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Understanding the potential impact of skills recognition systems on labour markets: Research report

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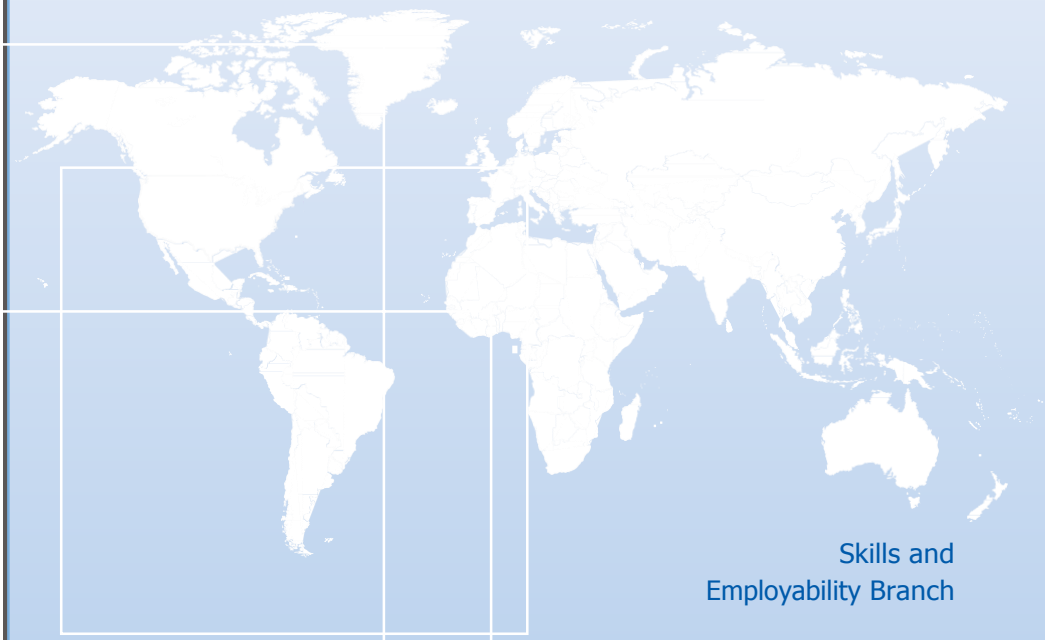

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Contents

List of figures

List of boxes

Foreword

The role of human capital in the modern economy is increasing, and its development is therefore considered as one of the key drivers of economic growth. Human capital development strategies are becoming an integral part of the economic, employment and social policies of countries and entire regions.

From the standpoint of employers, human capital contributes to their productivity, performance and thus competitiveness through the key asset that individuals possess – their skills. But similar to other assets that employers or individuals might have, the key question is how to achieve a proper utilization of skills and reduce a risk of a mismatch between skills offered and skills demanded on the labour market. This mismatch may result in a loss of investment into education and training on the part of both individuals and the public authorities, and in lower productivity and competitiveness of employers and whole countries.

Individuals' skills are acquired through learning and constitute an asset for employers, who value them and use them in the workplace. There are many ways to determine the level of skills and their value for employers during the recruitment process - the most widespread being the certificate achieved from formal education or a training system, such as an apprenticeship certificate, diploma or academic degree.

Formal education and training systems are not, however, the only way in which people develop skills; and in many cases they acquire these skills outside the country in which they work. Employers may not easily recognize skills attained this way, and individuals possessing such uncertified skills are at a disadvantage when trying to find a job, achieve progress in their careers or obtain a wage increase. The fact that these skills are invisible magnifies the challenge of skills under-utilization and mismatch, and contributes to higher unemployment, poverty and inequality.

The task of skills recognition systems is to make such uncertified skills visible. This research focuses on analysing the outcome of attempts in this area – to see whether skills recognition addresses the abovementioned challenges, improves skills utilization, reduces skills mismatch and alleviates unemployment, poverty and inequality.

The development and implementation of skills recognition systems give rise to a number of challenges that may have a negative impact on effectiveness and a return on investment in these systems. The research brings numerous examples on how can these challenges be addressed and may serve as an reference tool by stakeholders - and in particular the ILO tripartite constituents - to design, implement or upgrade skills recognition systems.

Girma Agune
SKILLS

Michelle Leighton
MIGRANT

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Acronyms and abbreviations

ACCA	Association of Chartered Certified Accountants
ASEAN	Association of South East Asian Nations
BIBB	Bundesinstitut für Berufsbildung (Federal Institute for Vocational Education and Training, Germany)
BRICS	Brazil, Russia, India, China and South Africa
CEDEFOP	European Centre for the Development of Vocational Training
COTVET	Council for Technical and Vocational Education and Training (Ghana)
CV	curriculum vitae
CVDC	Consortium de validation des compétences (Skills Validation Consortium, Belgium)
CVQ	Caribbean Vocational Qualification
DGET	Directorate General of Employment and Training (India)
DIHK	Deutsche Industrie- und Handelskammertag (Association of German Chambers of Industry and Commerce)
EU	European Union
EVC	Erkennen van Verworven Competenties (Recognition of Acquired Competences, the Netherlands)
HR	Human Resources
IBSA	Innovation and Business Skills Australia
ICA	International Compliance Association
ILC	International Labour Conference
ILO	International Labour Organization
ILOSTAT	ILO's central statistics database
IOM	International Organization for Migration
ISC	Industry Skills Councils (Australia)
IT	Information technology
ITC	International Training Centre
JQS	Joint Qualification Certificate (France)
MC	Master craftsperson
NIBA	National Insurance Brokers Association (NIBA)
NEET	(young person) Not in Education, Employment or Training
NGO	Non-governmental organization
NQF	National Qualifications Framework
NSSO	National Sample Survey Organisation (India)
NSDA	National Skill Development Agency (India)
NVTI	National Vocational Training Institute (Ghana)
OECD	Organization for Economic Cooperation and Development
PIAAC	Survey of Adult Skills
PES	Public Employment Services
PLAR	Prior Learning Assessment and Recognition
RPL	Recognition of prior learning
QAA	Quality Assurance Agency for Higher Education (United Kingdom)
QCTO	Quality Council for Trades and Occupations
QPIB	Qualified Practising Insurance Broker

SAQA	South African Qualifications Authority
SME	Small and Medium Enterprise
SSC	Sector Skills Council
SSTC	South-South and Triangular Cooperation
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VPL	Validation of Prior Learning
WDA	Workforce Development Agency (Singapore)
WEF	World Economic Forum
WSQ	Workforce Skills Qualifications (Singapore)

1. Executive Summary

A comprehensive literature review and analysis of 17 case studies demonstrate the potential of impact of skills recognition systems on the labour market, particularly with regard to matching skills and jobs. A significant part of the research has been devoted to the measurement and interpretation of data, information, indicators of outputs and of the impact of existing systems.

The five most difficult challenges for skills recognition systems identified include: understanding needs; identifying and involving stakeholders; providing quality and accessible services; communicating and building awareness and participation; and monitoring and evaluating the outputs and impact of recognition activities.

1.1. Understanding needs

The needs for skills recognition are reflected in the expectations of its users.

To individuals, skills recognition addresses:

- ***(i)*** Employability, skills utilization or career advancement; or
- ***(ii)*** Further skills development.

To employers, these needs are usually associated with:

- ***(i)*** Better company performance; or
- ***(ii)*** Compliance with related regulation.

To training providers, these needs are:

- ***(i)*** Focus training provision better
- ***(ii)*** Increase public interest in training

Governments have wider priorities, such as:

- ***(i)*** Matching jobs and skills, preventing skills waste;
- ***(ii)*** Combating informality;
- ***(iii)*** Ensuring social equity;
- ***(iv)*** Supporting policy coherence and social dialogue.

Matching of jobs and skills is the most important issue for employers and individuals - and it is also one of the public sector's key priorities. Tools must therefore be developed and duly applied to measure the level of skills mismatch and to identify critical areas for interventions. A solid partnership amongst different stakeholders in skills development is necessary, particularly with the business sector and employers' representatives.

Employers and training providers mostly articulate their short-term needs. This reflects the reality of labour and training markets: most employers and training providers simply do not plan for the long-term; the immediate or short-term benefits of skills recognition (1-2 years maximum) are their key interests. Governments must respond to today's pressing needs of the labour market and society, help to address the employers' skills gaps, reduce unemployment, and improve the occupational safety and social protection of workers.

