qualification types and their descriptors are included in the NQF documentation (such as Australia and New Zealand), but in others the qualification types and their descriptors may be included in additional documents such as policy or regulations (such as Philippines, Indonesia). In Europe for example, the Bologna Process provides guidance outlining three cycles of higher-education qualifications.

2.2.2 Underpinning Principles

There is very little written about the underpinning principles for drafting level descriptors. However, it is these principles that will guide the drafter/s as to how to approach the development of each level descriptor. As such these principles should be agreed to prior to drafting.

The following were noted from the development of two RQFs (i.e. EQF and PQF).

Table 10: Underpinning principles

PQF	EQF
The level descriptors were based on the principles that they: • Are neutral, that is, they do not identify the learning or the workplace context • Are developmental in that each successive level implies a higher level of complexity of learning • Does not exclude specific learner groups through the use of language or implied contexts • Are content free • Are not sector specific.	The descriptors were to be written in such a way so that: • all forms of learning outcomes are covered, irrespective of the learning context or institutional context • an adequate distinction is made between the descriptors of lower and higher levels • repetition is avoided, i.e. each level should build on the lower levels and encompass all the previous levels • only positive statements are made • jargon is avoided • clear, specific statements are made (e.g. no terms such as 'appropriate', 'narrow' or

PQF	EQF
	'good', and no references such as 'narrower' or 'broader'), keeping them as simple and general as possible.

Source: Bateman 2011, Markowitsch and Luomi-Messerer 2007/2008.

Other researchers offered similar sentiments. For example, Coles and Oates (2005) indicated that descriptors should be:

- Independent of each other
- Stated in positive terms
- Concrete and definite in nature and avoid the use of words such as narrow and good, or cross references such as narrower, broader or appropriate
- Jargon free and transparent for the non-expert reader
- As brief as possible to facilitate clarity of the concept of the level.

2.2.3 Conceptual basis of the level descriptors

There is very little written about the conceptual basis of level descriptors.

Within the EQF, extensive research and consultation was undertaken. The initial draft of the EQF was based on significant research, on an analysis of those countries that had already developed a NQF or were in the process of developing an NQF, and on extensive consultation. The inclusion of the two domains, knowledge and skills, were readily agreed, and it has been suggested that this was 'partly reflects the existence of a well-established research base, exemplified by the work departing from Bloom and colleagues (Anderson et al., 2001) on taxonomies of Learning' (Cedefop 2018, p. 16). The domain titled 'Competence' included sub-domains on autonomy and responsibility. This domain was the most challenging and was related to the definition and description of "competence"' (Cedefop 2013, p. 7). The research included a review of international papers 'on various level of competence development, with reference to, for example, the work of Dreyfus and Dreyfus (1986)' (Markowitsch and Luomi-Messerer 2007/2008, p. 36).

More recent work undertaken on the review of SADCQF levels (Keevy et al 2017) and on the mapping report for the development of the proposed African Continental Qualifications Framework (ACQF) (ACQF 2021) utilised the following taxonomies for the analysis of the EQF and other frameworks:

- Knowledge domain - the revised Bloom's knowledge taxonomy (Anderson et al 2011), ranging from factual, to conceptual, to procedural, and to metacognitive knowledge
- Skills domain – the SOLO taxonomy (Biggs and Collis 1982) utilizing five levels of learner performance and understanding
- Responsibility and autonomy domain – the Dreyfus and Dreyfus (1986) novice to expert taxonomy.

Although the work related to SADCQF and ACQF implies the three domains are based on these taxonomies, this may not be the case, especially so for the skills domain and the responsibility and autonomy domain. For example:

- SOLO (1982) refers to Structure of the Observed Learning Outcome, and is a taxonomy for describing how a learner's performance and understanding grows in complexity when mastering specific tasks. Performance levels include: pre-structural, unistructural, multi-structural, relational, extended abstract.

- Dreyfus and Dreyfus (1986) is a taxonomy of skills acquisition that plots an individual's progression through five levels: novice, advanced beginner, competent, proficient, and expert. The model is related to an individual's acquisition level of a specific task and therefore it is conflict with a QF's (be it national or regional) focus on outcomes rather than inputs.

