Development of level descriptors for the National Qualifications Framework

Contents

ERRATA ...

Executive summary	1
Historical development: regulatory framework, values of the NQF	9
International qualifications frameworks	14
The South African NQF: a way forward	20
Challenges	22
Articulation	29
Implications of these proposals for the system	31
The "nesting" principle for qualifications	32
The nature of level descriptors	34
Draft level descriptors	36
Notes on the use of level descriptors	44
Protected terms and qualification descriptors	45
Appendix 1: Process to date	47
Appendix 2: Bibliography and acknowledgements	49

THE DEVELOPMENT OF LEVEL DESCRIPTORS FOR THE NATIONAL QUALIFICATIONS FRAMEWORK: THE ROLE OF LEVEL DESCRIPTORS AND QUALIFICATION DESCRIPTORS IN THE NQF

Executive summary

The South African National Qualifications Framework (NQF) is an integrated framework of learning achievements, incorporating both standards and qualifications. At this stage, qualifications of two types can be registered on the NQF, i.e. those based on unit standards and those based on exit level outcomes and associated assessment criteria. Level descriptors for levels 1 – 8 of the NQF, once adopted, will be used to allocate both standards and qualification types to specific levels of the NQF.

In the case of unit standards, a particular standard will be tested against the descriptor statements at a number of successive levels, and will be pegged at the level that fits the standard best. Such standards will be unable to meet all descriptor statements at that level, because they represent "units" of learning and not qualifications. In the case of qualifications, most, preferably all, descriptor statements will have to be satisfied by a qualification registered at the relevant level. There may be well-specified exceptions, but they will not be the rule.

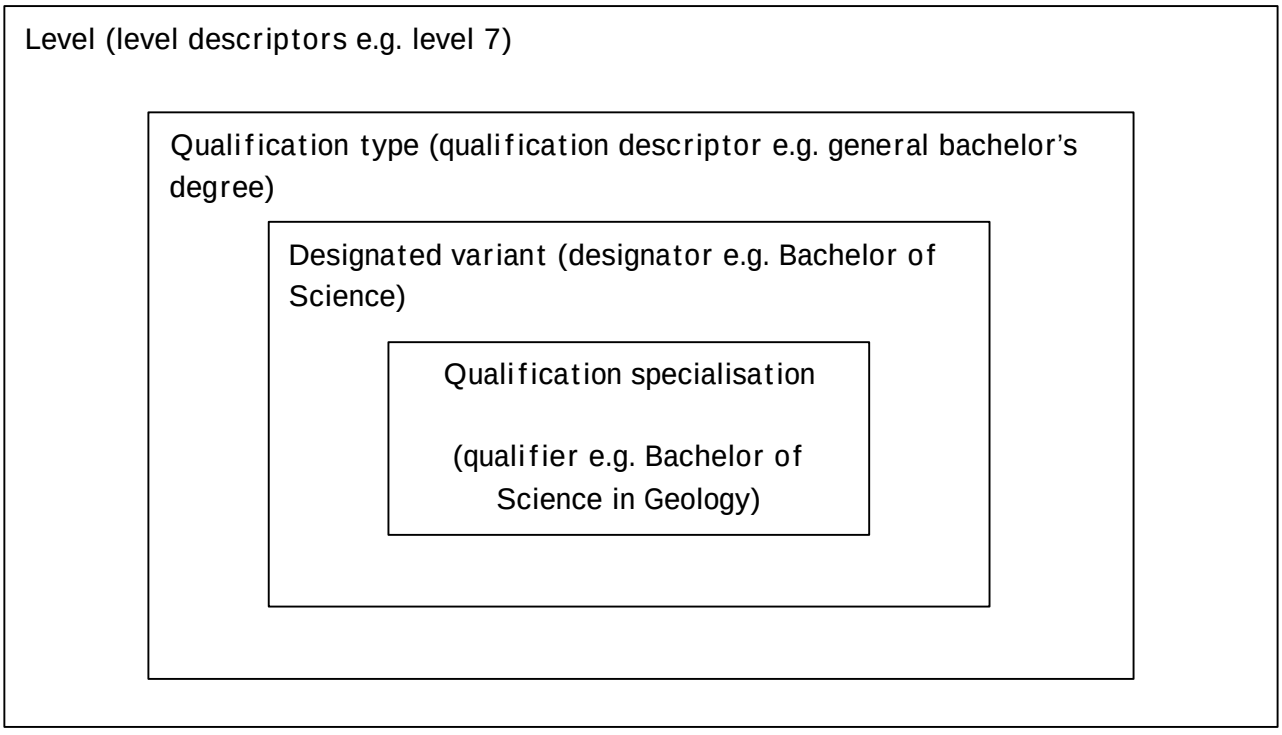
In this sense, the NQF will promote articulation and progression between qualifications, whether these are constructed from a number of unit standards (through rules of combination) or not.

The South African NQF was designed by SAQA to have eight levels, of which levels 1 and 8 are "open-ended" to provide flexibility in their domains. Levels 2, 3 and 4, on the one hand, and levels 5, 6 and 7, on the other, form symmetrical groups of levels, with a high degree of discrimination, around the crucial FET/HET interface between levels 4 and 5. This allows the system of qualifications and unit standards to function optimally in the most "crowded" part of the NQF. In this context, "crowding" refers to the number of existing and new qualifications requiring to be organised into a workable articulation and progression system that will affect a very large number of learners and qualifiers.

Qualification descriptors for the basic qualification types to be registered at L2 – 7 will indicate specific features and requirements that are **additional** to the level descriptor statements for the NQF level at which they are fixed in policy (see below). The fact that **each** of the qualifications fixed at a particular level, as well as all qualifications derived from them by the "nesting" principle (see below), will largely or wholly satisfy the level descriptors concerned and will greatly facilitate articulation and progression in the South African NQF system. It will therefore apply to qualifications built up partly or wholly from unit standards as well as to those not so designed. The arrangement will also have a powerful normative effect on those qualifications that are allocated to a particular level, but in delivery and assessment, do not meet the requirements as stated in the qualification descriptors. Clearly this will also be of immense assistance in quality assurance processes.

The "nesting" principle means that in setting standards for qualifications, the system moves logically from the most general to the most specific layers. With level descriptors and qualification descriptors for the most general qualification types being in place first, these will guide standard-setting for the generic designated variants of the basic qualification types, and for their specialised versions. They will all be "nested" within each other and meet requirements cumulatively from outside in.

This is illustrated in the following figure:



Standards-setting through the SGB/NSB processes will be greatly facilitated by the use of the "nesting" approach to select the appropriate place of any NQF qualification, making use of existing "outer layer" specifications and standards to do so.

To accommodate the apparent 'crowding' at the FET/HET interface, the following has been proposed:

- The first national degree, currently allocated at level 6 in the NSB regulations, be allocated at level 7. This will free up level 6 providing room for an additional undergraduate level;
- The first national diploma, currently allocated at level 5 in the NSB regulations, should be allocated at level 6;
- Qualifications currently allocated at 7, be allocated at level 8.
- There could be four sub-levels at level 8 as per NQF level 1, which accommodates three ABET sub-levels. The sub-levels at level 8 could be labelled postgraduate levels 1 – 4.

The NQF and associated qualification types would then be as follows:

<table>
<tr><th colspan="2">NQF level</th><th colspan="2">General</th><th>Articulation – horizontal and diagonal</th><th colspan="2">Career-focused / vocational</th></tr>
<tr><td rowspan="4">8</td><td>Postgraduate 4</td><td colspan="2">Doctor of Philosophy</td><td rowspan="4">Articulation credits, credit transfers, RPL, also additional qualifications that facilitate mobility and access

e.g. Master's Certificate

e.g Postgraduate Certificate</td><td colspan="2">Doctor of Philosophy, Professional Doctorate</td></tr>
<tr><td>Postgraduate 3</td><td>Research Master's degree</td><td>Structured Master's degree</td><td>Research Master's degree,

Master of Technology</td><td>Structured Master's degree</td></tr>
<tr><td>Postgraduate 2</td><td colspan="2">Master's Diploma</td><td colspan="2">Professional Master's degree,
Master's Diploma</td></tr>
<tr><td>Postgraduate 1</td><td colspan="2">Bachelor Honours degree
Postgraduate Diploma</td><td colspan="2">Advanced career-focused Bachelor's degree,
Bachelor of Technology
Postgraduate Diploma</td></tr>
</table>

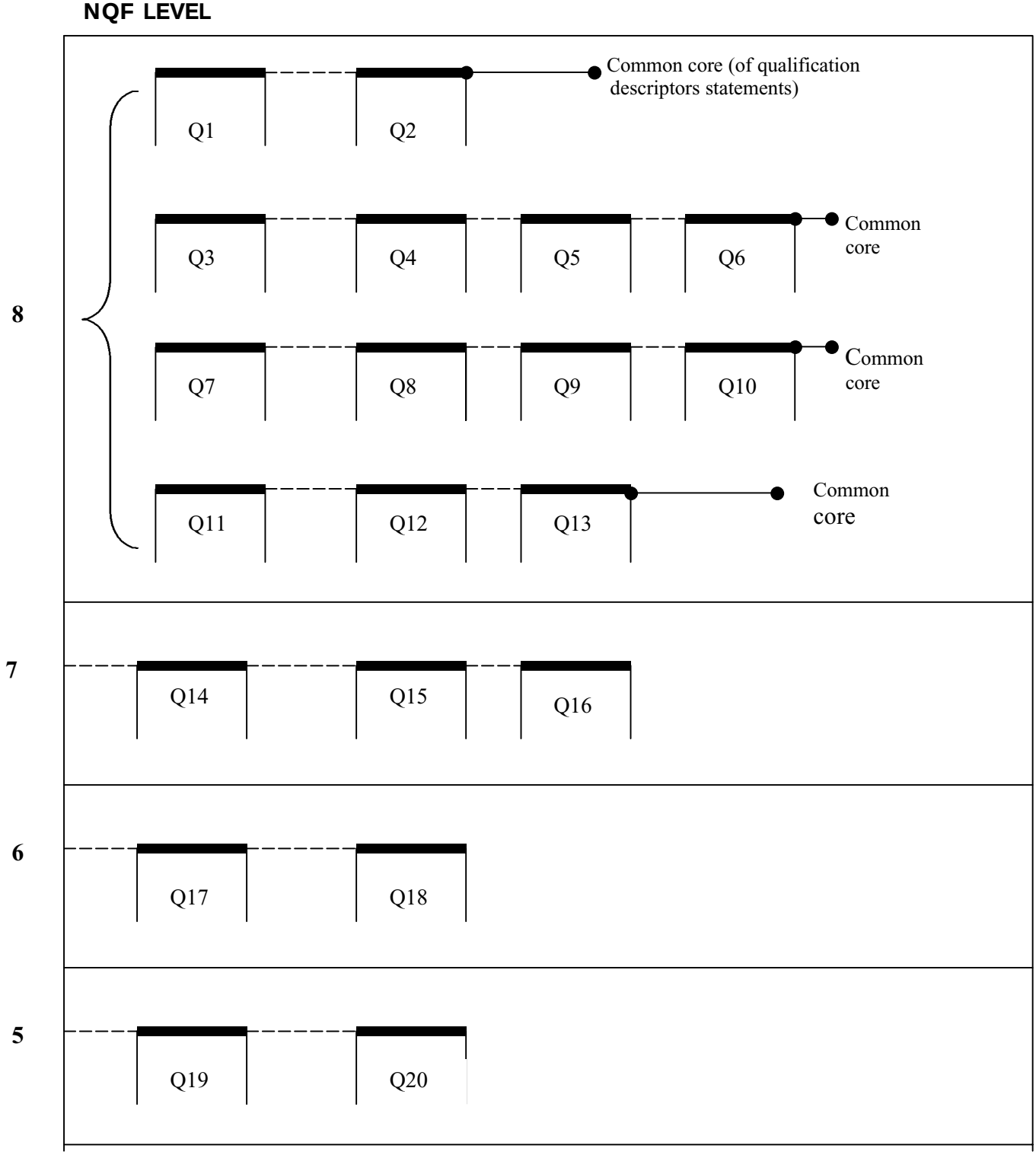
7		General Bachelor's degree	e.g. Graduate Certificate, Advanced Certificate	Career-focused Bachelor's degree, National Certificate (L7) - master artisan
6		National Diploma		National Diploma, National Certificate (L6)
5			e.g. Foundation Certificate	National Certificate (L5)
4		Further Education and Training Certificate – FETC (L4)	e.g. Bridging Certificate	National Certificate (L4)
3		National Certificate (L3)		
2		National Certificate (L2)		
1	**ABET 4 / GETC**	General Education and Training Certificate - GETC (L1) For all aspects, the requirements are not exclusionary		
	ABET 3	ABET level 3 Certificate		
	ABET 2	ABET level 2 Certificate		
	ABET 1	ABET level 1 Certificate		