Individuals typically access skills recognition for perceived immediate effects, such as getting a job, earning more, or career move. Skills recognition can help individuals to unleash their full potential and may motivate them to learn more; and it encourages them to take responsibility for their skills and

career development - and, in so doing, it may enable them to escape the poverty trap, informality and social exclusion forever.

1.2. Stakeholders and the environment

Countries with a strong formal education sector and high levels of educational attainment (generally the majority of developed countries) tend to value qualifications more and skills recognition procedures aiming at formal acknowledgment of skills are much more likely to succeed. Wherever there is a strong informal sector and/or low level of educational attainment, the value of formal qualifications may matter less. In such countries, other forms of skills recognition may however succeed; it is important to carefully assess the country context and choose a system that is appropriate.

The structure of the country's sectoral employment has a strong influence on the potential for developing a skills recognition system. Skills recognition seems to play an important role in the manufacturing industry, construction sector, IT and safety and security sectors - but also in the financial, health care and education sectors. Given the nature of the work, the amount of time required to attain the necessary substantial skills and competences, the existing workplace/job regulations and the need for clearly defined standards, the demand for skills recognition is higher in these sectors.

One set of skills recognition "does-not-fit-all"; it has to be carefully designed to fit the context and sectoral needs. Furthermore, some sectors may not place much value in formal skills recognition at all (this may concern many services sectors, but also the agricultural sector to a certain extent). It may therefore be unnecessary to have an all-encompassing system covering skills recognition for the economy as a whole.

Skills recognition approaches that are targeted to selected sectors, occupations or user groups (such as migrants, the unemployed or low-skilled), which are driven by users' specific, identified needs, seem to work best in general and give a better return on investment than large, nationwide systems.

In order to **boost awareness of, and confidence** in, skills recognition it is vital that there should be interaction, information exchange and cooperation between the stakeholders and the skills recognition system.

For example, a recognition system that targets the unemployed needs the cooperation of institutions responsible for the delivery of an active employment policy; a system that targets migrant workers should involve authorities coordinating migration and its network of support centres. Employers (through sectoral bodies), workers' representatives, the career guidance system, training providers and or/educational institutions are essential for ensuring the success of any skills recognition system.

In developing countries, the inadequate capacity of key stakeholders is still a major drawback. In developed countries, the conflicting objectives of the various stakeholders, their insufficient involvement in the design phase, and the inappropriate communications strategy geared to stakeholders are significant challenges. A shared challenge for all countries is the lack of financial resources that undermines the potential of skills recognition systems.

1.3. Quality and accessibility

The quality, level of detail and relevance pose a significant challenge: if the recognition process is too lengthy, complicated and thus costly (both in terms of time and money), it may discourage users and therefore limit the impact. On the other hand, if the recognition process is perceived as easy and "light", employers may not have confidence in its quality and in the skills certified under this system.

Finding a balance between these two is closely tied up with employer involvement in the design of recognition procedures. In public-owned systems, this is still not that common. But it is extremely important that stakeholders and the principal users' representatives communicate and cooperate. If there is no mutual understanding of the needs and limitations of those involved, there will be no confidence in – or demand for - a skills recognition system.

The trust in skills recognition delivery (guaranteed by thorough assessment methods) is contingent upon its accessibility – which is undermined by another important factor: the cost of skills recognition and access.

The ways in which skills recognition procedures are financed constitute an important enabler of impact. The linkage is clear: the perceived value of skills recognition vs. costs associated with it from the standpoint of users and stakeholders. The private-driven approaches often work on a commercial basis, with the main value added being the competitive edge that the skills certification provides its holders – or their employers - on the labour market. The cost of skills certification and of training is therefore substantial and expected to be borne by individuals and/or employers.

Financing of public-driven approaches, which target a wider range of objectives, which are not directly associated with better labour market outcomes, typically cover 100 per cent of costs for users – especially when these are individuals. In many cases, full coverage by public funding is unavoidable in the long term - especially when they involve disadvantaged groups, such as low-skilled, unemployed, low-income or migrant workers, who may benefit the most from skills recognition but lack sufficient resources to pay for it. If skills recognition is intended to contribute to social equity, making it accessible for disadvantaged groups is of prime importance.

Generally speaking, public financing is not sustainable in the long term; a cost-sharing model – in which users and stakeholders willingly participate - is the best way to secure a successful impact.

1.4. Communication and awareness

The low level of awareness resonates in most analyses and in many case studies conducted on the subject. Many recognition systems struggle with low participation, despite the fact that there is strong evidence of the target group's needs and benefits. The issue is significant both for individuals and for employers, but also for career counsellors, public employment services, integration service providers and others.

From the standpoint of individuals, the extent and quality of marketing, information support, guidance and other services are of considerable importance. Tackling disparities in awareness is a particularly vital issue. It appears that individuals with a higher level of education are much more knowledgeable and interested in existing skills recognition. The awareness level among vulnerable groups – i.e. those with a low level of education, the unemployed or immigrants - is much lower. This situation may dramatically reduce the labour market impact of skills recognition on these vulnerable groups. The responsibility for awareness building lies with the recognition authority itself and the network of

recognition providers - but also with the stakeholders (employers' and workers' representatives, PES, career guidance services and others).

Employers play an important role in awareness support. In many countries, the private sector informs and promotes validation opportunities. Examples from case studies show the need for a good communications strategy - both for employers and individuals; this must reflect their needs and expectations, while also taking into account the most effective ways to approach these.

1.5. Measuring of outputs and impact

Almost every recent analysis on skills recognition systems identifies the inadequate measurement of their performance as a critical issue; only a few have well-developed monitoring and evaluation tools that supply hard data on outcomes and impact. This is especially an issue for nation-wide, public-driven systems. The situation is better at sectoral level, especially in the case of private-led approaches. Skills certification at sectoral level often provides data on impact.

Monitoring and assessment of the impact of skills recognition systems are vital, inasmuch as they influence awareness, confidence and demand for the service. Data from monitoring and impact assessment may indeed serve as a useful marketing tool, raising better awareness of the system, creating confidence, gaining more users – and resulting in an increased practical use in the labour market.

The evidence gathered strongly supports the claim that skills recognition systems have great potential to help address various labour market challenges and bring substantial benefits. Skills recognition can improve labour market outcomes for individuals, and it can also help employers to address skills-related issues. However, the available evidence of impact is still scarce; we cannot say anything certain about the majority of existing systems.

Although most public-driven systems have some monitoring system in place, very few of them conduct a regular impact assessment. They not only lack the capacity for impact assessment, but have a limited knowledge of relevant tools and methodologies. This situation is often linked to the scarcity of labour market information in the country as a whole.

The methods and approaches that work best target the users of skills recognition systems directly; these may include conducting surveys of participants, including tracer surveys, and surveys on employers. Existing surveys of this kind usually work with either hard evidence (reduced recruitment costs, time granted to find a new job, wage increases etc., prior to and after recognition) or more subjective assessments (increased self-confidence, enhanced teamwork), or a combination of both.

2. Background

In recent years, skills development has played an ever-increasing role in labour market, labour migration and economic policies. From a wider economy perspective, skills development is inseparable from broader economic, employment and sectoral strategies that can engender "*a virtuous circle in which skills development fuels innovation, productivity increase and enterprise development, technological change, investment, diversification of the economy, and competitiveness that are needed to sustain and accelerate the creation of more and better jobs…..*" (ILO, 2008).

Skills development is therefore considered one of the key drivers of economic growth. However issues related to skills utilization (see box 1 for definition) can present a serious challenge as it can contribute to mismatch between the skills offered and the jobs available on the labour market. Such situation results in a loss of investment into education and training and damages the productivity and competitiveness of enterprises and whole countries.

Box 1. Utilization of skills

"…confident, motivated and relevantly skilled individuals who are aware of the skills they possess and know how best to use them in the workplace, working in workplaces that provide meaningful and appropriate encouragement, opportunity and support for employees to use their skills effectively in order to increase performance and productivity, improve job satisfaction and employee well-being, and stimulate investment, enterprise and innovation"

(Scottish Government 2008, Payne 2011).