Markowitsch and Luomi-Messerer (2007/2008) consider that a hierarchy such as Dreyfus and Dreyfus (1986) 'is conceivable'…'owing to the breadth of the world of work, more comprehensive systems are needed to specify the specialised nature or content' (2007/2008, p. 50). However, both SOLO and Dreyfus and Dreyfus taxonomies focus on an individual's skill acquisition or performance of specific tasks and therefore are not relevant to levels of learning complexity of a qualifications system (or NQF or RQF) and are not appropriate as forming the basis of domains of levels of learning complexity. On the other hand, the revised Bloom's knowledge taxonomy (2001) is focussed on educational objectives and as such its inclusion for analysis of level descriptors, or as the conceptual basis for a domain, may be more than justified.

The focus on developing a framework that is technically sound belies the notion that in some respects qualifications frameworks are social constructs, a view supported by Keevy 2005. Keevy (2005) indicates that all NQFs have a social aspect, be it communicative or transformational, but also acknowledges that they are the result of power struggles between stakeholders and social structures, and are reflective of the degree of stakeholder participation and stakeholder commitment. Keevy (2005) also notes that an NQF is 'a social construct as part of a change management strategy'…but 'is also a social construct by its very nature' (p. 12).

In relation to the EQF, the descriptors were developed building on research and extensive consultation including both experts and policy-makers across the member countries. The EQF descriptors finalised were based on consensus, compromise and acceptance 'rather than arriving at a perfect solution and total comfort' (Cedefop 2013, p. 7).

When one reflects on the development of qualifications framework, level descriptors are heavily based on extensive consultation and negotiation between different stakeholders and concessions are made. Another way of viewing a qualification framework development, is when drafting the EQF it was stressed that 'a pragmatic approach was required in developing the EQF – it did not have to be perfect in order to serve its purpose' (Markowitsch and Luomi-Messerer 2007/2008, p. 37).

2.2.4 Horizontal and vertical logic of level descriptors

The framework of level descriptors are developed on two dimensions:

1. Vertical dimension which specifies the level of learning complexity. Within a NQF these levels describe the learning complexity of qualifications (or qualification types). These levels are often referred to as *levels of learning progression*, but this implies a theoretical or conceptual basis that may not be present. Referring to these levels as *levels of learning progression* ignores the initial purpose of these levels, which is linking the linking RQF levels of learning complexity to NQF level descriptors, and in turn NQF levels of learning complexity to qualifications (or qualification types) within the national qualifications system.
2. Horizontal dimension which specifies the domains of learning. Within an NQF, the domains generally reflect that which is important to the nation and which are to be reflected in the qualifications. Domains are almost universally described as knowledge and skills, accompanied by the more contentious domains such as application, competence, autonomy and responsibility. These domains and determining the inclusion of 'what is reasonable' without over complicating the framework is where most of the discussion occurs.

Level descriptors in an RQF need to:

- Capture the domains and sub-domains (horizontal dimension)
- Be hierarchical in nature, from lower to higher levels (vertical dimension) with sufficient detail to enable differentiation from one level to the next. It stands to reason, that as more levels are required, the more difficult the level of differentiation can be achieved.

Keevy and Chakroun (2015) note that level descriptors are often criticised for being too broad and generic, but that they should be viewed as 'not an exact science' and that they 'only provide guidance with regard to levels' of learning complexity (p. 50).

For RQFs that act as a reference or meta-framework, level descriptors need to be sufficiently general to accommodate all learning (i.e. formal, nonformal, informal) and to allow member countries to relate to or reference to the framework. Castel-Branco (2021, p. 5) notes that RQF 'level descriptors ought to be generic and equally applicable' as 'overly detailed and specific formulations might prevent many NQFs to find compatibility of their level descriptors' to the RQF. As most RQFs are premised on the inclusion of all countries' qualifications frameworks then highly detailed RQF level descriptors with a high number of domains are not desirable, as it would result in exclusion of engagement by the countries' NQFs.

In terms of domains, it is critical that there is an agreed understanding of the definitions of each domain or sub-domain being developed. Clarity in definition, assists in the 'build' of the indicators for each domain at each level and provides a focus for review. Working with stakeholders will help further clarifying the inclusion or exclusion of specific domains.

When reviewing draft level descriptors, the vertical dimension is checked to ensure that there is an agreed understanding and agreement on the levels of complexity. The analysis of level descriptors in the review of the SADCQF (Keevy et al 2017, p. 33) assert that 'ideally, the progression should be on the diagonal', meaning that there should be a clear upward progression. However, there is no clear basis for this statement. In addition, many frameworks do not necessarily demonstrate a clear 'build' across all levels of a particular domain or sub-domain, with some only being 'built' over a lesser number of levels than that of the framework.