The qualification types in this diagram provide a starting point for further discussion.

The symmetry of the South African NQF, as represented in this diagram, is important both **symbolically** as an indication of the **equal** importance of the two domains on either side of the level 4 – 5 interface, and **operationally** in order to make the NQF work in a unified and understandable way in this "crowded" area of articulation and progression. Accordingly, the "open-endedness" of level 8 can be used to meet the needs of higher education for a longer hierarchy of basic qualification types to be fixed in policy. A straight-forward device to facilitate this is to write level descriptor statements for level 8 that can cover the full range of qualifications that are fixed in policy above level 7. This will capture the actual learning levels for each by including in their qualification descriptors, particular subsets of descriptor statements that fix their relative positions within level 8 as a whole (see top half of the following figure). This is formally similar to adding three more NQF levels to the system, but has the clear advantage of preventing the NQF from becoming a construction dominated by higher education (with 7 out of 11 levels). Higher education and training at the postgraduate level is critical to ensure South Africa's intellectual global competitiveness. However, the area where the bulk of learners need to

be adequately catered for is at the undergraduate levels i.e. levels 5 to 6, and at level 7, and it is at those levels that coherence within the framework is essential.

This diagram illustrates qualification descriptors in relation to NQF levels 5 – 8.



The other open-ended level, level 1, already has the inclusion of four ABET levels of which the last corresponds to the learning attainment achieved by qualifiers with a General Education and Training Certificate (GETC).

In the qualifications framework diagram there is a proposal that the division between 'general' qualifications and 'career related/vocational' qualifications should be carried into the FET Band, and a concomitant assurance that meaningful pathways into the 'career related/vocational' technical and professional qualifications in the higher education and training band are created. In the further education and training band in the diagram there is a series of national certificates (training-based) at levels 4 to 7, that could lead to qualifications in the higher education and training band, thus laying the basis for progression along both pathways.

This is primarily to ensure that public recognition is given to training within an integrated framework and the level of public commitment is given to its expansion - whilst it is 'invisible' to the public eye, it will be ignored as a national priority and will make targeted funding interventions more difficult. Furthermore it is important to ensure that a meaningful link is made from FET to the stronger arm of training within the higher education and training band – where craft trade unions can be supported by professional bodies to hold the training standard high.

In the past, there has been no attempt to compare the practical expertise acquired through the mentorship of a master craftsperson to anything on the 'academic' side – this competence, which takes years to acquire has been deemed to be 'value-less' in comparative terms, with only the theory being compared. Recent theoretical work suggests that knowledge 'in the body' as it were, is equally difficult to acquire, and is no less 'knowledge' and should be re-valued. The point is perhaps easier to understand if illustrated through some other form of 'physical' mastery – such as the playing of a musical instrument.

In this suggestion, there may be a need to introduce a qualification at level 7 which signifies what the Germans refer to as a 'master artisan' – someone with very high levels of technical skill, but who, in addition carries pedagogic and managerial / entrepreneurial skill. In Germany this qualification lays the basis for their highly competitive small business sector and, through the pedagogic requirement, contributes to the fact

that small businesses take on more apprentices than the larger firms i.e. have the capacity to reproduce themselves.

The overall model of the NQF achieved in this way is understandable, workable and strongly promotes the NQF objectives.

THE DEVELOPMENT OF LEVEL DESCRIPTORS FOR THE NATIONAL QUALIFICATIONS FRAMEWORK: THE ROLE OF LEVEL DESCRIPTORS AND QUALIFICATION DESCRIPTORS IN THE NQF

Historical development: regulatory framework, values of the NQF

The SAQA Act of 1995 tasked SAQA with overseeing the development and implementation of the NQF. This function required that SAQA take responsibility for the development of level descriptors which could be used in the allocation of standards and qualifications to specific levels on the framework. SAQA was required to do this after consultation and in co-operation with its stakeholders.

The values that guide SAQA in its work are clearly set out in the SAQA Act as the objectives of the NQF:

- To create an integrated national framework for learning achievements;
- To facilitate access to, and mobility and progression within education, training and career paths;
- To enhance the quality of education and training;
- To accelerate the redress of past unfair discrimination in education, training and employment opportunities; and thereby
- To contribute to the full personal development of each learner and the social and economic development of the nation at large.

Embedded in these objectives of the NQF are principles that determine the way in which consideration of NQF-related issues take place. For example, the first and fifth objectives of the NQF indicate that decisions made at the SAQA level need to accommodate the individual needs of all learners in all sectors. They must also serve the social and economic needs of the nation at large, by taking into account:

- The variety of learners and their reasons for learning;
- The variety of qualification types that currently exist and are likely to exist;
- Their relevance within their sectors;
- Their feasibility within the variety of contexts of learning that exist in the South African system; and

- The variety of learning sites.

Ultimately, the NQF must provide all standards and qualifications that are registered on the NQF at a specific level, with credibility and societal acceptability.

The second, third and fourth objectives of the NQF indicate that the framework (through which learning achievement within our education and training system is recognised) must not become so rigid that access and progression are inhibited, nor so flexible that meaningful achievement cannot be reliably identified. Excessive rigidity will restrict access, progression, articulation and mobility, and would be associated with a strictly hierarchical qualifications system that values certain education and training modalities above others. If the system is too flexible, however, coherence and effective portability (leading to success in study) are lost – meaningful learning achievements in different contexts will not be distinguished for recognition purposes from inappropriate or trivial learning.

Appropriate systems for redress must aim to ensure that alternate processes e.g. RPL, are considered to have value equal to that of more traditional education and training processes. The key consideration for SAQA is to ensure that the needs of all stakeholders are met, but not at the expense of a credible and flexible education and training system that must serve the interests of South Africa as a nation. Finding a balance that creates a win-win situation for all stakeholders and the nation at large is the primary consideration.

It is also important to establish stability within the system and to promote coherent implementation. This includes providing for such transitional arrangements as may be necessary, so that the quality of provisioning and assessment and hence the experience of all learners in the system is protected. Society must be able to preserve that which is deemed valuable while at the same time providing the opportunity to explore new possibilities which may take some time to mature and assume their rightful place in the system.

When the NSB regulations were published in March 1998, the Authority sought to provide the flexibility needed to build a skills base for the emerging democratic South Africa. Therefore it did not include prescriptive level descriptors amongst the many NQF specifications.

Instead, it was indicated that the level descriptors for the NQF would be developed in an iterative process of interaction between SAQA, NSBs and SGBs. It was felt that this interaction in the unfolding process of developing the NQF would provide the experience and opportunity needed to develop level descriptors that would be relevant to the South African context.

The NSB regulations described the structure of the framework as follows.

> The National Qualifications Framework shall consist of eight levels, which shall be entitled levels 1 to 8, **and each level shall be described by a unique level descriptor.**
> (Chapter 2: Section 3(1))

The definition of the level descriptor was given as follows:

> "Level descriptor" means that **statement describing a particular level** of the eight levels of the National Qualifications Framework.
> (Chapter 1: General provisions)

Under the purpose and application of the level descriptors, the following statements were made:

> The Authority shall prescribe level descriptors in consultation with the National Standards Bodies in order **to ensure coherence** across fields and **to facilitate the assessment of the international comparability** of standards and qualifications.
> (Chapter 2: section 4(2))

In the case of the assignment of levels to standards and qualifications, the regulations prescribed that:

> Each National Standards Body contemplated in regulation 12 together with each Standards Generating Body contemplated in regulation 20 shall **reach agreement on the level of each unit standard and standard submitted**, on a scale of eight levels as envisaged in regulation 3, **taking into account the way in which both the breadth and the depth of knowledge, skills and values** in a specific sub-field **have been advanced** by learning, and the way in which one or more of the critical outcomes is seen to be a

distinctive although contextual part of the prescribed outcome of the unit standard concerned.

The proposers of unit standards-based qualifications shall construct, through appropriate rules of combination of selected unit standards registered at different levels, qualifications which have exit level outcomes that are a function both of the particular component standards used, and of a process of integrating the overall outcome, again considered as reflecting the extent (on a scale of 1 to 8 as contemplated in regulation 3) to which knowledge, skills and values in a sub-field have been acquired and the critical outcomes incorporated, into the assessable performance.