Following the global downturn in 2008 and the period of unstable economic development that has prevailed since, labour markets have faced significant problems related to high unemployment and limited job creation. In addition, millions of people around the world have no access to education and no proof of skills they might have acquired elsewhere - and they are hence locked in traps of poverty, unemployment, informality or low-end jobs.

Matching of jobs and skills

The major focus of the study is on gathering evidence on how skills recognition contributes towards matching jobs and skills. The **skills mismatch** - an encompassing term that refers to **various types of imbalances between skills offered and skills needed** in the world of work (ILO, 2014) – had already gained attention before the global economic recession of 2008. At that time, labour and skills shortages represented a serious obstacle for productivity and economic growth - but after the recession, the labour market picture changed significantly. The sharp increase in unemployment in the developed world has been accompanied by significant structural changes, which have brought new patterns of job destruction and job creation. Many analysts have argued that skills mismatch has been reinforced by the crisis, a major constraint hampering economic recovery in Europe (ILO, 2014).

Box 2. Skills mismatch and productivity

A recent OECD study uses mismatch indicators and firm-level data to better understand the sources of cross-country differences in living standards by directly linking mismatch with labour productivity. A key finding to emerge is that high rates of skill mismatch – particularly over-skilling – tend to lower aggregate productivity by constraining the growth of innovative firms.

Source: Adalet McGowan and Andrews (2015).

There are many types of skills mismatch (box 3) - and for every type there are multiple ways of measuring it. However, the ways to measure skills demand and skills supply directly are scarce, as are the data sources. A number of proxies for skills – such as qualifications and occupations – are therefore used to provide an indirect picture of skills mismatch.

Box 3. Types of skills mismatch

- SKILLs SHORTAGE (SURPLUS) = Demand (supply) for a particular type of skill exceeds the supply (demand) of people with that skill
- SKILLS GAP = Type or level of skills is different from that required to adequately perform the job.
- VERTICAL MISMATCH = The level of education or qualification is different from the one that is required
- HORIZONTAL MISMATCH = The type/field of education or skills is inappropriate for the job
- OVER-EDUCATION (UNDER-EDUCATION) = Workers have more (fewer) years of education than the job requires
- OVERQUALIFICATION (UNDERQUALIFICATION) = Workers hold a higher (lower) qualification than the job requires
- SKILLS OBSOLESCENCE = Skills previously used in a job are no longer required and/or skills have deteriorated over time

Source: ITC-ILO (2006)

Despite considerable progress in educational attainment in both developing and industrialized countries, skills mismatch remains a persistent concern. The over-supply or shortage of certain skills result in higher unemployment or unfilled vacancies - and this, in turn, contributes to deskilling and further mismatch. Skills shortages can also delay the structural transformation of an economy into higher productivity sectors, reduce enterprises' productivity by forcing them to employ workers with suboptimal skills or resort to suboptimal technologies and forms of work organization, and lead to higher wage inequality because of rising premiums on skills (ILO 2014b).

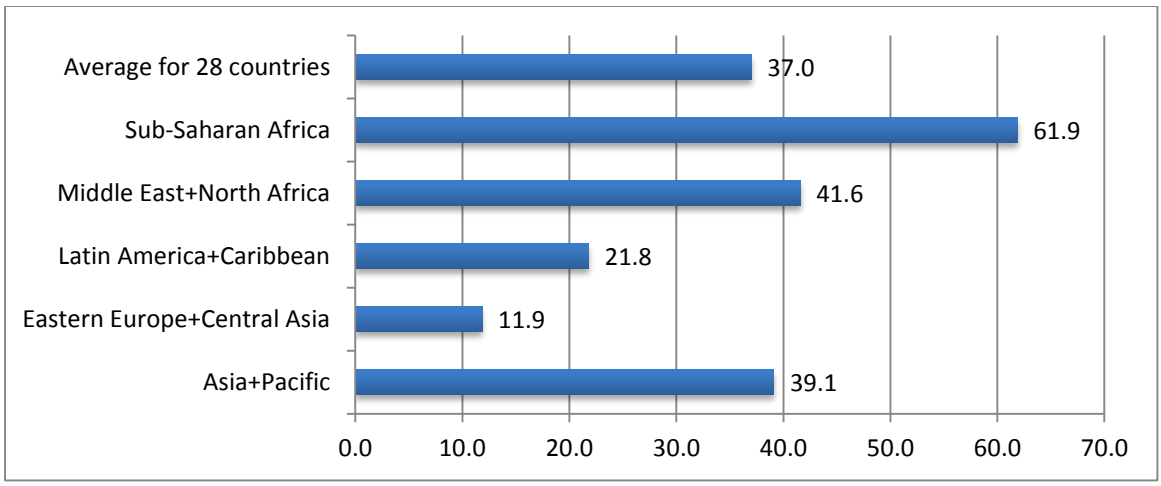
In developing countries, especially those with a high share of employment in the informal economy, skills mismatch often takes the form of under-education. ILO research conducted among 20 countries found this was especially common among informally employed youth (34 per cent), and less than half of them had jobs that matched their skills (ILO, 2014c). A large share of employment in the informal economy amplifies the skills matching challenge. For example, as ILO statistics indicate, the share of informal jobs in total employment exceeds 60 per cent in every second country (ILO, 2012).

The problem of under-education in developing economies is also exacerbated by lower enrolment in secondary education. Given the underdevelopment of the social system, there is a need to start working at an early age, or the costs related to education (caused also by lack of accessibility and availability of education providers) thus people have no chance to acquire skills in a formal learning setting. Consequently, skills recognition may be the only way that a significant group of people can obtain formal acknowledgement of their skills and knowledge.

Skills mismatch is the result of a variety of factors in this context: lower enrolment in formal education has its roots in the poverty of individuals and a lack of public funding for education, making it difficult for a significant number of young people to access education. As a result, employed youth – especially in developing countries – are to a significant degree under-educated for their jobs. A recent ILO study indicates that the share of employed youth who were under-educated for their jobs in 28 developing countries was 37 per cent (Sparreboom and Staneva, 2014). This share nonetheless varies significantly in different world regions; the same study reports that in the sub-Saharan countries it included in its

research (Benin, Liberia, Madagascar, Malawi, Togo, Uganda, the United Republic of Tanzania and Zambia), it reached almost 62 per cent (figure 1).

Figure 1. The share of under-educated youth, percentage of employment



Source: Sparreboom and Staneva, 2014. Own calculations

The problem also affects high-income countries, but from a different perspective. According to OECD calculations based on the Survey of Adult Skills (PIAAC), more than half of workers are employed in jobs for which their level of skills, education or field of study are inappropriate (OECD, 2014b). The main issue here is not under-education (in fact over-education starts to be much more important) but the field-of-study mismatch[1].

There are numerous ways to address skills mismatch; skills recognition is one of them. Systems that help to assess and recognize the skills of individuals - acquired by different means - become important tools in employment and skills development policies. Given the uneven quality of education, which could partially result from a lack of adequate information on skills demands, as well as slow responsiveness of education system to changing demand for skills, is liable to exacerbate the problem of mismatch.

There are around 232 million international migrants throughout the world (OECD, 2013). In developed countries, labour migration can play a crucial part in addressing the skills mismatch by filling existing skills gaps with an inflow of qualified workers from abroad. Migrant workers are on average more often exposed to the problem of over-skilling (OECD, 2014), or skills waste and deskilling, resulting in a significant brain waste, affecting migrant workers, employers, the economy as a whole – and the society of the destination country. This is also one of reasons why countries are making a significant effort to improve their recognition tools and systems.

The share of developing countries in world GDP and job creation is on the rise, and these countries are increasingly participating in global trade and labour migration flows. In 2013, over 116 million migrants were individuals born in the South and residing in the South, but in a country different from that of their birth (OECD, 2013). Also here, the recognition of their skills in the labour market of a destination country presents a significant challenge. Moreover, migrants frequently encounter difficulties in articulating their experiences from their destination countries into better work and

[1] According to OECD methodology, field study mismatch is a situation when individuals work in an area that is unrelated to their field of study and in which their qualifications are not fully valued.

opportunities upon their return home, due to a lack of mechanisms for the recognition of skills acquired abroad. Thus, the skills and experience acquired abroad may not translate to better employment and development outcomes upon return.