When reviewing draft level descriptors on the horizontal dimension, reviewers generally seek a degree of comparability of complexity across the domains.

2.3 Analysis of current RQF level descriptors

This section provides a more detailed look at RQF level descriptors of the following RQFS: EQF, SADCQF, AQRF, and the PQF.

Some RQFs have defined their domains, and other frameworks have not. The table below summarises these definitions.

Table 11: Domains and definitions

RQF	Domain	Definition
AQRF	Knowledge and Skills	Includes the various kinds of knowledge such as facts and theories as well as the skills used, such as practical and cognitive skills.
	Application and Responsibility	Defines the context in which the knowledge and skills are used in practice as well as the level of independence including the capacity to make decisions and the responsibility for oneself and others.

RQF	Domain	Definition
EQF	Knowledge	Knowledge is the body of facts, principles, theories and practices…In the context of the EQF, knowledge is described as theoretical and/or factual/
	Skills	Ability to knowledge and use know-how to complete tasks and solve problems. In the context of the EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments.
	Responsibility and Autonomy	This domain was originally defined as a 'competence'. Means the ability of the learner to apply knowledge and skills autonomously and with responsibility.
PRQS/PQF	Knowledge and Skills	Each level is defined by generic outcomes that describe the degree of complexity of knowledge and skills, application and autonomy. No clear definition within the PQF document. The three key domains are based on the following: • Knowledge and Skills - the kind of knowledge and skills involved • Application - the kinds of issues or problems that the knowledge and skills are applied to • Autonomy – the amount of independence, or organisation that is required to solve problems or complete tasks (Bateman 2011).
	Application	
	Autonomy	
SADCQF	Knowledge	Not defined.
	Skills	
	Autonomy and Responsibility	
TQF VUSSC	Knowledge and understanding, skills and wider personal and professional competencies	The level descriptors do not distinguish between the domains or sub-domains, and are not labelled or defined. Skills is defined in the glossary as: the ability to apply knowledge to complete tasks and solve problems. Skills are described as both cognitive (employing logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

Source: EQF 2017, ASEAN 2015, PQF 2015, TQF VUSSC 2015, SADCQF 2017, Bateman 2011

The AQRF (2015, p. 5) further explains that the 'level descriptors assume that the learning outcomes are cumulative by level. In other words, one level assumes that the knowledge, skills and conditions at one level include those at the lower levels. In addition, the domains must be read together to give a true indication of level'.

It is possible to deconstruct the levels into sub-domains to provide a better understanding of how they are 'built'. Table 11 breaks down each domain into sub-domains and an analysis of the level descriptors indicates that domains are built across the complete number of levels (e.g. AQRF and PQF [in 2 domains]) or that they are not developed or stated over all levels (e.g. EQF).

Table 12: Levels 1 and 2 of the AQRF, EQF and PQF

PQF					
Level	**Knowledge and skills**	**Application**		**Autonomy**	
		Type	**Problem solving**	**Level of support**	**Degree of judgement**
	Demonstrated knowledge and skills that:	**Applied in contexts that:**		**In conditions where there is:**	
Level 1	are basic, foundational and explicit	are highly structured, defined and repetitive	involve straightforward and everyday issues which are addressed by simple and rehearsed procedures	immediate support and clear direction	almost no judgment or discretion required
Level 2	are factual or manual or operational	are structured and stable	involve straightforward issues which are addressed by set, known solutions	close support and direction or guidance	minimal judgement or discretion required

EQF							
Level	***Knowledge***	**Skills**			**Responsibility and Autonomy**		
	Knowledge	***Skills***	***Range***	***Problem solving***	***Level of supervision and autonomy***	***Context***	***Level of responsibility for self & others***
Level 1	basic general knowledge	basic skills required	to carry out simple tasks	-	work or study under direct supervision	in a structured context	-
Level 2	basic factual knowledge of a field of work or study	basic cognitive and practical skills required	to use relevant information in order to carry out tasks	to solve routine problems using simple rules and tools	work or study under supervision with some autonomy	-	-

AQRF				
Level	**Knowledge and Skills**		**Application and Responsibility**	
	Knowledge	**Skills**	**Application**	**Responsibility**
	Demonstration of knowledge and skills that:		The contexts in which knowledge and skills are demonstrated:	
Level 1	is basic and general	involve simple, straightforward and routine actions	involve structured routine processes	involve close levels of support and supervision
Level 2	is general and factual	involve use of standard actions	involve structured processes	involve supervision and some discretion for judgment on resolving familiar issues

Source: AQRF 2015, EQF 2017, PQF 2015, Bateman 2011, Bateman 2012.