The proposers of qualifications not based on unit standards shall construct combinations of learning outcomes which have exit level outcomes that are a function of the most advanced outcomes included and of a process of integrating the overall outcome, considered as reflecting the extent (on a scale of 1 to 8 as contemplated in regulation 3), to which knowledge, skills and values in a sub-field have been acquired and the critical sub-field outcomes incorporated into the assessable performance as a whole. (Chapter 2: section 5)

The regulations thus set out to let each NSB develop its own sense of the way in which eight levels of learning achievement could be recognised in its own organising field of the NQF. The evolving "local" level descriptors had to help NSB's with the placement of both standards and qualifications on the framework; qualifications could be based either on unit standards or not, but their exit level outcomes and their associated assessment criteria would have to be the same. This placement would depend on the way in which the breadth and depth of learning has been advanced. Further, they had to assist standards-setters by providing general direction for the generation of learning outcomes and qualification designs, while the placements had to be comparable with international systems.

The difficulty with this early approach to level descriptors was that there had to be coherence across the framework as a whole, across the 12 organising fields as well as in relation to different basic qualification types. Level descriptors fundamentally needed to describe the nature of learning achievement, its complexity and relative demand at each level of

the NQF, distinguishing between the learning demands at each level. Because the level descriptors describe learning across domains, disciplines, fields and learning pathways, they must be broad, generic, qualitative statements against which specific learning outcomes within different organizing fields can be compared and located.

The following definition of a 'unit standard' was given in the NSB regulations:

> "Unit standard" means registered statements of desired education and training outcomes and their associated assessment criteria together with administrative and other information as specified in these regulations.
> (Chapter 1: General provisions)

The assumption has generally been that every unit standard will be linked directly with one or more qualification. Even though unit standards are intended to be part of clearly described overall learning pathways, it remains possible (and beneficial) for a learner to obtain credit for the successful fulfilment of the learning demands of one or more unit standards and to apply the knowledge, skills and values arising from that learning experience i.e. stand-alone learning achievements. Nevertheless, as stated in the 1996 report of the NCHE, "The demands of the future and the situation of South Africa as a developing country require that programmes, while necessarily diverse, should be educationally transformative. Thus they should be planned, coherent and integrated; they should be value-adding, building contextually on learners' existing frames of reference; they should be learner-centred, experiential and outcomes-oriented; they should develop attitudes of critical inquiry and powers of analysis; and they should prepare students for continued learning in a world of technological and cultural change."

Unit standards are thus not qualifications and will rarely or never meet all the competencies described in the set of level descriptor statements at a particular NQF level. The breadth and depth of learning provided by particular unit standards must be enough however, to allow their registration at a particular level of the framework. In other words, unit standards are recognised as registered entities in their own right in relation to the NQF, but will not need to meet the "full house" of descriptor statements for the NQF level at which they are individually registered.

In discussing the registration of qualifications and standards on the NQF, the NSB regulations in Section 8 (3) made provision for:

- The allocation of certificates and (unit) standards on levels 1 through 8 on the framework;
- The allocation of diplomas from level 5 through 8; and
- The allocation of degrees from level 6 through 8.

This served as a beginning for the task of fixing in policy the basic qualification types needed in the system.

International qualifications frameworks

The SAQA Act requires that standards and qualifications registered on the NQF be internationally comparable. Furthermore, in the NSB regulations, it is stated that one purpose of the level descriptors is **to facilitate the assessment of the international comparability** of standards and qualifications. It is important then to ensure that as far as possible, our qualifications and the levels at which they are pegged are internationally comparable. To this end, a brief summary of existing international qualifications frameworks is provided.

Formal national qualifications frameworks or systems for the national registration of qualifications have been developed (or are in the process of being developed) in a number of countries. A shared characteristic of these developments is the need to make the meaning of qualifications more transparent and to make more explicit what people have learned. The expectation is that this will make it easier for education stakeholders (including employers and students) to identify the nature and level of qualifications, to compare them and to identify more easily their articulation possibilities. A further characteristic is that in each instance there is a very close relationship between the qualification descriptors and the levels of the framework.

It is worth observing in this context that none of the international frameworks are part of an outcomes-based education and training system. Hence for the pegging of qualifications at the higher education levels, there is no reliance in these systems on level descriptors that describe in a general way what the outcomes are that one would expect from standards and different qualifications registered at a particular level.

Europe

Although not yet a formal qualifications framework, a noteworthy development is the Bologna Magna Charta Universitatum of 1988. While recognising and affirming the independence and autonomy of universities, the Bologna Declaration also calls for steps to ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge. Greater compatibility and comparability of the systems of higher education is stated as a priority. The objectives, stated in a Joint Declaration of the European Ministers of Education in June 1999, include:

- Adoption of a system of easily readable and comparable degrees in order to promote European citizens' employability and the international competitiveness of the European higher education system;

- Adoption of a qualifications system essentially based on two main cycles, undergraduate and graduate, (access to the second cycle requires the successful completion of first cycle studies, lasting a minimum of three years; the programme of the first cycle should be relevant to the labour market; the second cycle should lead to a master's and/or doctoral degree); and

- Establishment of a system of credits as a proper means of promoting widespread student mobility.

The aim is to achieve these objectives within the first decade of the third millennium.

Countries with formal national qualifications frameworks

New Zealand

The New Zealand Qualifications Authority (NZQA) began its work on unit standards development through various advisory bodies during 1993-1994. Following the 1999 White Paper, *The National Qualifications Framework*

of the Future, the framework was expected to include all quality-assured qualifications described in a consistent way (and not only national qualifications based on unit standards). The NZQA classification system makes provision for 17 fields. The characteristics, entry requirements, outcomes, credit requirements and relationship with other qualifications are stated for each qualification. In March 1999 the Authority undertook a consultation process to develop consistent definitions and credit requirements for all degree and postgraduate qualifications. This resulted in the publication of a consultation document in February 2000 entitled the *National Registration of Qualifications*. Various reports containing submissions and analyses of submissions appeared during 2000 and 2001 and the process has not yet been completed at the time of writing (June 2001). To avoid confusion with New Zealand's National Qualifications Framework, the broader framework is to be called the *National Register of Quality Assured Qualifications*. Learning outcomes for whole qualifications are to be recorded centrally.

The proposed register of qualifications originally made provision for eight levels but during the consultation process it has been expanded to ten to reflect the increasing number and diversity of postgraduate qualifications. Post-secondary qualifications are registered at six levels. Qualifications that can be equated with achievement in the first year of degree studies or advanced trade or technician studies are registered at level 5. Those qualifications that can be equated with achievement at the second year of degree studies or for higher-level technician and para-professional studies are registered at level 6. The bachelor's degree is to be registered at level 7, postgraduate diplomas and the bachelor's degree with honours at level 8, the master's degree at level 9 and the doctoral degree at level 10.

The quantity of learning and assessment typically required in gaining a qualification is measured in terms of "notional learning hours." Notional learning hours include direct contact time with teachers and trainers, time spent studying and doing assignments etc. and time spent on assessment. One credit is the equivalent of 10 notional hours. For funding purposes a full-time single year programme translates into 120 credits. When registering a qualification on the NZQF, any limitations or special provisions related to the recognition and transfer of credit from other qualifications must be stated. Students should expect credit transfer to apply automatically unless there are significant stated differences between qualifications.

Australia

The Australian Qualifications Framework (AQF) was introduced nation-wide on 1 January 1995 and was phased in over a five year period, with full implementation from 2000. The AQF is a unified system of 12 national qualifications in schools, vocational education and training and the higher education sector (mainly universities). Nine broad bands are distinguished under the AQF for the higher education sector (overlapping with the vocational education and training sector on the first four levels). In November 2000 the AQF Advisory Board issued a discussion paper entitled, *Review of the AQF Guidelines for the Bachelor Degree and Postgraduate Qualifications*. In this document new guidelines were proposed for the following qualifications in higher education: the bachelor's degree, the bachelor's honours degree, the graduate certificate, the graduate diploma, the master's degree and the doctoral degree.

The guidelines for these qualifications provide information on the following elements: purpose of the qualification, context, learning outcomes (including information on the authority to determine these), responsibility for assessment, pathways to the qualification, authority to issue the qualification and the certification issued. This is an attempt to establish a consistent set of guidelines and descriptions for all Australian higher education qualifications.

The United Kingdom

In the United Kingdom qualifications frameworks have been developed for (a) Scotland and (b) England, Wales and Northern Ireland. The frameworks share many common principles and components. At the postgraduate levels, the two higher education frameworks have common structures, qualification titles and qualification descriptors. Below the postgraduate levels, the honours degree levels are considered to be in broad alignment. Below the honours level, the frameworks reflect the particular features of the different educational contexts. To reflect the similarities at postgraduate levels, the two frameworks have shared labels as follows: D (Doctorates), M (Master's), H (Honours). Below these levels, the frameworks have individual numbering systems.

In Scotland the Garrett Commission recommended in 1997, that various stakeholders should together consider and adopt an integrated qualifications framework. The framework was published in January 2001. The Scottish Qualifications Framework provides for 12 levels including six Scottish higher education levels. (SQF level 7 = SHE level 1 and SQF level 12 = SHE level 6.) In ascending order the qualifications specified are: the certificate of higher education (SHE level 1), the diploma of higher education (SHE level 2), the bachelor's degree (SHE level 3), the honours degree (SHE level H), the master's degree (SHE level M) and the doctoral degree (SHE level D). For each qualification, guidelines are provided on: the required knowledge and understanding; the required level of practice (applied knowledge and understanding); and levels of attainment in the following generic skills - communication, numeracy, IT, autonomy, accountability and working with others. Furthermore, the characteristic outcomes and the competence required at each level are also provided.

The framework for England, Wales and Northern Ireland was also published in January 2001. The higher education qualifications awarded by universities and colleges in England, Wales and Northern Ireland are pegged at five levels. In ascending order, these are the certificate, intermediate, honours, master's and doctoral levels. In the framework document, qualification descriptors are provided specifying what successful candidates "have demonstrated," "will be able to (do)" and what "qualities and transferable skills necessary for employment" they will have. These descriptions are brief and it is easy to grasp the differences between the qualifications on each of the five levels and to follow the logic of their progression.

