4. Discussion and recommendations

This section aims to draw together the analysis and data in order to:

- provide conclusions in relation to qualifications frameworks and recognition tools in the APEC region including the feasibility of an Asia-Pacific Qualifications Framework;
- identify issues, needs and possible future areas of collaboration and cooperation in the field of qualifications frameworks; and
- make recommendations on measures or actions to assist APEC economies individually or collectively improve arrangements.

4.1 The foundations for NQFs

National qualifications frameworks (NQF) are a product of national sets of qualifications, the institutional structures associated with their accreditation, award and quality assurance and the relationships between qualifications. The economies of the APEC region represent a diversity of *traditions in education and training and in national characteristics*. The education and training systems in some economies have been influenced by European systems—and differences can be traced to British and Latin approaches in education and training. Other economies, notably those in Asia have built their qualifications upon long standing national approaches.

Differences in the *governance structures* of economies, e.g. federal structures of government, have influenced qualifications and in particular the capacity to introduce particular form of NQF.

Within this context it is difficult to locate common themes and even more difficult to locate common structures. At this stage just over half the APEC economies have or anticipate having an NQF. Amongst those economies that do have frameworks there is no common type, or even a shared type—unless described in the broadest of terms. On the other hand there are some common *internal themes* in education and training that can be used as starting points in drawing together the findings of this study:

- All systems to identify at least three sectors in education and training:
 - School education, for the purposes of NQFs upper secondary education. All economies have formal qualifications for this phase, which are subject to some form of quality assurance or validation. The phase typically is 2 or 3 years (or both) and is sometimes a common phase for all students or more frequently separated into types of general and vocational studies and qualifications.
 - Technical and vocational education (TVET). The arrangements across the APEC economies are heterogeneous with the sector providing certificates, diplomas, associate degrees, licencia, etc.
 - Higher Education. The arrangements across economies are diverse with some similar to the Bologna structures and include short and long cycle programs. The array of qualifications is considerable.
- All economies are aware of the changing context for qualifications. While the rhetoric of lifelong learning is not as pronounced as it is across OECD and EU documentation all economies are

aware of the greater international exposure of qualifications and the associated issues of quality assurance and recognition.

- Most economies have faced issues in the relationships between qualification across sectors and the relationship between the agencies responsible for these qualifications. All economies have multiple agencies that are responsible for the accreditation, award and quality assurance of qualifications.
- In most economies there has been some movement in these arrangements designed to facilitate the alignment of qualifications and/or bring greater quality assurance to the accreditation and awarding of qualifications.
- As a consequence the situation in many, and perhaps most economies with regards to the agency responsibilities for accreditation, award and quality assurance is dynamic. Several economies in their survey responses anticipated some immanent developments in key aspects of their qualifications systems and frameworks.
- Most economies indicated interest in international developments in qualifications, qualification systems and qualification frameworks.

4.2 National qualifications frameworks

Of the 11 survey returns six economies indicated that they had NQFs, and two indicated development under way. Amongst the non-responding economies in APEC there are examples of those that have frameworks (Singapore), those known to be developing them (Chile and Mexico) and one that has frameworks in one province (Canada).

Purposes

NQFs are seen as contributing to improvements in matching workers' skills to industry needs facilitating lifelong learning and training. As has been the case across the globe the NQFs represented across the APEC economies are diverse in their structure, coverage, operational purposes and governance. Most share the purposes of providing greater transparency for qualifications, support for skills standards systems, means of managing quality assurance in the context of the proliferation of qualifications, and the international recognition of qualifications. Few of the economies use the NQFs as a basis for credit systems, so far.

Types

There are several continua that can be used to describe NQF types and that were reflected in the construct of the survey instrument. Broadly:

- All classify qualifications by level, explicitly or implicitly;
- Most NQFs are regulatory in that they are designed to support quality assurance either or both through the inclusion of qualifications within the framework and the provision of a register, or involve the supervision of accreditation, awarding or auditing of qualifications;
- Most anticipate the facilitation of credit transfer and the recognition of prior learning including non-formal and informal learning, but most do not as yet have dedicated tools for these

purposes—although they could be developed from those NQFs which include measures of volume.