The informal economy is estimated to account for 60 per cent of the global workforce. Within such employment, workers are deprived of a decent income and social protection, and have limited - if any - career development prospects (OECD; ILO; World Bank; 2009). There is a higher risk of exploitation, especially in developing countries. Despite having no - or poor access to – formal education, informal workers have skills valuable in the formal economy. They learn in the family and throughout life, through observation and imitation, or by means of informal apprenticeships or on-the-job. In some countries, these alternative routes to skills acquisition account for up to 90 per cent of the workforce (Singh, 2011). Recognition of these skills may provide workers with a route out of informality.

The Resolution concerning the second recurrent discussion on employment, adopted by the International Labour Conference (ILC) in 2014, established new priorities for the interlinked areas of skills recognition systems, skills mismatch and the development of tools for anticipating future skills needs. This was in line with the ILO Recommendation on Human Resources Development: Education, Training and Lifelong Learning (No. 195), which calls upon member States to develop, implement and finance a mechanism for skills assessment, certification and recognition, irrespective of the countries where they were acquired and whether acquired formally or informally, and to ensure that the national qualifications frameworks, linked to standards, should be "*portable and recognized across sectors, industries, enterprises and educational institutions*" (ILO, 2004).

Recommendation No. 195 also called for special provisions to be designed to ensure recognition and certification of skills and qualifications for migrant workers. Skills recognition plays an important role in labour migration policies, as emphasized by the 2013 ILO Tripartite Technical Meeting on Labour Migration, which called for exploring "…*mechanisms for mutual recognition of skills, and certification of credentials built on ILO experience and with the active involvement of the social partners*;…" (ILO, 2013).

Finally, at its 104th Session, the ILC adopted the Recommendation concerning the Transition from the Informal to the Formal Economy, 2015 (No. 204), which pointed out that *the* recognition of *"prior learning such as through informal apprenticeship systems"* broadened options for formal employment (ILO, 2015).

The role and success of skills recognition systems in addressing these challenges lie at the centre of this study.

3. Objectives, scope and methodology of the research

3.1. Skills and their value

Skills are defined as the ability to carry out the tasks and duties of a given job. They are acquired and developed in the process of learning. In the case of individuals, skills provide an opportunity to find and retain a job, career progression and to earn a decent wage or salary. From the employer's perspective, granting a job contract and a certain level of wages or salary depends on his or her confidence – and thus recognition - that a potential employee has the valuable skills required for the job.

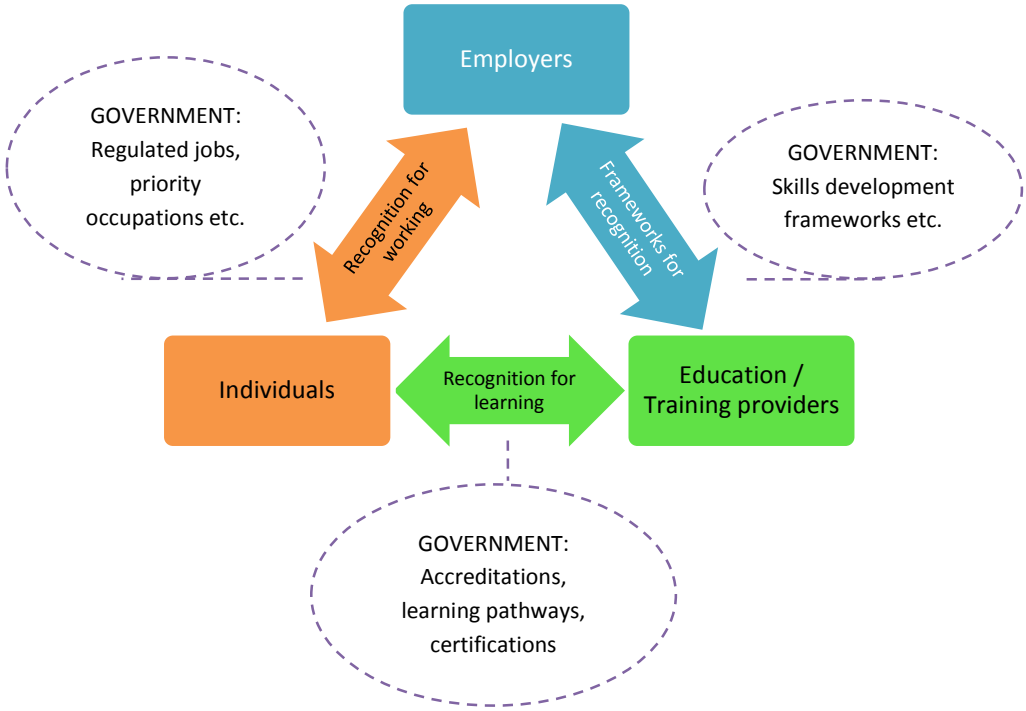
Skills recognition requires dialogue among stakeholders: employers, individuals and education or training providers. It can open new education or training pathways and prevents individuals from repeating training already undertaken on an informal or non-formal basis.

Box 4. What is skills recognition?

"…acknowledgment of an individual's skills and qualifications by employers, education/training institutions and national authorities." (ITC-ILO, 2006)

Typically, public authorities are involved in dialogues within this triangle of individuals, employers and education/training providers. (figure 2). They provide frameworks and regulations to ensure compliance with objectives laid down in education, employment and other policies. They set regulations for specific jobs, in the interest of public health and safety; establish rules for the certification of skills; and implement frameworks for skills development, such as National Qualifications Frameworks (NQFs).

Figure 2. Skills recognition dialogue



Source: Author, based on Duvekot, Halba (2015).

Skills recognition systems are enablers and facilitators of these interactions. This research focuses in particular on interactions between individuals and employers to assess the ways that skills (and their value) are measured and recognized.

3.2. Skills measurement and recognition

On the labour market, skills are recognized in various ways. The most reliable and precise instruments are also the most expensive: direct skills assessments through work observation, interviews and skills testing against agreed standards. In order for the recruitment process to be efficient and flexible, these instruments must be replaced – or at least strongly supported – by proxies for the direct measuring of skills.

These may take form of certificates of professional experience, statements or professional products. But the best-known, most widespread "proxy" is provided by formal education. An individual's skills and competences are recognized through a formal certification – qualification. Qualifications are required for an increasing number of jobs and are a prerequisite to enter formal employment[2].

But formal education is not the only way in which people develops skills; they also acquire them at work, during training and as part of life's experience, in more informal and non-formal learning settings (see Box 5).

Box 5. Different learning settings

Formal learning

Learning that occurs in an organised and structured environment (such as in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to certification. Learning that occurs in an organised and structured context (in a school/training centre or on the job) and is explicitly designated as learning (in terms of objectives, time or learning support). Formal learning is intentional from the learner's point of view. It typically leads to certification.

Non-formal learning

Learning embedded in planned activities not explicitly designated as learning (in terms of learning objectives, time or learning support). Non-formal learning is intentional from the learner's point of view.

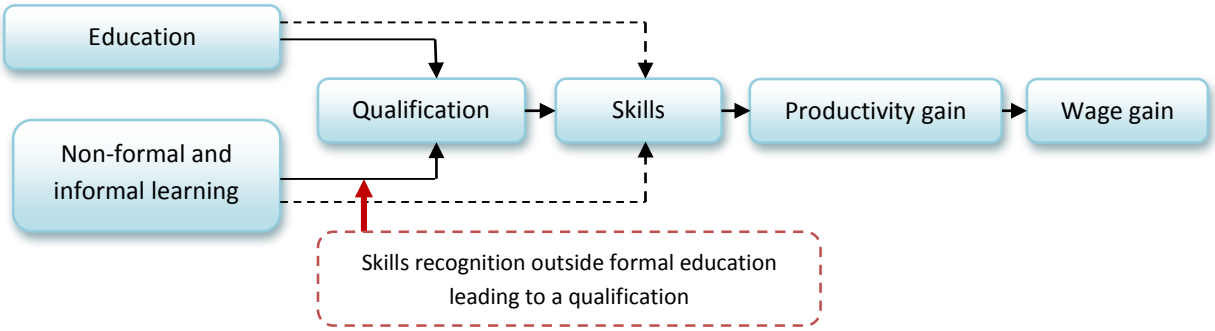
Informal learning

Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner's perspective.

Source: Cedefop (2014)

Unfortunately, skills acquired in this way are not accompanied by a "qualification" which weakens opportunities to secure decent work in the formal economy. In response, systems for formally recognizing skills acquired outside formal education have started to emerge at sectoral, national, regional – and global levels with a clear consensus that these systems bring benefits to individuals, to employers and to the economy as a whole.