A closer look at the definitions and the level descriptors provides some insights into the three RQFs level descriptors' construction.

2.3.1 Knowledge domain

The EQF takes a generic approach to knowledge and specifically contains the scope of knowledge by its definition; theoretical and/or factual. In some respects, it does reflect the revised Bloom's knowledge taxonomy (e.g. including such terms as concepts, factual, theoretical) but is based more on a taxonomy of breadth and depth and level of specialisation rather than the type of knowledge per se (Bateman 2012). The AQRF takes a similar approach. The PQF is reminiscent of the revised Bloom's knowledge taxonomy which includes four key knowledge types (factual, conceptual, procedural and meta-cognitive.

2.3.2 Skills domain

In the EQF, the *Skills* domain, relates to increasing complexity of cognitive and practical skills but also incorporates problem-solving skills. Problem solving is developed from level 2 ('routine problems') onwards. Of interest, is that the EQF has specifically placed 'creation thinking' within the definition of this domain. Within the EQF *Skills* domain there is some development[9] of creative thinking, especially from Level 4 onwards, explicitly at Level 5, in Level 6 ('innovation'), and in Level 7 ('innovation', 'new') but not explicitly in Level 8. However, this notion of 'creativity' is also blended through the other domains e.g. Level 8 *Responsibility and Autonomy* ('new ideas or processes'), Level 7 *Knowledge* ('original thinking'), Level 7 *Responsibility and Autonomy* ('new').

The PQF has a less explicit skills domain (and is linked to the knowledge domain), however from level 7 explicitly refers to cognitive processes such as analysis and creation.

The AQRF builds a consistent skills domain (also linked to the knowledge domain) moving from 'actions' at the lower levels of the framework, to 'critical and analytical thinking' at level 6 to 'independent and original thinking' at level 8.

2.3.3 Application, Responsibility, Autonomy domains

The approach to *Application*, *Responsibility* and *Autonomy* domains varies across the three RQFs vary. The table below summarises these approaches.

Table 13: RQF and treatment of the third domain

RQF	Treatment
PQF	Application: In this domain there are two components; the kinds of problems and issues that the knowledge and skills is applied to, and also the range of contexts in which these problems and issues arise. Autonomy: During the development of the PQF and the analysis of other frameworks it was recognised that the strands (level of autonomy, degree of independence as well as level of responsibility) were often intermingled or were not developed uniformly throughout the levels of the domain. The PQF in this regard has maintained a structured development of the taxonomies in its *Autonomy* domain. The PQF therefore builds two strands based on: • Degree of guidance • Degree of judgement or discretion (Bateman 2011)
EQF	Responsibility and Autonomy This domain includes the range of contexts in which the knowledge and skills is applied, including context statements and level of autonomy or responsibility. The EQF moves from Level 1 with 'direct supervision' and a 'structured context', and moves to taking 'responsibility' to 'solve. At Level 4 it notes self-management as well as

[9] This notion is not fully developed or consistent within the EQF.

RQF	Treatment
	a supervision of others and in contexts that are 'usually predictable but are subject to change'. By level 8 there is 'substantial authority' and 'autonomy'.
AQRF	Application This sub-domain builds the context in which the other sub-domains are applied. At level 1 this involves 'structured routine processes'. The types of problems within these contexts appears from level 2, 'issues'. At level 8, the context is 'highly specialised and complex involving the development and testing of new theories and new solutions to resolve complex, abstract issues'. Responsibility This sub-domain builds from 'close level of support and supervision' at level 1 and moves to less oversight by another, and to increasing responsibility and authority. At level 8 there is a shift to 'significant responsibility'

2.4 Summary

Developers of NQFs or RQFs when preparing to draft level descriptors need to:

- Be cognisant of the purpose of the QF and its underpinning principles
- Develop clear definitions of the domains and sub-domains to provide the parameters for the outcome statements
- Be aware that learning outcomes in an NQF or RQF can only be broad statements of outcomes of learning complexity
- Undertake research of the member countries' NQFs or qualifications system to inform the number of levels and domains (or sub-domains)
- Develop a set of level descriptors to which member countries' NQFs or qualifications systems can relate. In doing so, the level descriptors need to:
    - Be broad enough to enable this to occur; that is the domains and sub-domains should be kept to a minimum
    - Be written in simple, jargon free, non-technical language
    - Be stated in positive terms
    - Reflect all forms of learning irrespective of where and how the learning occurs.
- Acknowledge that the horizontal interplay between the domains informs the level of complexity
- Acknowledge that the level of complexity is also informed by vertical comparison between levels
- Acknowledge that levels of learning complexity are simply that and have no apparent or direct relationship to a volume measure. In addition, when drafting the RQF's levels of learning complexity there is no direct relationship to qualifications or qualification types of an NQF (or qualifications system).