• All are descriptor based, but in different ways. There is variation as to whether the descriptors are for qualifications/qualification types, units of learning, or taxonomies of domains of learning. Several NQFs have multiple types of descriptors.

Governance

NQFs have a legislative base or are the result of regulation or agreements among government sectors and their agencies. Most have the endorsement of ministers of governments, and in several cases ministers have been central to the initiatives that resulted in the frameworks. There is a national agency responsible for NQFs in each economy, although in several this agency is located within an already existing agency.

The characteristics of governance are influenced by three other sets of variables:

- Of those economies that are federations (Australia, Canada, USA) one has an NQF (Australia), one a framework in part of the country (Canada—although it is currently developing an NQF) and one that has no framework (USA—and is unlikely to develop one). Clearly within federations where responsibility for education and training is located at the provincial level it is more difficult to establish an NQF.
- Across most economies there have been two government departments that have been responsible for qualifications: education and labour. In the responding economies NQFs can be seen to have largely emerged from the VET sector because of the evolution of industry skills standards and standards based qualifications. On the other hand there appears to have been some shift in responsibility for education and training from ministries of labour to ministries of education, especially at the secondary education level.
- The higher education sector is diverse and in most economies the traditions of university autonomy have prevailed. This appears to have had two sets of impacts. On the one hand this autonomy has been a barrier to the development of and agreement to an NQF, especially where the frameworks are accompanied by quality assurance and accreditation systems that are external to the providers. On the other hand, as was the case with the Bologna processes in Europe, there is a greater need to establish qualifications frameworks because of the absence of standards in the education sector.

Benefits

The survey instrument nominated a range of benefits that had been identified from the literature that came mainly from national qualifications agencies across the globe. As Coles (2006) has noted the evidence for the realisation of all of these benefits is more difficult to locate. Some responses to the survey indicated that all of the benefits were either objectives or outcomes of the NQFs. However most responses were more qualified and the main benefits were seen as the following:

- A mechanism for establishing and aligning standards for vocational qualifications;
- A mechanism for benchmarking qualifications;

- Support for quality assurance systems, especially where there has been a proliferation of qualifications;
- Support for international recognition of qualifications; and
- Linking qualifications.

Structures

NQFs across the APEC economies are diverse in their structures:

- Most cover all sectors. One is confined to vocational and another to higher education qualifications;
- All are located in some type of national agency. However, the size and resources, functions, independence from sectoral agencies and functions of these agencies vary across economies.
- Most involve levels, and the number of levels varies, to a maximum of 11 in the APEC economies;
- Some have qualification type descriptors, a small number have unit descriptor and several have taxonomies of learning domains;
- Most have a capacity to measure and/or align the volume of learning;
- Some are explicit in supporting the recognition of prior learning/informal learning;
- Some are designed to support credit systems;
- In all the APEC economies with NQFs there is a register of qualifications and some are pursuing a recognition tool in the form of the EU diploma supplement.

Quality assurance

Quality assurance is possibly the most central part of NQFs. The quality assurance functions can be located in the agency responsible for the NQF or they can be distributed to other agencies across the sectors. While most economies give a degree of autonomy to higher education and to some vocational education and training providers for the accreditation and award of qualifications most have some type of agency oversight of these functions.

The agencies that conduct this oversight range from qualifications authorities, government departments, more independent bodies—commissions, councils, boards and institutes. In some economies professional associations and provider associations perform quality assurance functions.

Quality assurance also takes several forms. While several economies have self accreditation for their qualifications in higher education, most have procedures for including them on any national (or regional) register, and several link the accreditation and award functions to forms of licensing.

The OECD (2009) in a recent review of Australian vocational education and training has drawn attention to the need for closer quality assurance of assessment before the award of qualifications.

As noted, quality assurance can be supported by the provision of good information including a public register of providers and qualifications. This information can enable increased user understanding of

the system and allow them, where choice is available, to exert pressure on providers to provide quality education and training.