Figure 3. Importance of qualification?



Source: Author, based on Keep (forthcoming)

[2] It is important to mention, however, that qualifications are mostly of value in the initial phase of the recruitment process when the employer shortlists candidates; in the next phases, credentials are far less important than the skills that an individual can prove during an interview or test.

In many cases, this logic works. Given the fast pace of change in technologies and work organization, skills needs for jobs are rising and changing constantly - and individuals with a higher education may have a wider set of skills required by employers. Furthermore, the ability to gain a qualification signals to employers that an individual has intrinsic qualities that are often more valuable in the workplace than hard, occupational-specific skills (box 6).

Box 6. Importance of qualifications

"…the holders of qualifications may be regarded as having qualities such as a work ethic, a capacity to complete tasks over a long period, and reliability and punctuality. Qualifications can signal generic skills as well as a capacity to learn."

Source: Keating et al. (2005)

In countries with a large informal economy, there is often a scarcity of formal jobs - and those who successfully obtain qualifications may find it difficult to make good use of them. There is also a sectoral context: in some cases, qualifications simply matter less for employers. If a country has an economy with few sectors requiring a highly formalized acquisition of certified skills, skills recognition leading to qualifications is less likely to succeed (see chapter 5.1 for detailed explanation).

However, skills recognition increases the supply of "visible" skills on the labour market. If skills acquisition - learning – outside the formal education system is not recognized, a significant component of human capital is hidden and thus unused by employers and society (box 7).

Box 7. Skills recognition value

Recognition of non-formal and informal learning outcomes does not, in itself, create human capital. But recognition makes the stock of human capital more visible and more valuable to society at large (OECD, 2010).

Does an increased supply of skills lead to an increased demand for skills – and, above all, to an increased utilization of skills by employers? It certainly has this potential. But the growing supply of skills also leads to "credentialism", as employers demand levels of qualification that are not required to do the job, but which help reduce the field of candidates (Keep, forthcoming). An example from the United States confirms this practice (box 8).

It is worth asking whether a system that recognizes skills acquired outside formal education would be trusted by employers to such an extent that they would use it as part of their recruitment process – and use it to distinguish between otherwise equally ranked candidates. Would employers utilize skills that were recognized this way and allow individuals to build on them? If the answer is in the affirmative, under what circumstances would this system operate?

Box 8. Credentials Gap: example from the job market analysis (United States)

Employers now require bachelor's degrees for a wide range of jobs, but the shift has been dramatic for some of the occupations historically dominated by workers without a college degree. The credential gap can amount to 25 percentage points or more for middle-skill jobs in some occupational families. For example, 65 per cent of postings for Executive Secretaries and Executive Assistants now call for a bachelor's degree. Only 19 per cent of those currently employed in these roles have a B.A.

In some roles, employers prefer bachelor's credentials even when that makes the position harder to fill. Also, the skill sets indicated in job postings do not include skills typically taught at the bachelor's level, and there is little difference in skill requirements for jobs requiring a college degree from those that do not. Yet the preference for a bachelor's degree has increased. This suggests that employers may be relying on a B.A. as a broad recruitment filter that may or may not correspond to specific capabilities needed to do the job.

Jobs resist credential inflation when there are good alternatives for identifying skill proficiency. Many health care and engineering technician jobs show little sign of "upcredentialing". That is because strict licensing, certification standards, well-developed training programmes, or measurable skill standards help employers to assess skills better than with proxies like college degree.

Source: Burning Glass Technologies, 2014

Even if skills recognition helps an individual to find a job or gain more responsibility at the workplace in the short-term, will it also help him or her enjoy long-term benefits, such as career progress and substantial wage gains that will make it possible, for instance, to escape the threat of poverty?

And finally the last question arises: what's the role of the education/training system in this process in which the meeting of skills demand and supply could be enhanced by recognizing the skills that an individual acquired informally and non-formally as well? So how does the learning triangle as a multi-targeted process contribute to this meeting?

These are fundamental questions that need to be answered within every skills recognition system. And they only can be answered by having access to information on their labour market impact, but such evidence is often difficult to obtain. To find this evidence – and to identify factors that may influence it - is the key objective of this research.

3.3. Skills recognition systems

The aim of **skills recognition,** as part of an interaction **between individuals and education/training providers,** is to award an individual with a qualification that helps to open new formal learning pathways. This process takes place at the national level, where its objective is to stimulate life-long learning as an important way to reduce poverty and social exclusion and – in so doing – to guide people towards a better life and long-term career prospects. Such recognition is provided either directly by education and training providers, or within the context of broader initiatives

Skills recognition may be conducted in a number of ways, usually by measuring skills against agreed standards for a particular job, occupation or qualification. It is up to every skills assessment and recognition provider to determine the standards included in the actual recognition procedure. These standards – and those who prescribe them - are key in the recognition process.

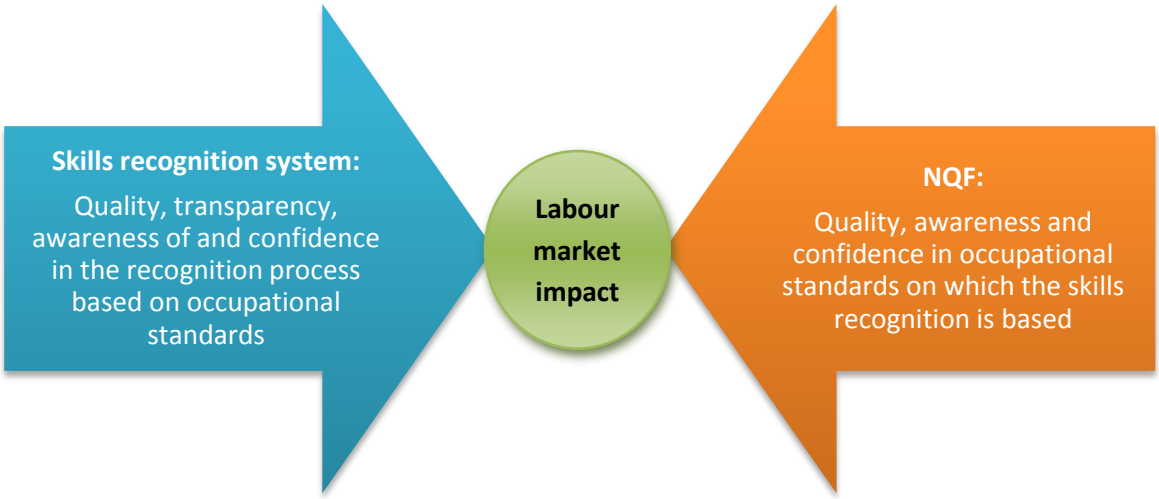
At the **micro level**, standards are set by the employers. The employers attempt to recognize skills during the recruitment and human resource (HR) management stages. The successful outcomes of

such an exercise may include the recruitment, career progression or wage gain of the assessed individual. The transferability of such recognition outside a particular establishment may be difficult, as standards and recognition practices tend to vary from one employer to another.

Sectoral approaches to skills recognition, often private-owned, are driven by employers in a given sector, or by professionals in a specific occupational group (such as lawyers, accountants and brokers). Recognition providers assess individuals' skills against standards developed and maintained by a sectoral or professional body. It is a particularly interesting practice - and worth following closely.

Cross-sectoral and national systems are driven by the wider needs of a country and its labour market. For nation-wide systems, occupational standards are often – but not always – developed within NQFs. There are more than 150 NQFs in the world now, and their coverage extends to approximately three in four countries (UNESCO, 2015). The development of **skills recognition linked to NQF** is a major trend[3], and it will be important to evaluate the factors of success. Skills recognition systems and NQFs may be mutually supportive however, successful recognition systems may work well without an NQF.

Figure 4. Mutual support of skills recognition system and an NQF



Public-led national systems serve to match skills and jobs, but also other objectives such as the integration of migrants and the formalization of skills gained in the informal economy.

Given the magnitude of international migration, recognition of skills of migrant workers has great potential to guide people toward a better life. In developed countries, labour migration can play a crucial part in addressing the skills mismatch by filling existing skills gaps with an inflow of qualified workers from abroad.