3. Level descriptors and their links to quality assurance and other associated structures

3.1 National qualifications frameworks

Within the national qualifications system, level descriptors of the NQF are critical to the quality assurance of qualifications. At a national level, level descriptors influence the conception, formulation and review of qualifications, 'they are used as a reference point for designing new qualifications' (Cedefop 2018, p. 9). Quality assuring qualifications at a national level this involves:

- Ensuring quality assessment outcomes through:
    - The conception and formulation of qualifications and how they are approved to ensure that they are current (and remain current) and meet the identified needs
    - The approval of providers and ensuring that they have the capacity and capability to provide programmes leading to the qualification, and to provide assessors that are competent to undertake assessments
    - The assessment and validation of assessment outcomes, promoting valid and reliable assessments
- Ensuring the certification process that confirms outcomes have been achieved (Bateman & Coles 2017b, pp. 14-15)

How qualifications are quality assured and the responsible bodies (such as quality assurance agencies, qualifications agencies) established to manage the functions of quality assurance vary enormously from country to country. However, within the formulation and approval of a qualification, the outcome of this qualification is aligned to a level of learning complexity (the level descriptors) to provide the basis for the determining the qualification type.[10]

As mentioned previously, qualification type descriptors outline the types of qualifications (such as Bachelor, Certificate, Diploma) that will be issued within the qualifications system, and are usually described using two main metrics (that is level of complexity, volume of learning measure) and additional fields of interest (such as entry requirements, purpose, pathways, relationship to other qualifications, examination details [especially for PhD]). Volume of learning measures could be described in terms of duration or in relation to learner effort, which can be described in terms of hours or a credit point equivalent.

Qualification types are positioned on the NQF, i.e. the levels. As level descriptors specify the level of learning complexity, therefore if there is more than one qualification type on a NQF level it should be that these qualification types are similar in terms of learning complexity and that the difference between them is more than likely the volume of learning measure. Therefore, it is possible to identify qualification types, such as the Bachelor that may be 3 years in duration on the same level as a Bachelor that may be 4 years in duration. This is because the level of complexity is determined to be similar. However, if they are on different levels of the NQF it is because the outcome of one qualification type is determined to be higher than the other qualification type, and indeed should be viewed as two qualification types. It should not be a consideration, that volume measure, such as duration, affects the position of a qualification type on an NQF, as it is the outcome of the qualification type that affects it position on the NQF (i.e. on the level).

[10] How this process is undertaken and assured in one of the main criteria that sits within the referencing process.

Within the quality assurance arrangements, it is these qualification types that determine the qualifications to be accredited within the qualifications system and for which a qualification (certification) can be issued. In the conception and formulation of specific qualifications a key check point is the accreditation process which would ensure that the outcome of the specific qualification, e.g. Bachelor of Economics, meets the qualification type specification. If it does not it cannot be accredited without adjustments to the qualification specification of the Bachelor of Economics. Describing the quality assurance arrangements and how a qualification type and/or qualification is placed on the NQF (or within the qualifications system) is part of the referencing process.

3.2 Regional qualifications frameworks

As mentioned in Section 1.3.5, RQFs have incorporated quality assurance into the framework in two different ways: as criteria used within the referencing process, or as an associated quality assurance framework that is agreed by member countries. It is noted that meta-frameworks do not have a direct link to qualifications, unless in specific circumstances where the RQF also includes other functions (such as agreed regional occupational standards and regional qualifications). These occupational standards and qualifications can therefore be aligned to the level descriptors within the RQF.

Both RQFs and regional quality assurance frameworks aim to build trust in qualifications within the regional community and can only aim to facilitate lifelong learning, validation of formal/nonformal/informal learning, recognition, mutual recognition, and credit transfer systems; they do not result in or ensure such processes.

Level descriptors within an RQF, and after a country's referencing activity has been completed and accepted by the member countries, provide the basis of transparency and trust in qualifications or occupations standards. This is essentially because the NQF level descriptors have been aligned to the RQF level descriptors, and the quality assurance arrangements have been explained.