Constraints and problems

The most frequently cited constraints were those of acceptance and understanding of the NQF across these various agencies and sector authorities. In particular most systems face the on-going challenge of maintaining wider user acceptance and understanding of the NQF. Some economies have faced direct resistance from some sectors to the inclusion of their qualifications within the NQF. Those economies with highly distributed regulatory arrangements face the constraints of maintaining those arrangements within the NQF. Conversely the more centralised NQFs have the challenge of maintaining a dynamic capacity across their qualifications system.

Variations of this issue are challenges of accepting new qualifications within the NQFs, on going tensions between sectors because of different genre of qualifications and the associated issue of the relative levels of qualifications, and thus the challenges of maintaining multiple sectors within a single NQF. Of course several NQFs have avoided or reduced this problem through sector based qualifications or by having a umbrella type of framework.

Support and achievement

The main achievement of NQFs is their acceptance by the wide range of sectors, agencies and stakeholders. This could be regarded as a self serving achievement but it does mean that there is an acceptance of the idea of a national qualifications' system' and that these systems are more than the sum of their parts. That is the systems embody relationships between qualifications and the associated potential or capacity for links between qualifications, stronger and more consistent quality assurance arrangements and the wider recognition of national qualifications. Some economies are able to report some more tangible outcomes in the form of credit and recognition. It is this range of activities that enhance trust and transparency in qualifications that is supported by an NQF.

Further challenges

Because most NQFs are in their early stages the most common challenges are those of continued development, dissemination and stakeholder engagement. In some cases there is the challenge of convincing or negotiating with a non-participating sector to embrace the NQF. All NQFs face the challenge of the changing international contexts.

International links and APEC regional framework

Several economies indicated that they had observed developments in other economies, especially in New Zealand and Australia, and that of South Africa outside of APEC. This is to be expected as these economies were the first to establish NQFs. The degree of influence of these economies' NQFs on developments in APEC is difficult to gauge. The NQFs across each of the APEC economies do vary in their levels, descriptors, volume measures, and the way they cover the separate sectors.

All economies see benefits in linking their NQFs internationally. The advantages that such links can bring are the greater potential for international recognition of national qualifications, the facilitation of the mobility of labour and students and the liberalisation of trade in education and training.

Most economies who responded to the survey indicated support for the development of a regional framework across the APEC economies. However, few reasons were given for this. Several economies expressed caution, and some insisted that any such development would need to be based upon a voluntary relationship with each member country NQF and qualifications system. Some raised the question of whether the regional framework should be cross APEC economies rather than some other regional groupings of economies. Some economies indicated that any regional development should be based upon the EQF.

The barriers to a regional framework included the fact that most economies are in the early stages of NQF developments—although in the EU this was reasons for developing the EQF, as a basis for guiding the subsequent development of NQFs— the costs of the development, and how such a framework would be administered and maintained.

4.3 The feasibility of developing an Asia-Pacific Qualifications Framework

Following the terms of reference for this project we refer to an Asia-Pacific Qualifications Framework (APQC) rather than specifically to an APEC framework.

There are four regional frameworks which are briefly discussed as a preface to considering an Asia-Pacific framework. There is the EQF and those in development in the Caribbean, Southern Africa and the Middle East.

The EQF provides a benchmark for regional frameworks. It is based upon three domains and an eight level set of descriptors and provides a benchmark for member countries to align their own qualifications and NQFs. It does not require countries to change the core structure of their qualifications and NQFs, but as a benchmark it mediates the alignment of qualifications across member countries. So member countries continue to have NQFs with different numbers of levels and different types of descriptor domains to those of the EQF. The EQF is also accompanied by the Bologna and Copenhagen processes that have similar objectives of comparability and consistency between qualifications.

The developments in the Caribbean appear to be an extension of some shared qualifications, including the Caribbean Secondary Education Certificate and Caribbean Vocational Qualifications. The Southern African Development Community (SADC) agreed to establish a SADC Qualifications Framework over the period 2005-2010 although progress appears to be slow (Mudzi 2005). Within the widespread development of NQFs across Middle East and Gulf states the option of a regional framework is being considered³.