Table showing comparative qualifications frameworks

England, Wales, Northern Ireland (QAA)	**Scotland (QAA)**	**New Zealand (proposed)**	**Australian Qualifications Framework**
		(Levels 1 – 4, certificates and national certificates)	Certificates I – IV, Vocational & Senior Secondary Certificate of Education
Certificate level	Certificate of Higher Education level 7 SHE 1	Diploma level 5	Diploma (Higher Education and Vocational) AQF level 5
Intermediate level Ordinary (non-honours) degrees, foundation degree, diplomas of HE, higher diplomas	Diploma of Higher Education level 8 SHE 2	Advanced/ higher diploma level 6	Advanced diploma (Higher Education and Vocational Education) AQF level 5
Honours level The largest group of HE qualifications, takes **three years** full-time, leading to a bachelor's degree with honours	Ordinary degree level 9 SHE 3	Bachelor's degree level 7	Bachelor's degree AQF level 6
	Honours degree (4 years) level 10 SHE H	Graduate cert / diploma, Postgraduate cert / diploma, Bachelor's degree with honours level 8	Graduate certificate / diploma, Bachelor's degree with honours AQF level 7
Master's level	Postgraduate diploma and certificate, Master's degree level 11 SHE M	Master's degree level 9	Master's degree AQF level 8
Doctoral level	Doctorates level 12 SHE D	Doctoral degree level 10	Doctoral degree AQF level 9

A comparison of higher education qualifications in the SADC region

Formal national qualifications frameworks exist in a limited number of countries in the SADC region. These include South Africa, Namibia, Mauritius and Botswana. A broad comparison of the duration of study and the names of undergraduate degree qualifications yields the following information:

	Angola	Botswana	Lesotho	Mozambique	Swaziland	Zambia	Zimbabwe
	3 + 2	4	2 + 2	2/3 + 2	2 + 2	2 + 2	3
2 years			Diploma	Bachelerato		Diploma	
3 years	Bachelor's			Bachelerato			Bachelor's
4 years		Bachelor's	Bachelor's		Bachelor's	Bachelor's	
5 years	Licenciado			Licenciatura			

Namibia and Mauritius have both decided to develop national qualifications frameworks and are currently determining appropriate structures.

The South African National Qualifications Framework: a way forward

It is clear that consideration of international qualifications structures cannot be ignored if the South African system is to be comparable with international systems.

All international frameworks have been characterised by a hierarchical structure – qualification "ladders" - where qualifications are arranged according to the associated years of full-time study and a traditional understanding of the demands of the qualification types: the qualifications are pegged in each case on successive levels of the framework. In other words, the construction of the frameworks reflect a one-to-one relationship between a qualification type and the level on the framework. Thus there is one set of descriptors (and one level of the framework) for each qualification type. This means that the level descriptors (where they exist) are actually qualifications descriptors. This construction characteristic dominates in the higher education bands of all the countries cited, and appears also to be appropriate for the needs of public higher education institutions in South Africa. It is thus SAQA's task to ensure that the needs of that sector are met as far as possible.

A consideration of the reasons for the establishment of international qualifications frameworks emphasises the need to make the meaning of qualifications more transparent. They also make more explicit what people have learned, with the expectation that this will make comparisons and articulation easier. The focus has been on the exchange value of existing, established qualifications that are associated with formal learning institutions, within and across countries. This is an important consideration and must also be taken into account in SAQA's deliberations. Given that this is a primary reason for establishing frameworks, it is remarkable that there is no consistency in the number of levels of the frameworks across different countries.

The precise needs within the South African system extend beyond the need for comparison and benchmarking of qualifications.

The needs within the South African environment are starkly illustrated by the figures of the level of education of those aged 20 years or more in the 1996 census:

- 6,2% of the population have education level above grade 12;
- 16,4% have grade 12;
- 33,9% have some secondary schooling;
- 7,5% have completed primary schooling only;
- 16,7% have some primary schooling; and
- 19,3% have no schooling.

To improve the skills levels in the country, it is imperative that the 16,4% and 33,9% that have completed all or some secondary schooling be moved into tertiary education and training. Furthermore the 7,5% and 16,7% that have completed all or some of their primary education must be moved into the further education and training band. The 19,3% that do not have any recognised level of education must be moved into NQF level 1, at least. Only 6,2% fall in the higher education and training band. The emphasis for the NQF and the HRD strategy in South Africa must be the lower levels of the higher education and training bands as well as the general and further education and training bands. The FET-HET transition as well as the undergraduate levels of HET must be given specific attention to ensure that articulation in learning pathways at these levels is as flexible as possible and promote access and portability.

In addition to establishing clear pathways of articulation between qualifications in South Africa, there has been an emphasis on developing a framework that encourages looking at new options that are relevant for our needs; questioning traditional qualification structures and encouraging experimentation with alternate sites and modes of learning. The South African NQF underpins the person-power strategy (National HRD strategy) and the Skills Development Strategy; it underpins the development of a vibrant, high quality, relevant vocational education and training system with an emphasis on workplace-based training and assessment as a major contributor in the awarding of qualifications. The South African NQF development needs to accommodate other possibilities that may not yet be part of traditional qualification structures e.g. qualifications based on unit standards or qualifications that consist of a combination of unit standards and exit level outcomes and their associated assessment criteria. It needs to accommodate the possibility of establishing viable and credible learning pathways that may differ from traditional learning pathways at all levels of the framework. In short, the South African qualifications framework must be able to accommodate the possibilities for innovation and creativity that the South African learning context demands.

The NSB regulations clearly intended to create a one-to-many relationship between the level descriptors and the basic qualification types and (unit) standards. The function of the level descriptors was to describe the way in which both the breadth and the depth of knowledge, skills and values in specific sub-fields were advanced by learning. They were also intended to describe the way in which one or more of the critical outcomes was seen to be a distinctive although a contextual part of the specific outcome of a learning unit - a unit standard, a qualification of either type i.e. based on unit standards or based on exit level outcomes and their associated assessment criteria, and of different sizes, as indicated by credit value.

The challenge for the development of level descriptors

The primary issue that the development of level descriptors in South Africa needs to address is to ensure that alignment with international qualifications frameworks is possible at the same time as ensuring that the specific needs posed by the developing education and training system are accommodated. To ensure stability, the integrity and social credibility of the existing qualifications structure must be protected. At

the same time, it is essential that provision is made for the innovation and creativity in standards generation and qualifications design that may emerge from the initiatives of the Skills Development Act.

The level descriptors must thus provide the mechanism for connecting horizontal elements of the NQF for registration of qualifications and standards on the NQF. In addition, level descriptors must be sufficiently flexible to accommodate innovation but at the same time provide firm guidance to protect the integrity of the framework.

The NSB regulations issued in 1998 established the South African NQF as an 8-level framework, with levels 1 and 8 open-ended. Level descriptors will be formally prescribed for each level, and will describe in broad terms the complexity of learning acquired at a particular level and will help to distinguish between the learning demands at each level. Broad guidance will be given as to the level at which any qualification or standard should be pegged. (The level descriptors are discussed more fully in a later section of this document.)

The NSB regulations also indicated that a series of possible basic qualification types could be pegged at any particular level of the NQF. To achieve this, a set of qualification descriptors would have to be developed for each basic qualification type, describing exactly what their requirements are. The specific basic qualification types will become SAQA-protected terms and no qualification will be registered on the NQF under one of these names unless it fulfils the qualification descriptors associated with it.

The level descriptors, together with the qualification descriptors of each basic qualification type fixed in policy by SAQA, will enable NSBs to register qualifications under specific names, without damaging the integrity of the qualification structure. At the same time, NSBs will be in a position to register unit standards as independent entities. This structure will also accommodate the possibility of qualification types that are in the process of development or not yet envisaged, and will also provide much clearer direction for standards-setters as to the requirements for particular qualification types.

The South African NQF is an integrated framework of learning achievements, incorporating both standards and qualifications. At this stage, qualifications of two types can be registered on the NQF i.e. those

based on unit standards and those based on exit level outcomes and associated assessment criteria. Level descriptors for levels 1 – 8 of the NQF, once adopted, will be used to allocate both standards and qualification types to specific levels of the NQF.

In the case of unit standards, a particular standard will be tested against the descriptor statements at a number of successive levels and will be pegged at the Level that fits the standard best. Such standards will be unable to meet all descriptors contained in level descriptor statements at that level, because they represent "units" of learning and not qualifications. In the case of qualifications, most, preferably all, of the descriptor statements will have to be satisfied by a qualification registered at the relevant level. In time there may be well-specified exceptions, but they will not be the rule.

In this sense, the NQF will promote articulation and progression between qualifications, whether these comprise a number of unit standards (through rules of combination) or not.

The South African NQF was designed by SAQA to have 8 levels, of which levels 1 and 8 are "open-ended" to provide flexibility in their domains. Levels 2, 3 and 4, on the one hand, and levels 5, 6 and 7, on the other, form symmetrical groups of levels, with a high degree of discrimination, around the crucial FET/HET interface between levels 4 and 5. This allows the system of qualifications and unit standards to function optimally in the most "crowded" part of the NQF. "Crowding" in this context refers to the number of existing and new qualifications requiring to be organised into a workable articulation and progression system that will affect a very large number of learners and qualifiers.

Qualification descriptors for the basic qualification types to be registered at L2 – 7 will indicate specific features and requirements that are **additional** to the level descriptor statements for the NQF level at which they are fixed in policy (see below). The fact that **each** of the qualifications fixed at a particular level, as well as all qualifications derived from them by the "nesting" principle (see below), will largely or wholly satisfy the level descriptors concerned, will greatly facilitate articulation and progression in the South African NQF system. It will apply to qualifications built up partly or wholly from unit standards as well as to those not so designed. The arrangement will also have a powerful normative effect on qualifications that are allocated to a particular level

but in delivery and assessment do not meet the requirements as stated in the qualification descriptors. Clearly this will also be of immense assistance in quality assurance processes.

To accommodate the apparent 'crowding' at the FET/HET interface, the following has been proposed:

- The first national degree, currently allocated at level 6 in the NSB regulations, be allocated at level 7. This will free up level 6 providing room for an additional undergraduate level;
- The first national diploma, currently allocated at level 5 in the NSB regulations, should be allocated at level 6;
- Qualifications currently allocated at 7 be allocated at level 8; and
- There could be four sub-levels at level 8 as per NQF level 1, which accommodates three ABET sub-levels. The sub-levels at level 8 could be labelled postgraduate levels 1 – 4.