Free flow of skills and their utilization across borders is a shared concern of many countries. Therefore **regional approaches** to migrants' skills recognition emerge, such as in the Caribbean, South-East Asia and elsewhere.

Another area is the recognition of skills acquired informally or non-formally. The informal economy is estimated to account for 60 per cent of the global workforce. As most of learning in an individual's life happens through informal and non-formal ways, recognition of these skills may provide workers with a route out of informality and helps to open new formal career and training pathways.

[3] In fact, skills recognition is inseparable part of the NQF as a way to acquire certification for occupational standards and it should focus skills related in all learning settings, see box 5.

Skills recognition also takes place at the **international and global level**, where it enhances the mobility of students, an international exchange of talents - and consequently also labour market mobility. Tertiary education institutions play a special role as focal points of international recognition. In many developing countries, universities play a catalytic role - a case in point is the ILO current technical assistance to the African Union on creating skills recognition at the regional level. The most important and wide-sweeping international systems for the recognition of foreign qualifications include the Bologna Process; the Arusha and Addis Ababa Conventions on the Recognition of Studies, Diplomas and Degrees; and the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific[4].

Global sectoral approaches in higher education, such as the Washington or Sydney Accord in engineering, are similar to the recognition of skills for learning and recognition of skills for the labour market. These approaches directly interact with labour market and employers' needs, as they can be considered as standards for sectoral occupations.

Box 9. The Washington Accord Agreement

The Washington Accord Agreement, signed in 1989, facilitates the recognition or equivalency of accredited engineering education programmes leading to an engineering degree. It is based on a shared understanding that an accreditation of engineering academic programmes is a crucial factor for the practice of engineering at the professional level in each of the countries or territories involved. The Accord is both about standards and accreditation practices. Thus the Accord can also be understood as a benchmarking standard for engineering occupations, and it recommends that graduates of programmes accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering.

Following the Accord, some countries have put a considerable effort into ensuring that their university standards and accreditation processes are equivalent - and some of them are assisting others in reaching this objective.

Source: http://www.ieagreements.org/Washington-Accord/Washington-Accord-Overview.pdf

Apart from this short overview, the subject of skills recognition for education pathways is not covered in this research. The major focus is on the recognition of professional qualifications and skills for working, and on the impact of such recognition on employability, remuneration and career progress.

When referring to the recognition of professional qualifications, it must be emphasized that these qualifications may be recognized for either regulated or non-regulated occupations.

[4] http://www.unesco.org/education/studyingabroad/tools/conventions.shtml

Occupations may be regulated in a number of ways (box 10). The reasons for these regulations vary. The public sector may need to protect public health and safety (such as health care, energy or construction sectors) or certify compliance with laws. Professional bodies may wish to increase their members' status and improve their earnings. And sectoral bodies may need to ensure the correct use of equipment, improve the quality of services or products, and enhance productivity and workplace security (Kleiner, 2013).

Box 10. Ways of regulating of occupations

The state may require an individual to register with an appropriate government agency, and may include a fee or bond – this enables some general oversight of who is practicing in a specific area. The second level is certification, which includes the above but also requires an individual to pass some form of examination to ensure the individual has reached a required level of knowledge and skill. The most restrictive is licensing, which includes all of the former requirements for those practicing an occupation, and also specifically excludes anyone not licensed from performing the occupation.

Source: Richmond A. (forthcoming)

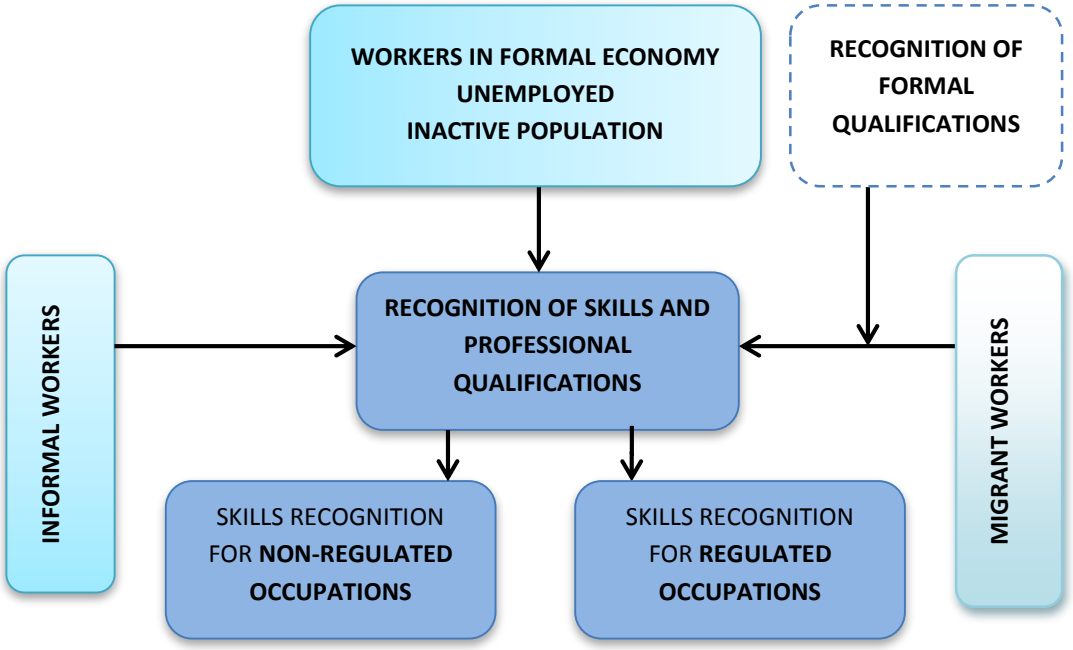
Skills recognition may also be an important part of labour market regulation. In many cases, obtaining a skills certificate or qualification may be a prerequisite for finding a job. Occupational regulation therefore represents a significant driver of demand for skills recognition systems - and in many cases, it is the most important driver, as examples from Germany and the Czech Republic clearly demonstrate (box 11).

Box 11. Job regulation: driver for skills recognition

In the skills recognition system for migrant workers in Germany, the ratio between recognitions in regulated and non-regulated occupations is very much in favour of regulated ones (78:22), such as occupations that require authorization – i.e., medical doctors, nurses or pharmacists *(*Case study in Germany*).*

In the national recognition system for non-formal and informal learning in the Czech Republic, out of 101,000 recognition certificates (as of mid-2014), 84,000 were awarded for the job of security guard, which had been recently added to a list of regulated occupations. Previously there were no formal qualifications available for this job (Husova, 2014).