The Southern Africa, Caribbean and Middle East developments have particular sets of circumstances: the existence of an infrastructure in the SADC and the established South African NQF; cross national infrastructure and qualifications in the Caribbean; and simultaneous developments of NQFs in the Middle East. None of these conditions exist across the APEC region, which is much larger and more diverse than these three regions.

³ Correspondence with Edwin Mernaghn, consultant Qualifications Framework Project Abu Dhabi.

As noted the responses to the survey supported the concept of a regional framework. The reservations included that any development and its outcome should be voluntary and should not be a costly exercise.

Any APQC could not have ambitions that approached those of the EQF in cost, or for that matter those of the SADC and the Caribbean countries. As a framework it would need to be a relatively modest instrument, both in terms of its developmental costs and its maintenance, and in its relationships with sets of national qualifications and qualifications frameworks.

In this sense an APQC could have one or more of three facilities:

- a benchmark for levels of learning,
- a mechanism for measuring volume, and
- a language for comparing areas and levels of learning (e.g. level of knowledge, application, autonomy and judgement).

Economies could choose to use the APQF for:

- alignment of sets of their qualifications with the levels of the regional framework;
- comparing and align qualifications across economies; or
- submitting their qualifications to an APQF agency for alignment and location within its register.

In regards to the feasibility of an APQF there are four sets of questions that might be considered.

- 1. Are there problems or needs in regards to qualifications and NQFs across the region that a regional framework would help to resolve?
- 2. Would it be feasible to negotiate a voluntary regional framework given the diversity of the economies?
- 3. Would it be worth the investment, and what resources would be needed for its maintenance?
- 4. Are there better alternatives to addressing the problems and needs?

Problems and needs: Using Tuck's 2007 sets of 'problems and needs' the issues to be considered include: access of learners to qualifications; progression routes; the relevance of qualifications for users; consistency in standards; quality assurance; and international recognition. All of these needs exist across the region. It is likely that a regional NQF could meet some of these needs but the returns for the investment would be modest and patchy in the short term.

A voluntary framework: The response to the survey in this project indicates that only a voluntary or enabling APQF would be acceptable, not one that had binding force within an economy. Given this, it would be possible to have volunteer economies work on a framework? The APEC economies as a group lack some of the conditions that have favoured other regional framework: a political constitution and other social and economic institutions of the EU; common qualifications in the Caribbean; the economic centrality of South Africa in southern Africa and the longevity of the SANQF; and shared cultural foundations, similar labour force needs, and a common momentum of NQF development in the middle east. It also needs to be noted that only the EQF has reached the point of having any real impact as a regional framework.

Given the diversity of economies and the size of the region it might be feasible for APEC to invite its member economies and other Asia-Pacific economies to convene to look at the option of a limited regional qualifications framework. It seems likely that only those economies that have or are developing NQFs are likely to take part.

Level of investment: To establish a regional framework of the EQF type could be relatively expensive. The initial development exercise would need to examine the qualifications systems and NQFs of volunteer economies, negotiate the broad parameters of the regional framework (e.g. whether it is based upon level descriptors, domain descriptors, qualifications descriptors, etc), and then negotiate the details of the proposed framework. A framework would also need to be maintained and monitored. This would involve some means of assessing whether it is providing the enabling function for member economies. Given the characteristics of the APEC region any initial investment would need to be modest.

An alternative: An alternative to the establishment of an APQF is to utilise the EQF. It should be noted that a considerable number of non-EU countries, albeit within or close to the European region, have joined or adopted the EQF on a voluntary basis. This has been encouraged by the EU and facilitated by the European Training Foundation (ETF).

There would appear to be three options for APEC economies in regards to the EQF:

- 1. volunteer to join by aligning their NQFs with the EQF;
- 2. the APEC secretariat could approach the ETF to investigate the possibility of building an Asia-Pacific chapter to the EQF; the chapter would effectively use the EQF as a facility to aid articulation between qualifications of economies in a voluntary basis across the region;
- 3. establish a regional framework that utilises the core features of the EQF—eight levels and possibly generic level descriptors derived from the domain descriptors of the EQF and seek some support from the ETF.