The NQF and associated qualification types would then be as follows:

<table>
<tr><th colspan="2">NQF level</th><th colspan="2">General</th><th>Articulation – horizontal and diagonal</th><th colspan="2">Career-focused / vocational</th></tr>
<tr><td rowspan="4">8</td><td>Postgraduate 4</td><td colspan="2">Doctor of Philosophy</td><td rowspan="4">Articulation credits, credit transfers, RPL, also additional qualifications that facilitate mobility and access

e.g. Master's Certificate

e.g Postgraduate Certificate</td><td colspan="2">Doctor of Philosophy, Professional Doctorate</td></tr>
<tr><td>Postgraduate 3</td><td>Research Master's degree</td><td>Structured Master's degree</td><td>Research Master's degree,

Master of Technology</td><td>Structured Master's degree</td></tr>
<tr><td>Postgraduate 2</td><td colspan="2">Master's Diploma</td><td colspan="2">Professional Master's degree,
Master's Diploma</td></tr>
<tr><td>Postgraduate 1</td><td colspan="2">Bachelor Honours degree
Postgraduate Diploma</td><td colspan="2">Advanced career-focused Bachelor's degree,
Bachelor of Technology
Postgraduate Diploma</td></tr>
</table>

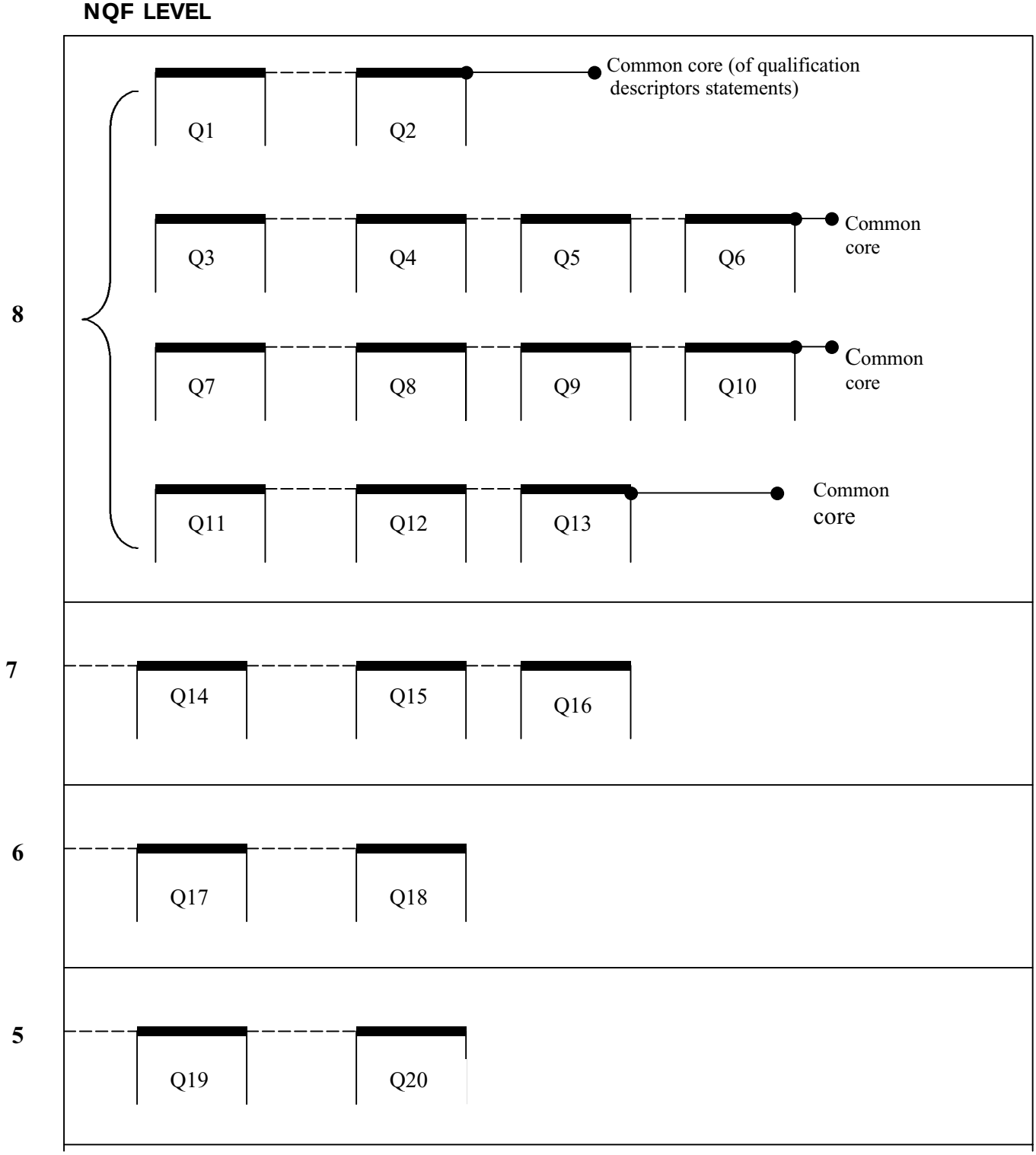
7		General Bachelor's degree	e.g. Graduate Certificate, Advanced Certificate	Career-focused Bachelor's degree, National Certificate (L7) - master artisan
6		National Diploma		National Diploma, National Certificate (L6)
5			e.g. Foundation Certificate	National Certificate (L5)
4		Further Education and Training Certificate – FETC (L4)	e.g. Bridging Certificate	National Certificate (L4)
3		National Certificate (L3)		
2		National Certificate (L2)		
1	**ABET 4 / GETC**	General Education and Training Certificate - GETC (L1) For all aspects, the requirements are not exclusionary		
	ABET 3	ABET level 3 Certificate		
	ABET 2	ABET level 2 Certificate		
	ABET 1	ABET level 1 Certificate		

The qualification types in this diagram provide a starting point for further discussion.

The symmetry of the South African NQF, as represented in this diagram, is important both **symbolically** as an indication of the **equal** importance of the two domains on either side of the level 4 – 5 interface, and **operationally** in order to make the NQF work in a unified and understandable way in this "crowded" area of articulation and progression. Accordingly, the "open-endedness" of level 8 can be used to meet the needs of higher education for a longer hierarchy of basic qualification types to be fixed in policy. A straight-forward device to facilitate this is to write level descriptor statements for level 8 that can cover the full range of qualifications that are fixed in policy above level 7. This will capture the actual learning levels for each by including in their qualification descriptors, particular subsets of descriptor statements that fix their relative positions within level 8 as a whole (see top half of the following figure). This is formally similar to adding three more NQF levels to the system, but has the clear advantage of preventing the NQF from becoming a construction dominated by higher education (with 7 out of 11 levels). Higher education and training at the postgraduate level is critical to ensure South Africa's intellectual global competitiveness. However the area where the bulk of learners need to

be adequately catered for is at the undergraduate levels i.e. levels 5 to 6, and at level 7, and it is at those levels that coherence within the framework is essential.

This diagram illustrates qualification descriptors in relation to NQF levels 5 – 8.



The other open-ended level, level 1, already has the inclusion of four ABET levels of which the last corresponds to the learning attainment achieved by qualifiers with a General Education and Training Certificate (GETC).

In the qualifications framework diagram there is a proposal that the division between 'general' qualifications and 'career related/vocational' qualifications should be carried into the FET Band, and a concomitant assurance that meaningful pathways into the 'career related/vocational' technical and professional qualifications in the higher education and training band are created. In the further education and training band in the diagram there is a series of national certificates (training-based) at levels 4 to 7, that could lead to qualifications in the higher education and training band, thus laying the basis for progression along both pathways.

This is primarily to ensure that public recognition is given to training within an integrated framework and the level of public commitment is given to its expansion - whilst it is 'invisible' to the public eye, it will be ignored as a national priority and will make targeted funding interventions more difficult. Furthermore it is important to ensure that a meaningful link is made from FET to the stronger arm of training within the higher education and training band – where craft trade unions can be supported by professional bodies to hold the training standard high.

In the past, there has been no attempt to compare the practical expertise acquired through the mentorship of a master craftsperson to anything on the 'academic' side – this competence, which takes years to acquire has been deemed to be 'value-less' in comparative terms, with only the theory being compared. Recent theoretical work suggests that knowledge 'in the body' as it were, is equally difficult to acquire, and is no less 'knowledge' and should be re-valued. The point is perhaps easier to understand if illustrated through some other form of 'physical' mastery – such as the playing of a musical instrument.

In this suggestion, there may be a need to introduce a qualification at level 7 which signifies what the Germans refer to as a 'master artisan' – someone with very high levels of technical skill, but who, in addition carry pedagogic and managerial / entrepreneurial skill. In Germany this qualification lays the basis for their highly competitive small business sector and, through the pedagogic requirement, contributes to the fact

that small businesses take on more apprentices than the larger firms i.e. have the capacity to reproduce themselves.

Articulation

A unique feature of this qualifications framework is the middle column labelled *horizontal and diagonal articulation* which is designed to build flexibility into a framework that would otherwise remain too rigid and crude to accommodate the vast variety of programmes and qualifications offered across the HET band. Horizontal and diagonal articulation is proposed as a mechanism to facilitate meaningful articulation between qualifications in the two different tracks. Its purpose is to facilitate learner mobility and progression along the framework as efficiently as possible. It can also be used to admit into the system those learners who do not meet the full entry requirements for their target programmes. It is likely to be the 'space' in the system where the recognition of prior learning can most easily be implemented. The horizontal and diagonal articulation mechanism is thus proposed to cater for the learning needs of those whose past learning experiences have not adequately prepared them for a chosen programme, without forcing them to 'go back to the beginning again'.

An example of the use of qualifications in the articulation column follows: If a learner wishes to change from the general to the career-focused track after his/her first degree at level 7, s/he may be required to first move horizontally on the framework and attain a graduate certificate at level 7 before being permitted to register for an advanced career-focused bachelor's degree. Alternatively, depending on the nature of his/her previous degree and on his/her level of attainment, s/he may be permitted to move diagonally on the framework and register for a postgraduate certificate at level 8 in order to thereafter gain entry to a postgraduate programme at level 8 in the career-focused track. Alternatively, the learner may not hold a recognised formal degree but may have considerable appropriate experience. His/her prior learning may be assessed against the learning outcomes for a graduate or postgraduate certificate and if successful, s/he may gain entry to any one of a number of level 8 programmes.

Generally, horizontal articulation requirements mean that the learner is required to undertake further learning at the same level as his/her highest qualification in order to meet the entry requirements of a target

programme. Diagonal articulation requirements mean that the learner may proceed to the next level, but will be required to undertake additional enrichment learning in the target area prior to being admitted to a new programme. In some cases, where a learner is better prepared than others, s/he may be required to attain only a certain number of credits in the target area (i.e. register for one or two modules or unit standards rather than a whole qualification in the articulation column) prior to being admitted to the target programme. In such cases, if the learning load is not too onerous, s/he may be allowed to register simultaneously for the enrichment learning in the articulation column and for the target programme. This example applies equally to both tracks on the framework.

It is important to understand that the pegging of two qualifications at the same NQF level does not mean that they are equal or even equivalent; it simply means that the programmes leading to these qualifications engage with comparable levels of complexity of learning. This is why the concept of horizontal and diagonal articulation is necessary to facilitate articulation between programmes and qualifications that may differ widely in the nature and scope of required content (foundational competence), skill (practical competence) and requirements for reflexive competence. Provided that entry requirements and exit points for particular learning programmes and their qualifications are clearly stated and provided assessment methods are valid and reliable, transparent decisions can be made by learners, their curriculum advisors and institutional gate-keepers about what further learning is required before a learner's exit level learning articulates with the entry requirements of a target programme and vertical progression on the framework can be resumed.