Figure 5. Skills recognition themes covered



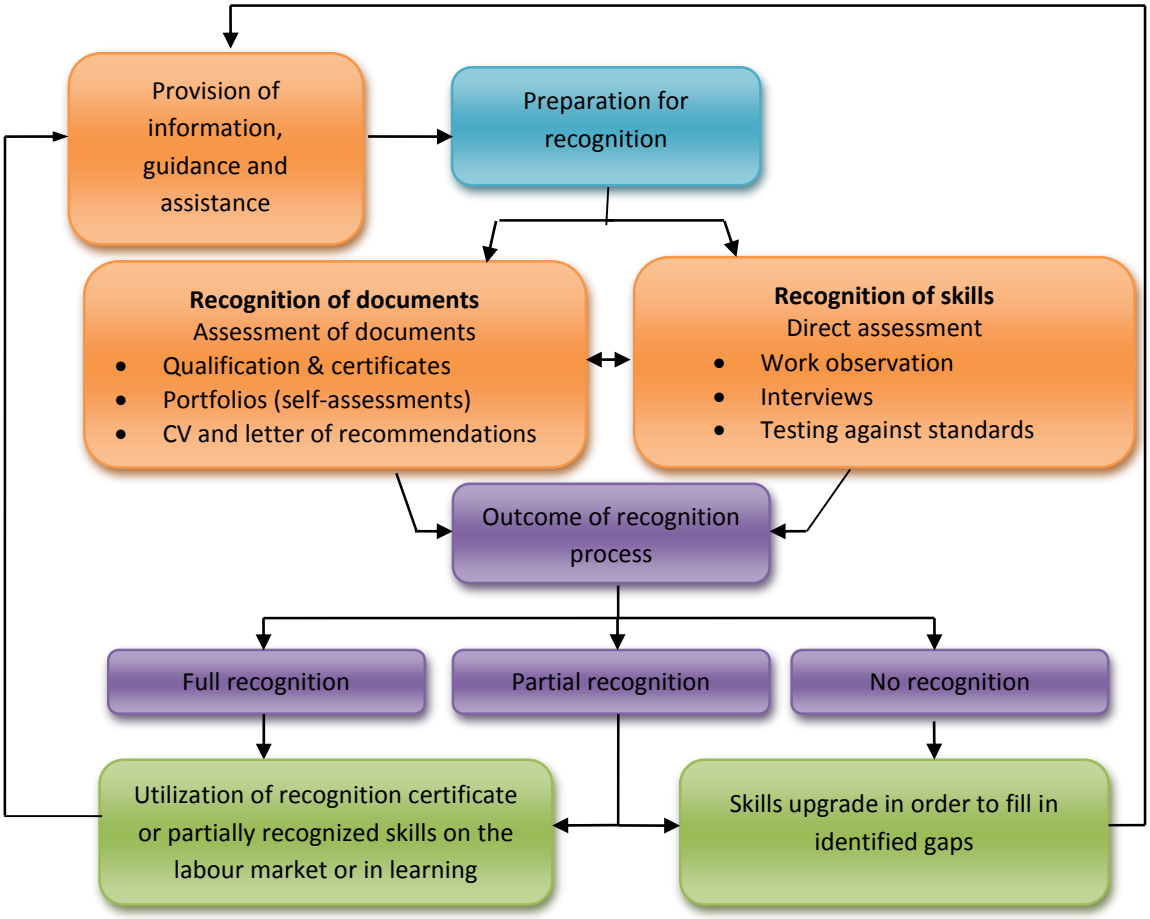
3.4. Skills recognition process and services

Within the skills recognition system, the recognition process itself has two major components (see Figure 6). The first consists of the assessment of documents demonstrating acquired skills - such as qualifications and training certificates, but also portfolios (self-assessments), CVs and letters of recommendations. The second consists of a direct assessment of skills through work/activity observation, interviews or testing against agreed standards.

The recognition process is supported by specific services, such as the provision of information, advice and assistance in identifying the focus of recognition (towards which skills set/qualification) and the right provider, as well as help in the preparation of the necessary documentation.

There may be several possible outcomes from the skills recognition process: either the skills are recognized fully, partially or not at all. If the recognition ends at least in partial recognition, the provider issues a document certifying the recognized skills. Following the outcomes of the recognition process, further guidance may be provided on how to use the skills certificate obtained, or how to better document evidence of the skills. Advice may also be dispensed on ways to develop the individual's skills portfolio appropriately, or even on required training (Aggarwal, 2015). The objective of assessment is not only to award a qualification but also to steer the candidates' personal and professional progress, and to provide them with the tools to do that (Paulet, 2013).

Figure 6. Skills recognition process and functions



In fact, many skills recognition systems are closely linked to the provision of training. If the skills recognition process identifies gaps that will prevent someone from pursuing his or her desired career or training pathway, the provision of a related skills development programme should logically follow.

Linkage to training is highly significant in the event that the full recognition of skills or qualifications is not granted. For example, "*…foreign-educated immigrants whose qualifications have been only partially recognised … suffer from higher risks of unemployment and over-qualification*" (OECD, 2014). In such a case, forms of alternative, partial or conditional recognition may apply. Alternative recognition can include bridging courses offered by the competent authority to make up for discrepancies with the required qualification. Australia, in particular, has been a world leader in the development of field-specific bridging programmes designed to assist migrant workers in receiving full recognition and employment (IOM, 2013).

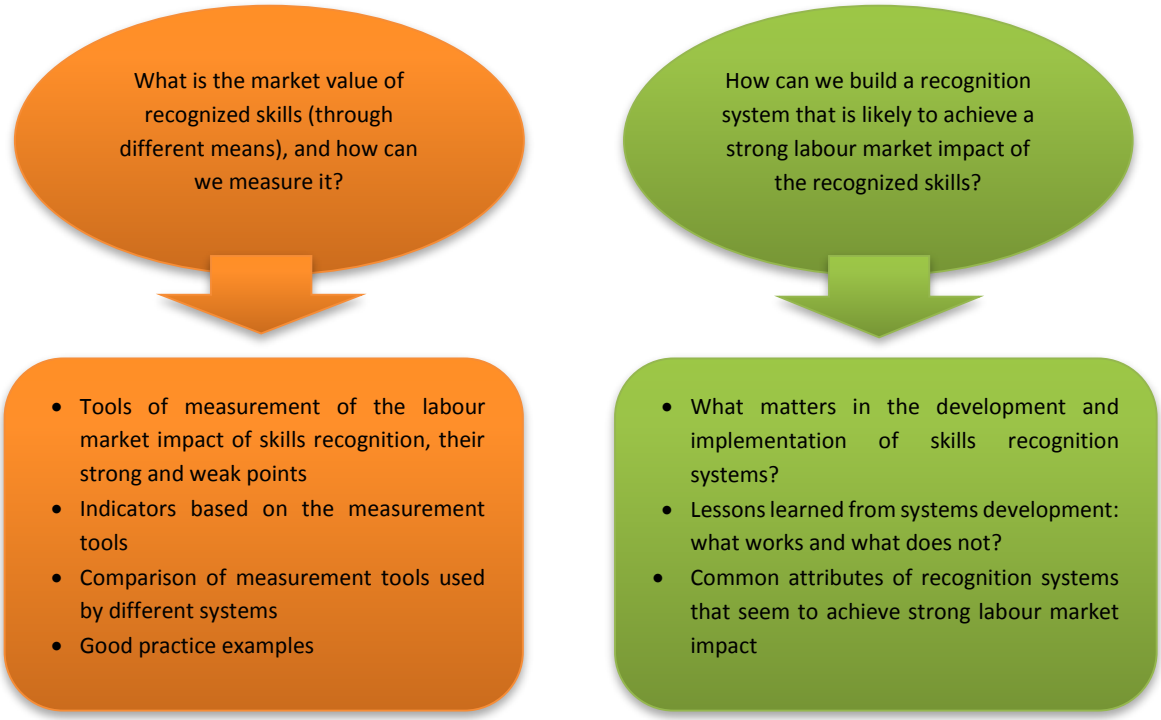
According to recent ILO research, the existence of a training provision, which is linked to skills recognition and the identified needs of employers, is evidence of an impact on the labour market (Allais, 2015). However, relations between the recognition process and training provision are more complex - and they are also covered by the research.

3.5. Research questions

It goes without saying that the recognition of skills does not end with the issuing of a formal document or certificate. Even if a person has certified skills, these must ultimately be recognized by those who can use them, value them and are willing to pay for them – the employers. **The real recognition of skills takes place on the labour market.** It is their practical value that makes the difference – in hiring, career and skills development pathways, promotion and remuneration.

In this respect, there are two major research questions that need to be answered:

Figure 7. Research questions



3.6. Methodology

The research consisted of two major parts. First, an extensive literature review was conducted, which covered a large number of studies and research papers related to skills recognition. Second, an analysis was made of 77 skills recognition approaches throughout the world, with a focus on those in their later stages of development and implementation - as these were more likely to provide some information on their labour market impact. Some of these approaches benefitted ILO technical assistance. Some of the most developed were chosen as good practice examples, of which 19 have been developed in the form of full or short case studies (figure 8).

Figure 8. Country-specific skills recognition systems analysed in detail

Note: "Flags" for global recognition systems are not displayed.

The case studies aimed at developed and developing countries, and were conducted nation-wide as well as at sectoral and international level; they covered both the formal and informal economy, and targeted domestic and migrant workers alike.

In line with the ILO's partnership and cooperation priorities, some of the case studies were developed under the South-South and Triangular Cooperation agenda. With significant support from the ILO Partnerships and Field Support Department (PARDEV), five case studies were conducted in BRICS countries, with particular focus on one of their key priorities - skills mismatch, and how it can be addressed by skills recognition. In addition, a specific case study was developed on the topic of regional cooperation among countries of the South, bringing an example of a skills recognition framework in South Asia.

Finally, a number of short studies were carried out specifically on tools to measure the labour market impact in Denmark, Singapore and the United States.

Further evidence from the case studies can be found either in the boxes in this report, or in Annex 2 summarizing key findings for analysed recognition systems.