This report has shown that there is considerable variation in the NQF types across those economies in APEC that have developed them. In this sense the EQF is as good a fit for a regional framework as any of the of member economies NQFs, despite the fact that some economies reported referring to the longer standing NQFs of New Zealand and Australian in their own NQF developments.

The question of why any regional framework should be different to the EQF can also be asked. While it cannot be assumed that the EQF is an intrinsically optimal framework it is likely that its representative characteristics towards European country qualifications will also apply reasonably well to those of most of the APEC economies, given the influence of European qualifications upon qualifications structures in a large number of APEC economies.

The complexity of these sets of questions about an APQF suggests that more dialogue between interested member economies should take place. The suitability of the EQF or at least its core features should be considered further.

4.4 Conclusions and Recommendations

The APEC region is similar to other international regions with a significant number of economies having or developing NQFs. The region is quite eclectic including economies from East Asia, South East Asia, Australasia and the Pacific, South America and North America. While extensive desktop research was undertaken for all economies only 11 responses were received to the survey, mainly from those with NQFs. Therefore generalisations about the region must be drawn with caution.

Some other regions, notably Europe, North Africa, Southern Africa and the Middle East are more active than the APEC region in the development of NQFs. Yet the APEC region includes economies in the first and second waves (Coles 2006; Tuck 2007) of NQF development. Therefore, there is a considerable amount of experience of the NQFs across the region.

There is also a strong interest in sharing information and experiences across the region. Most economies that have recently developed or are developing NQFs have looked within rather than beyond the region for guidance and lessons.

The EQF development did not depend upon a high degree of congruence in NQF types across its region. Indeed the UK (Wales, Scotland, England, Northern Ireland) was able—and continues to—display a considerable difference in NQF types within the same nation state. On the other hand a core purpose of a regional framework is that of enabling NQFs and national qualifications systems to align with or 'talk to' each other.

The experience of member economies appears to endorse the 'lessons' listed earlier (Coles 2006, 2008; Raffe et al 2008; Young 2005, 2008). These include the need to ensure that NQFs are built with stakeholder commitment; to see them reflect national education and training system characteristics and to be cautious of the costs of very elaborate NQFs.

It does seem that an APQF could be developed drawing on the EQF while still building stakeholder commitment, with moderate or evolutionary reform of existing education and training structures and with moderate costs.

The main driver of the EQF is the ETF. It and its sister agency CEDEFOP (the European Centre for Vocational Education Research) have build a substantial store of research and knowledge of NQFs and their development. The Foundation appears to be willing to support the dissemination of this knowledge and the facilitation of NQF development across the globe.

Recommendations:

Recommendation 1. Economies that have developed NQFs should be asked to identify key lessons from their experiences.

 Seven APEC economies have frameworks and another six are in process of developing or implementing them. These economies could be asked by EDNET to use this report as a means of identifying the key lessons for the further development and usefulness of their NQFs and the relation of their NQF to that in other economies.

Recommendation 2. EDNET should use the report and the lessons provided by economies with NQFs to facilitate ongoing dialogue between member economies and other Asia-Pacific economies on national qualifications frameworks.

- EDNET could extend the dialogue on the differences between the economies in their NQFs, or in their intentions towards them, and the advantages to be gained from understanding these differences and/or modifying their frameworks.
- The dialogue on NQFs should be closely linked with other work in the region on quality assurance and the recognitions of qualifications to ensure coherence and avoid duplication of research and development.

Recommendation 3. A proposal for a voluntary regional framework should be developed and disseminated amongst member economies for comment.

- The framework should be a set of qualifications level descriptors and/or domain based descriptors.
- If possible it should be aligned to core features of the European Qualifications Framework (EQF)
- The European Training Foundation (ETF) could be approached by EDNET for advice and support in investigating the development of the voluntary regional framework drawing on the core features of the EQF.
- An early assessment should be made of the costs of advice and support from the ETF and the costs of developments within the Asia-Pacific Region
- In support of this recommendation APEC could consider the complementary proposal in DEEWR (2008) for the establishment, in economies that do not presently have them, of National Information Centres on qualifications and course structures to provide information to potential users in other economies.