Whilst the framework provides general guidelines and parameters, specific articulation requirements will always be determined by the receiving institution on the basis of publicly declared entry requirements for particular programmes and qualifications. That is already a requirement for the registration of qualifications on the NQF. A key to ensuring the articulation of qualifications in the HET Band and to exploiting the flexibility of this framework, will be the clear and public statement of entry and exit requirements for programmes, both in terms of credits at particular levels and in terms of statements of learning outcomes, against which learning (both formal and experiential or non-formal) can be assessed and weighted.

As stated in the example above, the articulation column can be used as a space where learners achieve 'articulation credits' in transit between two programmes, or it can be used to attain whole qualifications. The whole qualification offered in the articulation column are all certificates requiring a minimum of 120 credits in all, with only 72 credits at the level at which they are pegged, thus meeting SAQA's minimum requirements for whole qualifications.

As a generalisation, it is likely that the curricula of the bridging and foundation certificates at levels 4 and 5 will be more formative and general, focussing on disciplinary content and academic and generic skills in order to prepare learners for higher education study. On the other hand, the curricula of the graduate, postgraduate and master's certificates are likely to be more specialised and focused in order to ground learners in new professions or careers, up-grade their current professional knowledge and skills, or provide them with research training and a methodological grounding for postgraduate study.

The overall model of the NQF achieved in this way is understandable, workable and strongly promotes the NQF objectives.

Implications of these proposals for the system

- **Modifications to NSB regulations**

  The NSB regulations of March 1998 will need to be modified as follows:

  - Section 8 (3)(c): The Authority shall register a qualification as a national first degree where it has a minimum of 360 (three hundred and sixty) credits of which at least 72 (seventy-two) credits shall be at **level 7** or above;

  - Section 8 (3)(b): The Authority shall register a qualification as a national diploma where it has a minimum of 240 (two hundred and forty) credits of which at least 72 (seventy-two) credits shall be at l**evel 6** or above; and

  - Section 3(2): Level 1 of the National Qualifications Framework shall be open-ended and shall accommodate three sub-levels for

Adult Basic Education and Training for which certificates of achievement may be awarded, and level 8 shall be open-ended **and shall accommodate four sub-levels for postgraduate education and training for which qualifications may be awarded**.

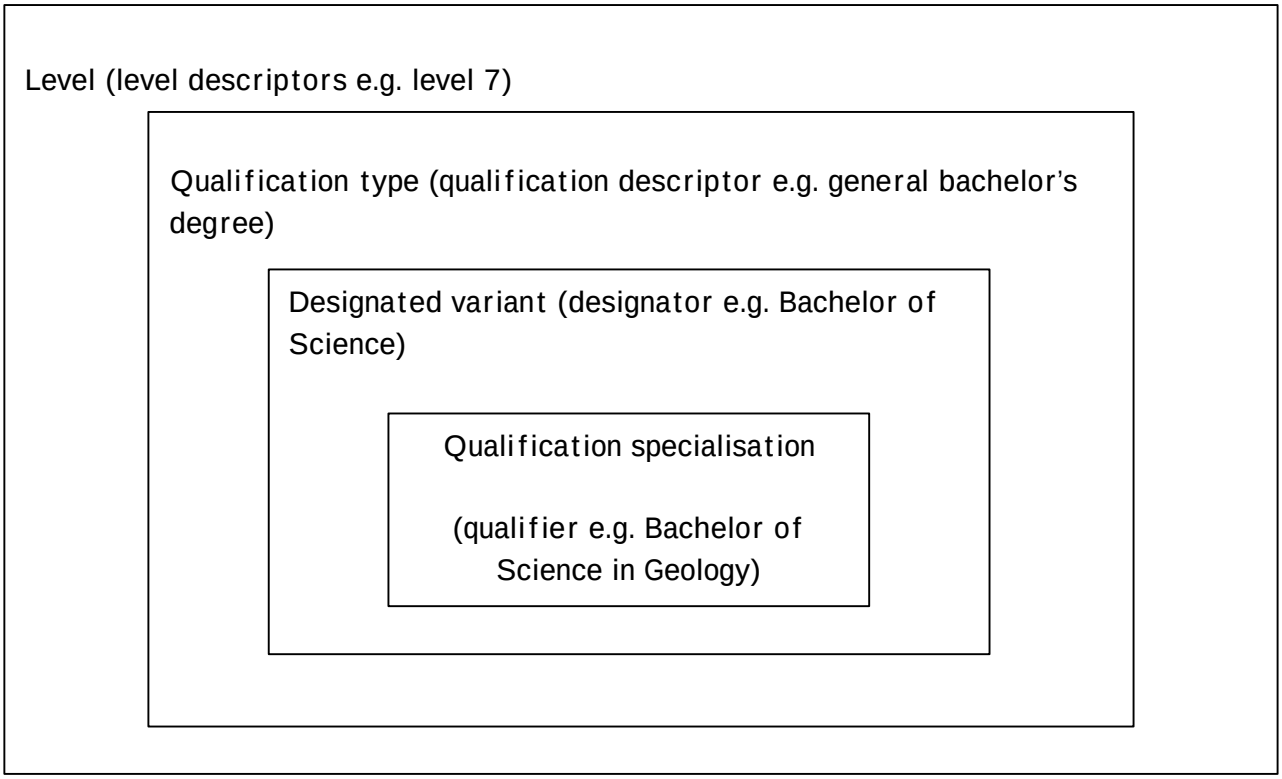
Note: The modifications are indicated in bold.

- Some of the qualifications currently registered on the NQF at levels 5, 6 and 7 – both those that were registered in the Interim Registration process as well as new qualifications that have been registered on the NQF - will need to be re-allocated to levels 6, 7 and 8 (postgraduate levels 1 - 4) as per the proposal. Timeframes for the implementation of this aspect could be a year. This will include (a) the actual re-allocation of qualifications and (b) the forwarding of appropriate documentation to affected providers. The timeframe will also include any modifications of the structure of the National Learners' Records Database (NLRD).

The "nesting" principle for qualifications

The "nesting" approach to standards generation and qualification specification provides a conceptual tool of enormous power for standards-setting, which also creates a logical classification for qualifications. At the outermost layer are the level descriptors, which are generic statements and hence broadly indicate the learning demands. At the next layer are the basic qualification types which will be SAQA-protected terms and will be described in policy by means of formal qualification descriptors enabling a distinction to be made between basic qualification types which are fixed at one level and those fixed at other levels. At the next layer are designated variants of the qualification types (such as BSc, BCom and BA variants on the basic qualification type of bachelor's degree). Finally, there are the specialisations which will take the "nesting" system to its fourth layer. Fundamentally important for the "nesting" approach is that level descriptors and qualification descriptors are carried cumulatively through the "nested" layers, as they are recontextualised from outside inwards.

The "nesting" principle



It is important to note that each of the "layers" includes information about the main articulation routes up to and out of a particular qualification.

This model will provide qualification designers with firm guidelines as to the rationale for each qualification type. It will also indicate what is required for the generation of new qualifications out of the basic qualification types. Should designers believe that the existing qualification types do not meet the needs of the qualification that they wish to register, they will be able to motivate for the registration of a new qualification type, indicating why it is necessary and cannot be met by any of the existing qualification types. In this way the existing qualification structure is protected and yet sufficiently flexible to incorporate innovation and creativity that may emerge.

Furthermore, the model enables unit standards to be pegged on the framework in a logical and understandable manner, providing a rationale for the rules of combination for unit standards-based qualifications, by indicating the requirements of specific basic qualification types and their "nested" variants.

The nature of level descriptors

As already stated, level descriptors attempt to describe the nature of learning achievement, its complexity and relative demand, at each level of a qualifications framework. Level descriptors are broad, generic, qualitative statements against which specific learning outcomes can be compared and located. Thus, sets of level descriptors can be used in a general way to determine the pegging of qualifications and standards on a framework. But because they describe learning across domains, disciplines, fields and learning pathways, level descriptors must be general and at the same time specific enough to serve their purpose. They must provide a clear understanding of the meaning of learning attainment corresponding to each level on the NQF.

It is important to recognize that the NQF levels and their level descriptors can only serve as reference points for more specific outcomes achieved by specific qualifications. Level descriptors are necessary for qualification design and for the assessment of learning, but for these purposes must be complemented by the relevant qualification descriptors and often more specifically by the addition of specialised qualification standards. These will be re-worked into learning outcomes.

Qualification descriptors are used to distinguish between different qualifications that are allocated to the same level on the NQF, as well as between these and qualifications allocated to other levels. Credit-rating should not be used to determine the level at which a particular qualification sits, for the volume of learning (the number of credits) required for different qualifications may vary considerably, while the level of complexity of learning attained remains similar. For example, a Bachelor of Technology (Optometry) (a highly specialized and focused qualification) could require 480 credits at level 8, whilst the Bachelor of Medicine and Surgery (a very comprehensive, broad qualification) could require 600 – 720 credits **at the same level** on the NQF.

Level descriptor categories

Although SAQA's concept of "applied competence" has three separate components (foundational, practical and reflexive competence), the description of learning used in this document retains the concept in its integrated form. A further category has been added which does not seem

to be catered for in the concept of "applied competence", namely "autonomy of learning". Both concepts are defined below.

Applied competence: "Applied competence is the overarching term for three interconnected kinds of competence. Practical competence is the demonstrated ability, in an authentic context to: consider a range of possibilities for action; make considered decisions about which possibility to follow; and perform the chosen action. It is grounded in foundational competence where the learner demonstrates an understanding of the knowledge and thinking that underpins the action taken, and integrated through reflexive competence in which the learner demonstrates ability to integrate or connect performances and decision-making with understanding and with an ability to adapt to change and unforeseen circumstances and to explain the reasons behind these adaptations."

> *Norms and Standards for Educators (Government Gazette* No.20844, Feb.2000: 10)

Autonomy of learning: autonomy of learning is a learner's capacity for lifelong learning; i.e. the extent to which a learner can undertake action for learning independently, the extent to which a learner takes responsibility for his/ her own learning and the extent to which a learner is self-reflexive about and can evaluate the quality of his/ her learning and eventually that of others. Progression in this category of learning is from dependence on other-regulation to full self-regulation and from close supervision to creative, self-directed learning and the ability to supervise the learning of others.