RQFs need to be linked to other recognition mechanisms to facilitate recognition. Mechanisms that facilitate recognition could include the following national and international mechanism, which in many respects are interrelated.

Table 14: Mechanisms that facilitate recognition and the role of RQF level descriptors

Mechanism	Comments	Input from RQF level descriptors
National application		
Regional diploma supplement	APEC Higher Education Diploma Supplement model – applied at national level	Are explicitly noted on the supplement
Certification	RQF criteria (EQF and AQRF) ask member states that have completed the referencing process to acknowledge the RQF and the level on certification document.	Are explicitly noted on certification document.
Recognition agencies	For determinations of comparability or equivalence	Can provide the basis for comparison or translation of outcomes of learning
Awarding bodies – recognition/credit	Awarding bodies providing recognition of formal learning (credit transfer) or nonformal and informal learning (recognition of prior learning).	Can provide the basis for comparison or translation
Application across nations		

Mechanism	Comments	Input from RQF level descriptors
Bilateral arrangements related to recognition of qualifications or occupations	Agreements related to mutual recognition of occupations (or qualifications), for the purposes of labour or student mobility	Can provide the basis for comparison or translation of outcomes of learning or occupation outcomes
Multilateral (or plurilateral) arrangements related to recognition of qualifications or occupations	Examples: • Convention on the Recognition of Qualifications concerning Higher Education in the European Region (Lisbon Convention) • UNESCO Asia Pacific Convention on the Recognition of Qualifications in Higher Education	Can provide the basis for comparison or translation of outcomes of learning or occupation outcomes
Regional occupational standards or qualifications	PQRS/PQF or TQF VUSSC	Inform the complexity of the occupational standard or the qualifications (during formulation and approval process)
Credit transfer systems		Can provide the basis for comparison or translation of outcomes of learning
International professional associations or licensing bodies	Occupational standards that are aligned to licensing or professional association	Can provide the basis for comparison or translation of outcomes of learning or occupational standards

Source: Adapted from Bateman & Coles 2015b, Bateman 2015

4. Learnings from current RQFs

Like NQFs, RQFs are at different stages of planning or implementation. Bateman & Coles (2015a, p. 8) categorises development of an NQF according to 8 stages which could be equally applied to RQFs. The stages are:

1. No intent
2. Desired but no progress made
3. Background planning underway
4. Initial development and design completed
5. Some structures and processes agreed and documented
6. Some structures and processes established and operational
7. Structures and processes established for five years
8. Review of structures and processes proposed or underway.[11]

The EQF is the most established RQF and has undergone a review. The AQRF and the PQF are both operational but with the AQRF being more established. The SADCQF, although operational, is still in the early stages of implementation.

The EQF is considered the benchmark of RQFs, in regard to its reputation and period of implementation, and for being a model for other newly emerging regional qualifications frameworks. The influence of the EQF can be seen in the structures for the SADCQF and the AQRF.

The EQF is based on a recommendation adopted by the European Parliament and the Council in 2008 (European Union, 2008) and revised in 2017 (European Union 2017). The EQF is supported by a

[11] These categories were utilised in the initial research for the AQRF, Bateman, Keating, Burke, Coles & Vickers (2012).

range of briefing notes and research papers related to implementation and developing common understandings. The EQF is linked to other regional initiatives and agreements, such as the Lisbon Convention, Bologna Process, sector quality assurance systems, credit transfer system and transparency tools such as the diploma supplement. The EQF has strong engagement with members states and has also undertaken alignment activities with countries outside Europe, currently Australia, New Zealand and Hong Kong.

The AQRF was endorsed by ASEAN ministers in 2015 (ASEAN, 2015). The AQRF is supported by resources focused on agreed understandings of referencing process, quality assurance, learning outcomes and non-formal and informal learning. The AQRF is linked to three quality assurance frameworks, specifically the ASEAN Quality Assurance Framework has been designed for the member states, and is linked to the integration of the economic community and has emerging links with credit transfer processes. the AQRF initiative is an AANZFTA funded project and is supported by Australia and New Zealand technical experts in the areas of qualifications, quality assurance and referencing. Two member states are still working towards confirming a NQF and one member state has not public intent to have an NQF. Although this framework is operational, 'it is still early days for this framework and more work is needed to build the capacity of member states that are yet to confirm an NQF' (ACQF 2021) and to strengthen the referencing process and continue build trust across the region.