Draft level descriptors [1]

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
1	a. a general knowledge of one or more areas or fields of study[2], in addition to the fundamental areas of study b. an understanding of the context within which the learner operates c. an ability to use key common tools and instruments[3] sound listening and speaking, reading and writing skills basic numeracy skills including an understanding of the symbolic systems d. an ability to recognise and solve problems within a familiar, well-defined context e. an ability to recall, collect and organise given information clearly and accurately f. an ability to report information clearly and accurately in spoken and written form	a. a capacity to apply themselves to a well-defined task under direct supervision b. an ability to sequence and schedule learning tasks c. an ability to access and use a range of learning resources d. an ability to work as part of a group

[1] These level descriptors are a working draft which will be piloted and refined before being finalised by SAQA
[2] The purpose of the qualification will determine whether one or more fields is covered
[3] Common tools and instruments covers not only hand and cleaning tools but can include keyboards, various computer packages, writing instruments, communication devices including telephones

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
2	a. a basic operational knowledge of one or more areas or fields of study[4], in addition to the fundamental areas of study b. an understanding of the environment within which the learner operates in a wider context c. an ability to use a variety of common tools and instruments[5] the ability to apply literacy and numeracy skills to a range of different but familiar contexts d. an ability to use their knowledge to select and apply known solutions to well-defined routine problems e. a basic ability to collect, organise and report information clearly and accurately f. an ability to express an opinion on given information clearly in spoken and written form	a. a capacity to work and learn in a disciplined manner in a well-structured and supervised environment b. an ability to mange their time effectively c. an ability to develop sound working relationships and an ability to work effectively as part of a group

[4] The purpose of the qualification will determine whether one or more fields is covered

[5] Common tools and instruments covers not only hand and cleaning tools but can include keyboards, various computer packages, writing instruments, communication devices including telephones

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
3	a. a basic understanding of one or more field's or discipline's key concepts and knowledge[6], in addition to the fundamental areas of study b. an understanding of the organization or operating environment as a system c. application of skills in measuring the environment using key instruments and equipment[7] operational literacy and numeracy skills[8] use basic procedures and operations to complete complex tasks d. an ability to use their knowledge to select appropriate procedures to solve problems within given parameters e. a basic ability to summarise and interpret information relevant to the context from a range of sources f. an ability to take a position on available information, discuss the issues and reach a resolution; produce a coherent presentation and report, providing explanations for positions taken	a. a capacity to operate within clearly defined contexts b. an ability to work and learn within a managed environment c. a capacity to actively contribute to team effectiveness

[6] The purpose of the qualification will determine whether one or more fields is covered

[7] The process of converting conditions into data, quantifying events and phenomena

[8] Operational literacy = reading of symbols and representations related to the field or discipline e.g. music notation, engineering drawings, building plans, circuit diagrams, flow diagrams, maps

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
4	a. a fundamental knowledge base of the most important areas of one or more fields or disciplines[9], in addition to the fundamental areas of study an informed understanding of the key terms, rules, concepts, established principles and theories in one or more fields or disciplines b. an understanding of the organisation or operating environment as a system within a wider context c. an ability to apply essential methods, procedures and techniques of the field or discipline; an ability to apply and carry out actions by interpreting information from text[10] and operational symbols or representations d. an ability to use their knowledge to solve common problems within a familiar context; an ability to adjust an application of a common solution within relevant parameters to meet the needs of small changes in the problem or operating context; an ability to motivate the change using relevant evidence[11] e. a basic ability in gathering relevant information, analysis and evaluation skills f. an ability to communicate and present information reliably and accurately in writing and verbally	a. a capacity to take responsibility for their own learning within a supervised environment b. take decisions about and responsibility for actions c. evaluate their own performance against given criteria d. a capacity to take the initiative to address any shortcomings they find

[9] The purpose of the qualification will determine whether one or more fields is covered
[10] Text will include operation manuals, written instructions etc.
[11] This could include health and safety requirements, operation procedures etc.

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
5	a. a fundamental knowledge base of the main areas of one or more fields or disciplines[12]; an informed understanding of the important terms, rules, concepts, principles and theories in one or more fields or disciplines b. an understanding of the organisation or operating environment as a system within a wider context and in relation to the society c. an ability to effectively apply essential methods, procedures and techniques of the field or discipline; an ability to interpret, convert and evaluate text[13] and operational symbols or representations d. an ability to use their knowledge to solve well-defined problems both routine and unfamiliar within a familiar context; an ability to adjust an application of a solution within relevant parameters to meet the needs of changes in the problem or operating context; an ability to evaluate the change using relevant evidence[14] e. efficient information-gathering, analysis and synthesis, and evaluation skills f. presentation skills using appropriate technological skills; an ability to communicate information coherently using basic conventions of an academic / professional[15] discourse reliably in writing and verbally	a. a capacity to take responsibility for their own learning within a supervised environment b. take decisions about and responsibility for actions c. evaluate their own performance against given criteria

[12] The purpose of the qualification will determine whether one or more fields is covered
[13] Text will include operation manuals, written instructions etc.
[14] This could include health and safety requirements, operation procedures etc.
[15] Professional incorporates what has traditionally been known as vocational

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standard at this level aims to develop learners who demonstrate:		
6	a a solid knowledge base in at least one discipline/field b a sound understanding of one or more discipline/field's key terms, rules, concepts, established principles and theories; some awareness of how the discipline/field relates to cognate areas c effective selection and application of the central procedures operations and techniques of a discipline/field d an ability to solve well-defined but unfamiliar problems using correct procedures and appropriate evidence e a critical analysis and synthesis of information; presentation of information using basic information technology f an ability to present and communicate information reliably and coherently, using academic/professional discourse conventions and formats appropriately	a. a capacity to evaluate their own learning and identify their learning needs within a structured learning environment b. a capacity to take the initiative to address these needs c. a capacity to assist others with identifying learning needs

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standard at this level should develop learners who demonstrate:		
7	a. a well-rounded and systematic knowledge base in one or more disciplines/fields and a detailed knowledge of some specialist areas b. a coherent and critical understanding of one or more discipline/ field's terms, rules, concepts, principles and theories; an ability to map new knowledge onto a given body of theory; an acceptance of a multiplicity of 'right' answers c. effective selection and application of the essential procedures, operations and techniques of a discipline/ field; an understanding of the central methods of enquiry and research in a discipline/ field; a knowledge of at least one other discipline/ field's mode of enquiry d. an ability to deal with unfamiliar concrete and abstract problems and issues using evidence-based solutions and theory-driven arguments e. well-developed information retrieval skills; critical analysis and synthesis of quantitative and/ or qualitative data; presentation skills following prescribed formats, using IT skills appropriately f. an ability to present and communicate information and their own ideas and opinions in well-structured arguments, showing an awareness of audience and using academic/ professional discourse appropriately	a. a capacity to operate in variable and unfamiliar learning contexts, requiring responsibility and initiative b. a capacity to accurately self-evaluate and identify and address own learning needs c. an ability to interact effectively in a learning group

As discussed, Level 8 is sub-divided into 4 postgraduate sub-levels. A composite level descriptor is provided for Level 8 as well as separate descriptors for each of the four postgraduate sub-levels.

NQF level	Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:		
8	a. a comprehensive and systematic knowledge of one or more disciplines/fields with depth, specialisation and up-to-date knowledge in some areas b. an informed and critical understanding of the theory and research methodology of one or more disciplines/fields and an understanding of how these relate to research problems in the field; an ability to relate theory to practice and *vice versa* and an ability to think epistemologically c. an ability to select and apply research methods effectively and to undertake a research project in an area of specialisation d. an ability to deal with complex problems using the intellectual, research and technological resources and tools provided by a discipline/ profession e. effective information retrieval and processing skills; an ability to critically engage with current research and scholarship in an area of specialisation f. an ability to present and communicate academic/ professional work effectively, using the full resources of an academic/professional discourse appropriately	a. a capacity to operate in complex, unfamiliar contexts, requiring personal responsibility and initiative b. a capacity to accurately self-evaluate and take responsibility for continuing professional/ academic development c. a capacity to manage learning tasks independently, professionally and ethically d. a capacity to critically evaluate own and others' work with justification.

NQF level & Sub-level		Applied competence	Autonomy of learning
Typically, a learning programme leading to the award of a qualification or unit standards at this level should develop learners who demonstrate:			
8	**PG 1**	a. a comprehensive and systematic knowledge base in one or more disciplines/fields and a depth of knowledge in some specialist areas, informed by current developments in the field b. an informed and critical understanding of the principles and theories of one or more disciplines/fields and of emerging issues and debates in an area of specialisation; acceptance of the provisional nature of knowledge and of the boundaries and limitations of a discipline/field c. effective application of a discipline/field's basic methods of enquiry, research and technology d. an ability to identify, analyse and deal with concrete and abstract problems using evidence-based solutions and theory-driven arguments e. an ability to identify information needs and retrieve information accordingly; critical analysis, synthesis and evaluation of quantitative and/or qualitative data; an ability to engage with journal articles, scholarly reviews and primary sources f. an ability to present and communicate academic/ professional work effectively, catering for a range of audiences and using academic/professional discourse appropriately	a. a capacity to operate in unfamiliar contexts, requiring personal responsibility and initiative b. a capacity to accurately self-evaluate and take responsibility for continuing professional/ academic development c. a capacity to maintain professional working relationships d. an awareness of the social and ethical implications of applying knowledge to particular contexts

NQF level & Sub-level		Applied competence	Autonomy of learning
Typically, a programme leading to the award of a qualification at this level aims to develop learners who demonstrate:			
8	**PG 2**	a. a comprehensive and systematic knowledge base in a discipline / field and a depth of knowledge in some areas of specialisation b. a coherent and critical understanding of the principles and theories of a discipline/field; an ability to critique current research and advanced scholarship in an area of specialisation; an ability to make sound theoretical judgements based on evidence and an ability to think epistemologically c. an understanding of a range of research methods, techniques and technologies and an ability to select these appropriately for a particular research problem in an area of specialisation d. an ability to identify, analyse and deal with complex and/or real world problems and issues using evidence-based solutions and theory-driven arguments e. efficient and effective information retrieval and processing skills; the identification, critical analysis, synthesis and independent evaluation of quantitative and/or qualitative data; an ability to engage with current research and scholarly or professional literature in a discipline/ field f. an ability to present and communicate academic/ professional work effectively, catering for a range of audiences by using a range of different genres appropriate to the context	a. a capacity to operate effectively in complex, ill-defined contexts b. a capacity to self-evaluate exercising personal responsibility and initiative c. a capacity to manage learning tasks autonomously, professionally and ethically d. a capacity to continue to learn independently for continuing academic / professional development

NQF level & Sub-level		Applied competence	Autonomy of learning
Typically, a programme leading to the award of a qualification at this level aims to develop learners who demonstrate:			
8	**PG 3**	a. a comprehensive and systematic knowledge base in a discipline/ field with specialist knowledge in an area at the forefront of the discipline/field or area of professional practice b. a coherent and critical understanding of the theory, research methodologies and techniques relevant to a discipline/field; an ability to rigorously critique and evaluate current research and participate in scholarly debates in an area of specialisation; an ability to relate theory to practice and *vice versa* and to think epistemologically c. mastery of the application of research methods, techniques and technologies appropriate to an area of specialisation; an ability to undertake a research project and write up a research dissertation under supervision d. an ability to identify, analyse and deal with complex and/or real world problems and issues drawing systematically and creatively on the theory, research methods and literature of a discipline/field e. advanced information retrieval and processing skills; identification, critical analysis, synthesis and independent evaluation of quantitative and/or qualitative data; an ability to undertake a study of the literature and current research in an area of specialisation under supervision f. an ability to effectively present and communicate the results of research to specialist and non-specialist audiences using the resources of an academic/ professional discourse; the production of a dissertation or research report which meets the standards of scholarly/professional writing	a. a capacity to operate effectively in complex, ill defined contexts b. a capacity to critically self-evaluate and continue to learn independently for continuing professional development c. a capacity to manage learning tasks autonomously professionally and ethically d. a capacity to critically evaluate own and others' work with justification

NQF level & Sub-level		Applied competence	Autonomy of learning
Typically, a programme leading to the award of a qualification at this level aims to develop learners who demonstrate:			
8	**PG 4**	a. a comprehensive and systemic grasp of a discipline/field's body of knowledge with expertise and specialist knowledge in an area at the forefront of the discipline, field or professional practice b. a critical understanding of the most advanced research methodologies, techniques and technologies in a discipline/field; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems c. substantial, independent research and advanced scholarship resulting in the (re) interpretation and expansion of knowledge which is judged publishable by peers d. an ability to identify, conceptualise, design and implement research projects that address complex, ill-defined problems at the cutting edge of a discipline/ field e. advanced information retrieval and processing skills; an ability to independently undertake a study and evaluation of the literature and current research in an area of specialisation f. an ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences using the full resources of an academic/professional discourse; the production of a thesis which meets international standards of scholarly/professional writing	a. a capacity to operate autonomously in specialised, complex, ill-defined and unpredictable contexts b. intellectual independence and research leadership through managing advanced research and development in a field professionally and ethically c. a capacity to critically evaluate own and others' work on the basis of independent criteria

The level descriptors for the higher education and training levels i.e. level 5 upwards have been adapted from *The Framework for Qualifications of Higher Education Institutions in Scotland* Appendix 1, QAA for HE, November, 2000; levels 1 to 4 have been adapted from work done by a SAQA working group.

Notes on the use of level descriptors

1. The level descriptors should be understood as cumulative, i.e. each level subsumes the levels of learning achievement below it.

2. The descriptions for autonomy of learning may require elaboration at the qualification level to ensure that they are applicable to the learners for whom the qualification is intended.

3. Level descriptors should be understood as guides, indicating a broadly acceptable level of learning, skills and learner autonomy for a particular level on the NQF. Level descriptors are not standards or qualifications and cannot be seen as complete learning outcomes or assessment criteria, even though all qualifications registered at a level must meet most or preferably all the descriptor statements included in the level descriptors of that level. The capabilities described for a level should be used as a conceptualising and organising tool to guide the writing of specific learning outcomes and assessment criteria which only apply in a re-contextualised form to the particular qualifications registered at that level. Professional and curriculum expertise will always be required to interpret and contextualise generic level descriptors in particular educational, field or disciplinary contexts.

4. Level descriptors are an important mechanism for facilitating the articulation of learning achievement and qualifications on the NQF. In the HE sector this function will be particularly important in an attempt to integrate the previously distinct university, technikon and college sectors. Furthermore, HE provision is increasingly being offered beyond the walls of HE campuses. Level descriptors can act as general guides for curriculum design and quality assurance for providers within and without formal education e.g. for employers offering work-based modules/ unit standards. The primary function of the level descriptors is to ensure that there is articulation between the different bands on the NQF.

5. Level descriptors need to be complemented by qualification descriptors which aim to describe in more detail the specific purposes and characteristics of the learning undertaken for different qualifications. Qualifications descriptors assist particularly in distinguishing between the learning achieved for different

qualifications pegged at the same level on the NQF. Reference to qualification descriptors is particularly important because qualifications with different credit values may be registered at the same NQF level, e.g. the advanced graduate diploma and the advanced graduate certificate at level 8 – postgraduate 1. In this case, the certificate should be understood as an exit point from the diploma, and expectations for learner achievement should be lowered accordingly, with reference to the relevant qualification descriptors.

Protected terms and qualification descriptors

The following principles govern registration of all qualifications and standards at each level of the framework.

In keeping with the NSB regulations, it is possible to register qualifications that are based on unit standards and it is possible to register qualifications that are not based on unit standards, but on exit level outcomes and associated assessment criteria.

Integration: a system of human resources development which provides for the establishment of a unifying approach to education and training. In other words, all qualifications and standards should ensure the development of practical skills and knowledge.

Recognition of prior learning: through assessment give credit to learning which has already been acquired in different ways, e.g. through life experience. All qualifications that are registered must indicate how RPL can be applied in the awarding of the qualification.

Access: provide ease of entry to appropriate levels of education and training for all prospective learners in a manner which facilitates progression.

Flexibility: allow for multiple pathways to the same learning ends.

Portability: enable learners to transfer their credits or qualifications from one learning institution and/or employer to another.

Progression: ensure that the framework of qualifications permits individuals to move through the levels of national qualifications via different appropriate combinations of the components of the delivery

system. Each qualification will provide access to various learning pathways, both horizontal and vertical, in terms of the purpose of the qualification. The scope of access will be determined by the qualification itself.

The last four principles place emphasis on the importance of articulation in the registration of qualifications and standards on the NQF.

Qualification descriptors include the following:

- The name of the qualification type;
- The level;
- The minimum credit values;
- Any other relevant information in respect of credit allocation including compulsory credits;
- The rationale for the qualification type;
- Additional features (that distinguish the qualification type from others); and
- Primary articulation possibilities.

There are further details and information that must be provided when the qualification is presented for registration. These include:

- The full name, including a designator and qualifier, where applicable;
- A statement of the learning assumed to be in place;
- A full statement of the articulation possibilities;
- A statement of the designation of credits for fundamental, core and elective learning where applicable; and
- A statement of the possibilities for RPL.

A number of basic qualification types will be placed on the open-ended level 8 of the NQF which correspond to qualification types that have been placed on levels 7, 8a, 8b and 8c by the "New Academic Policy". Although these are all covered by a single set of NQF level descriptors, they are separated into four postgraduate levels through their qualification descriptors. Thus, for example, the basic qualification types the "New Academic Policy" placed into its proposed level 8c and placed at postgraduate level 4in this document, share a **core set** of qualification statements. The same principle will apply at postgraduate levels 1, 2 and 3.

Furthermore, Chapter 6 of the New Academic Policy includes a detailed discussion of qualification types and possible qualification descriptors that are currently part of the formal higher education system. There have been proposals originated in SGB discussions for other qualification types at all levels of the NQF.. There are still other ideas for qualification types that have not yet served as formal proposals at SAQA.

If the principles outlined in this discussion document are accepted, a process will be put in place for the identification of names for qualification types that will become SAQA-protected terms and the development of associated qualification descriptors. It would be appropriate to make use of existing developments.

Appendix 1: Process to date

The NSB regulations indicate as follows:

> The National Qualifications Framework shall consist of eight levels, which shall be entitled levels 1 to 8, and each level shall be described by a unique level descriptor.

In terms of the SAQA Act, SAQA is tasked with overseeing the development and implementation of the NQF. This function requires that SAQA take responsibility for the development of level descriptors which would be used in the allocation of standards and qualifications to specific levels on the framework. Furthermore, in terms of the Act, SAQA is required to do this after consultation and in co-operation with its stakeholders. When the NSB regulations were written, the members of the Authority were well aware that in establishing a new system that could accommodate the flexibility required to build the skills base required for the emerging democratic South Africa, it would not be an easy task to immediately decide on appropriate level descriptors.

For that reason SAQA adopted the developmental approach indicated in Section 4 of the NSB regulations i.e. the level descriptors would be developed in an iterative process of interaction between SAQA, NSBs and SGBs. It was felt that this interaction in the unfolding process of developing the NQF would provide the experience and opportunity needed to develop level descriptors that are relevant to the South African context. This work was slow and the need for more direct guidance in the face of the interim registration process in June 2000 prompted further thought and discussion at the level of the Authority.

It was then decided that SAQA should kick-start the process by developing and adopting a particular qualifications structure and set of level descriptors. These level descriptors could be used for pegging qualifications during the interim registration process and also be used for pegging new qualifications on the framework. The viability of these descriptors could then be tested and modified if necessary. This document was published for public comment on 24 October 2000. Thereafter a SAQA working group was established to deal with the issues raised in the public comment process. It was further decided that the development of the level descriptors document should be part of the Joint Implementation Plan between SAQA and higher education to

ensure coherence between developments in that sector and the NQF and SAQA. The original SAQA document was used to facilitate the interim registration process and has been used by NSBs and SGBs in the allocation of new standards and qualifications to specific levels.

A sub-committee of the working group revised the level descriptors for levels 1 to 4 to ensure that they were appropriate for the full range of learners at these levels. A revised document that included the work of the Academic Policy Task Team and contributions from various other stakeholders served at the SAQA meeting of 15 August 2001. The decision at that Authority meeting was that the document and the issues arising from it should be discussed in more detail so that complete understanding and careful consideration of the issues could take place before the process went any further. A workshop was held on 6 September 2001 and those deliberations resulted in a document that served at the SAQA meeting of 10 October 2001. Prior to that, it was evident that the document would not enjoy the support of some key stakeholders and further consideration was given to providing some alternative approaches. These options were discussed and the current document reflects the discussion of that meeting and is now published for public comment.

The following documents are the primary resources used in the development of this discussion document:

- The discussion document of the Academic Policy Task Team of the CHE, written by Ms K Luckett, and particularly Chapters 5 and 6 of that document. The original versions of these chapters provided the basis for much of this discussion document;
- Contributions from the SAQA working group on level descriptors;
- A report from the sub-committee working on level descriptors for levels 1 to 4;
- Response from the Department of Labour (Ms A Bird);
- Qualifications from the Educators in Schooling SGB;
- The Criteria for the Evaluation of Standards and Qualifications; and
- Individual inputs to contentious issues from a number of Authority members.

Appendix 2: References and acknowledgements

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