The PQF was endorsed in 2010 and is linked to a regional quality assurance framework (that includes agreed standards for a quality assurance agency and a provider of education and training services), and a register of standards and qualifications. As mentioned previously, the PQF 'was designed as a common reference framework but included additional aspects to provide the basis for an NQF for those island nations that did not have the capacity or relative size of a qualifications system to warrant developing an NQF' (ACQF 2021, p. 150). The PQF has not had strong long-term funding arrangements with its development partners (Australia and New Zealand) within the Pacific Community and has faced other limitations. 'The PQF is not linked to strong student or labour mobility initiatives and is led by a secretariat working on behalf of the ministers of education and training in the island nations. The quality assurance agencies do not have a direct voice or representation on this regional committee. Regionally, those nations with emerging or stable qualifications systems are generally facing constraints such as inadequate capacity of providers and inadequate funding. There are still island nations yet to confirm their own NQF or to have adopted the PQF as a national framework' (ACQF 2021, p. 150). The PQF however has developed in its application and scope of work.

The SADCQF development work began in 2011 and it was launched in 2017. The framework is supported by quality assurance and RPL guidelines, a qualifications portal (in the early stages), and a technical committee overseeing development (ACQF 2021).

There are some clear lessons that can be learnt from the existing RQFs, including:

- RQFs are not just specifications of levels, level descriptors, referencing criteria and governance arrangements. RQFs operate within a region or community grouping and can be used not just as a process to align NQFs or qualifications systems but for other more broader purposes agreed to by the community of countries. RQFs invariably are a catalyst for change, regardless as to whether this was the key intent or purpose of the RQF. RQFs generate the development or review of NQFs and in turn foster a deeper understanding of qualifications and the links to quality assurance arrangements. RQFs provide a forum for sharing experiences and good practice, and ultimately build a space for trust in qualifications and qualifications systems of member countries.

- RQFs should not be considered as static frameworks, but as frameworks that will evolve overtime in response to cyclical reviews, to ongoing applicability to the changing needs of its community of countries, and also as a result of improved understandings of the technical nature of these meta-frameworks. Changes could include:
    - An adaptation of the existing model (as is the case with the revisions to the EQF)
    - Modifications to or additions to features in the RQF (as is the case with the PQF and the development of national qualifications)
    - Potentially more subtle changes to the RQF purpose, such as shifting priorities of member countries, e.g. member countries becoming more interested in transparency and mutual understanding as opposed to contributing to recognition and/or labour and student mobility
    - Potentially more subtle changes to interpretations and application of the referencing criteria during the referencing activity as a result of a deeper understanding of the technicalities of the RQF.
- Strong governance arrangements to manage and monitor the implementation of the framework
- Strong links to other initiatives within the region, such as regional QA frameworks, labour and student mobility initiatives and other initiatives that facilitate recognition
- Clear framework structures (e.g. purpose, level descriptors, referencing criteria) to support a strong referencing process
- International credibility is critical to the success of the framework. Risks to this credibility include poor integrity and lack of transparency of the referencing process, and, lack of thoroughness and accuracy of the referencing reports
- Level of maturity of the qualifications systems assists in building trust across the community of countries
- Technical capability of member states to understand and interpret the technical nature of the framework and of referencing. Member states need ongoing support and dialogue to improve understandings, and agree on understanding of aspects these frameworks.

Of the RQFs reviewed, the lessons learnt for developing level descriptors are also clear. There is a clear need for the developers of the ACQF to:

- Undertake research of the member countries' NQFs or qualifications system to inform the number of levels and domains (or sub-domains). The research on qualifications and NQFs undertaken in the context of the ACQF Mapping Study in 2020 (ACQF, 2021a) was continued and expanded in 2021 in the context of ACQF Feasibility analysis (ACQF, 2021b)
- Develop a set of broad level descriptors with the domains kept to a minimum without prejudice to considering strategic needs of the continent, notably related with the aims of the Continental Education Strategy for Africa 2025, of the Protocol of Free Movement of Persons and the African Continental Free Trade Area (ACQF, 2021b). Green, digital and social skills are important in the continental Agenda 2063 and CESA-2025, and the ACQF may support this aspect of the transformation of learning.
- Ensure that the purpose of the RQF is clear and that the level descriptors support the purpose of the ACQF.
- Acknowledge that the level descriptors are the documented agreed understanding of the levels of learning complexity to which all member countries can relate their NQF or qualifications system.

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Appendix 1: EQF Quality Assurance Principles (Annex IV)

In accordance with national circumstances and taking into account sectoral differences quality assurance of qualifications with an EQF level should:

1. address the design of qualifications as well as application of the learning outcomes approach;
2. ensure valid and reliable assessment according to agreed and transparent learning outcomes-based standards and address the process of certification;
3. consist of feedback mechanisms and procedures for continuous improvement;
4. involve all relevant stakeholders at all stages of the process;
5. be composed of consistent evaluation methods, associating self-assessment and external review;
6. be an integral part of the internal management, including sub-contracted activities, of bodies issuing qualifications with an EQF level;
7. be based on clear and measurable objectives, standards and guidelines;
8. be supported by appropriate resources;
9. include a regular review of existing external monitoring bodies or agencies, carrying out quality assurance;
10. include the electronic accessibility of evaluation results.

Source: Council of the European Union 2017, pp. 20-21

Appendix 2: EQF referencing criteria (Annex III)

Annex III - Criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework (EQF)

1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process are clearly determined and published by the competent authorities.
2. There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF.
3. The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems.
4. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.
5. The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation.
6. The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.
7. The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.
8. The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.
9. Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.
10. Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

Source: Council of the European Union 2017, pp. 18-19

Appendix 3: AQRF referencing criteria

1. The structure of the education and training system is described.
2. The responsibilities and legal basis of all relevant national bodies involved in the referencing process are clearly determined and published by the main public authority responsible for the referencing process.
3. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent.
4. There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the AQRF.
5. The basis in agreed standards of the national framework or qualifications system and its qualifications is described.
6. The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system are described. All of the bodies responsible for quality assurance state their unequivocal support for the referencing outcome.
7. The process of referencing has been devised by the main public authority and has been endorsed by the main stakeholders in the qualifications system.
8. People from other countries who are experienced in the field of qualifications are involved in the referencing process and its reporting.
9. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies and shall address separately and in order each of the referencing criteria.
10. The outcome of referencing is published by the ASEAN Secretariat and by the main national public body.
11. Following the referencing process all certification and awarding bodies are encouraged to indicate a clear reference to the appropriate AQRF level on new qualifications certificates, diplomas issued.

Source: ASEAN 2015, pp. 9-13

Appendix 4: SADCQF Alignment Criteria

1. Responsibilities of relevant national bodies involved in the alignment process are determined and published by the relevant competent authorities;
2. There is a clear and demonstrable link between qualification levels in the NQF/ National Qualification System (NQS) and level descriptors of the SADCQF;
3. The NQF/ NQS is based on learning outcomes and links to non-formal and informal learning and credit systems (where these exist);
4. Procedures for including qualifications in the NQF or describing the place of qualifications in the NQS are transparent;
5. The National Quality Assurance System for education and training refers to the NQF or NQS and is consistent with quality assurance guidelines of the SADCQF;
6. There is a clear indication of the relevant national authorities responsible for the verification of the qualifications obtained in the national system;
7. The alignment process shall include a stated agreement of relevant quality assurance bodies;
8. Competent national bodies shall certify the alignment of the NQF/ NQS with the SADCQF. A comprehensive report on alignment and its evidence must be published by competent national bodies;
9. The official platform of the country must provide for a public comment process for the alignment report; and
10. Clear plans have been made to make changes to legislation and policy supporting alignment to SADCQF levels on new qualification certificates, diplomas and other documents issued by competent authorities.

Source: ACQF 2020, p. 18

Appendix 5: TQF VUSSC referencing criteria

1. There must be a clear and demonstrable link between the qualification system, NQF, and/or the RQF and the TQF in terms of levels and level descriptors.
2. The qualification system, NQF, and/or the RQF must be based on learning outcomes that validate all types of learning.
3. The procedures for inclusion of qualifications in the qualification system, registration of qualifications on the NQF, including the placement and level of qualifications must be transparent.
4. The legal status and responsibilities/mandate of the NQAAs or competent public authority within the small states must be clearly determined and published by the competent public authorities.
5. The NQAA or competent public authority within the small states, in collaboration with the TQFMC, shall certify the referencing of the qualification system, NQF or RQF to the TQF.
6. The national quality assurance system must be consultative and public, and consistent with the TQF procedures and guidelines.
7. Qualifications are registered on the TQF by the TQFMC and recorded on the TQF portal. The TQFMC is also responsible for maintaining and publishing the register of qualifications.

Source: Commonwealth of Learning 2017, pp. 13-14