Figure 9. Skills recognition systems analysed in detail

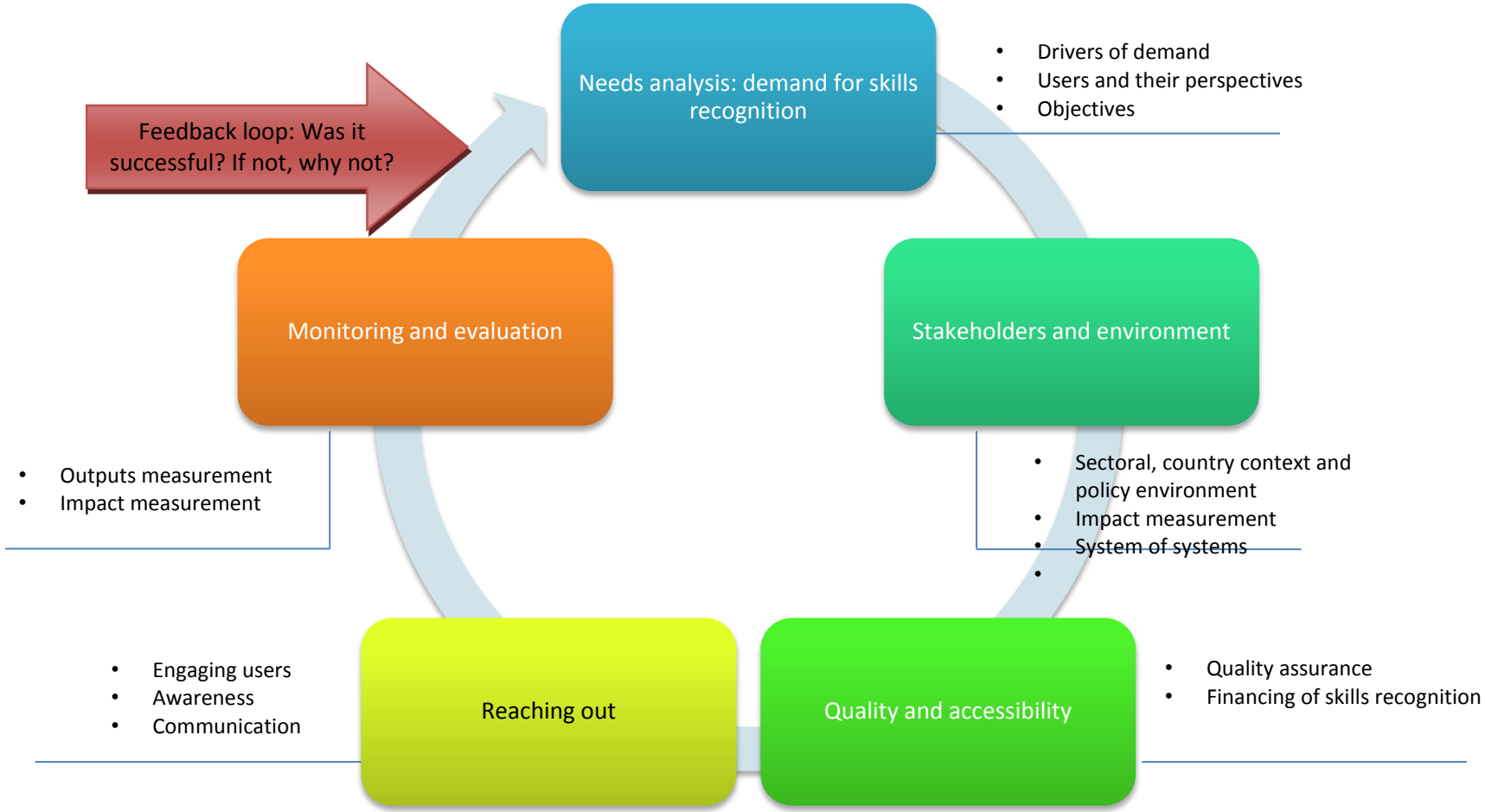
EUROPE AND CENTRAL ASIA	
Case study	**Description**
Belgium	National system for recognition of prior learning
The Netherlands	National system for recognition of prior learning
Germany	System for recognition of skills of migrant workers
Italy	System for recognition of skills of migrant workers
Norway / Philippines	System for recognition of skills of migrant workers from the Philippines in the nursing sector in Norway
Russian Federation (BRICS)	National skills recognition system with sectoral implementation
Denmark (short case)	Impact measurement of skills recognition for migrant workers
AFRICA	
Case study	**Description**
Ghana	Skills recognition through informal apprenticeships
South Africa (BRICS)	National skills recognition system linked to the NQF
ASIA & PACIFIC	
Case study	**Description**
China (BRICS)	Skills recognition as a tool enhancing labour mobility
India (BRICS)	National system for recognition of prior learning
ASEAN (SSTC)	Skills recognition framework in the ASEAN countries
Australia	Skills recognition system in the financial sector
Singapore (short case)	Monitoring of national skills development and recognition of the Workforce Skills Qualifications (WSQ) system
AMERICAS	
Case study	**Description**
Brazil (BRICS)	Skills recognition approaches at the sectoral level and in the informal economy
United States (short case)	Impact measurement of skills certification in the manufacturing sector
GLOBAL SECTORAL EXAMPLES	
Case study	**Description**
IT sector (short case)	Impact measurement of skills certification in the IT sector
Accounting sector (short case)	Impact measurement of skills certification in the accounting sector
Engineering sector (short case)	Labour market impact of the Washington Accord

3.7. Logic of skills recognition

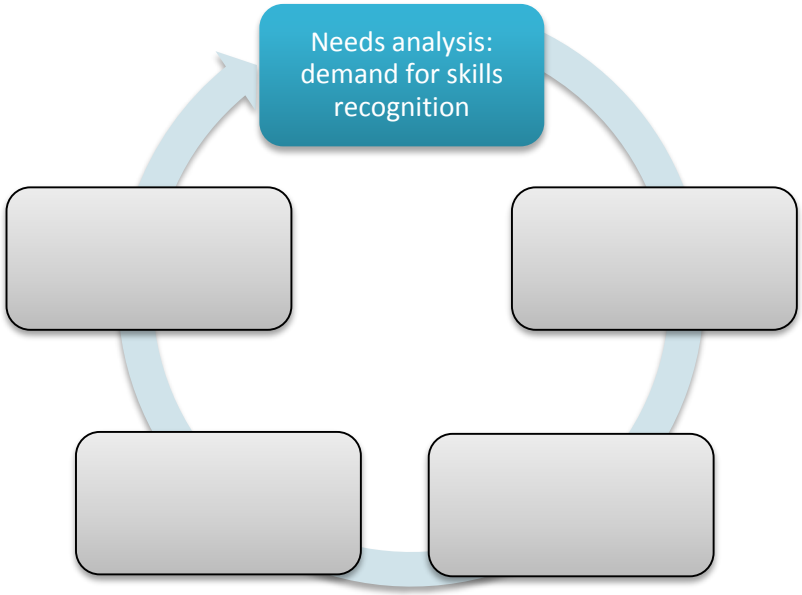
Drawing upon an extensive survey of the literature available on the subject of skills recognition, and the findings of case studies, there are several key factors that influence the labour market impact of skills recognition systems:

- ***(i)*** identifying and clarifying needs;
- ***(ii)*** understanding the skills recognition environment and engaging its stakeholders;
- ***(iii)*** ensuring quality and accessibility;
- ***(iv)*** reaching out to users; and
- ***(v)*** monitoring and the evaluation of impact. Each of the following chapters deals with one of these challenges.

Figure 10. Logic of skills recognition research



4. Demand for and drivers of skills recognition



Demand for skills recognition is created by needs of individuals and education and training providers and the objectives of employers and governments.

1. The first is **the standpoint of the individual**, who, after having successfully had his or her skills recognized, naturally expects better labour market outcomes. It is important to capture the expectations of individuals before they undergo the recognition procedure - and the benefits they derive from it. Individuals' needs may be represented by stakeholders, such as trade unions.

2. Equally important is the **expectation of employers**. From their point of view, skills recognition may also bring substantial benefits, such as better job matching and improved employee performance. Understanding to what extent skills recognition systems bring these benefits to employers is also at the core of this research.

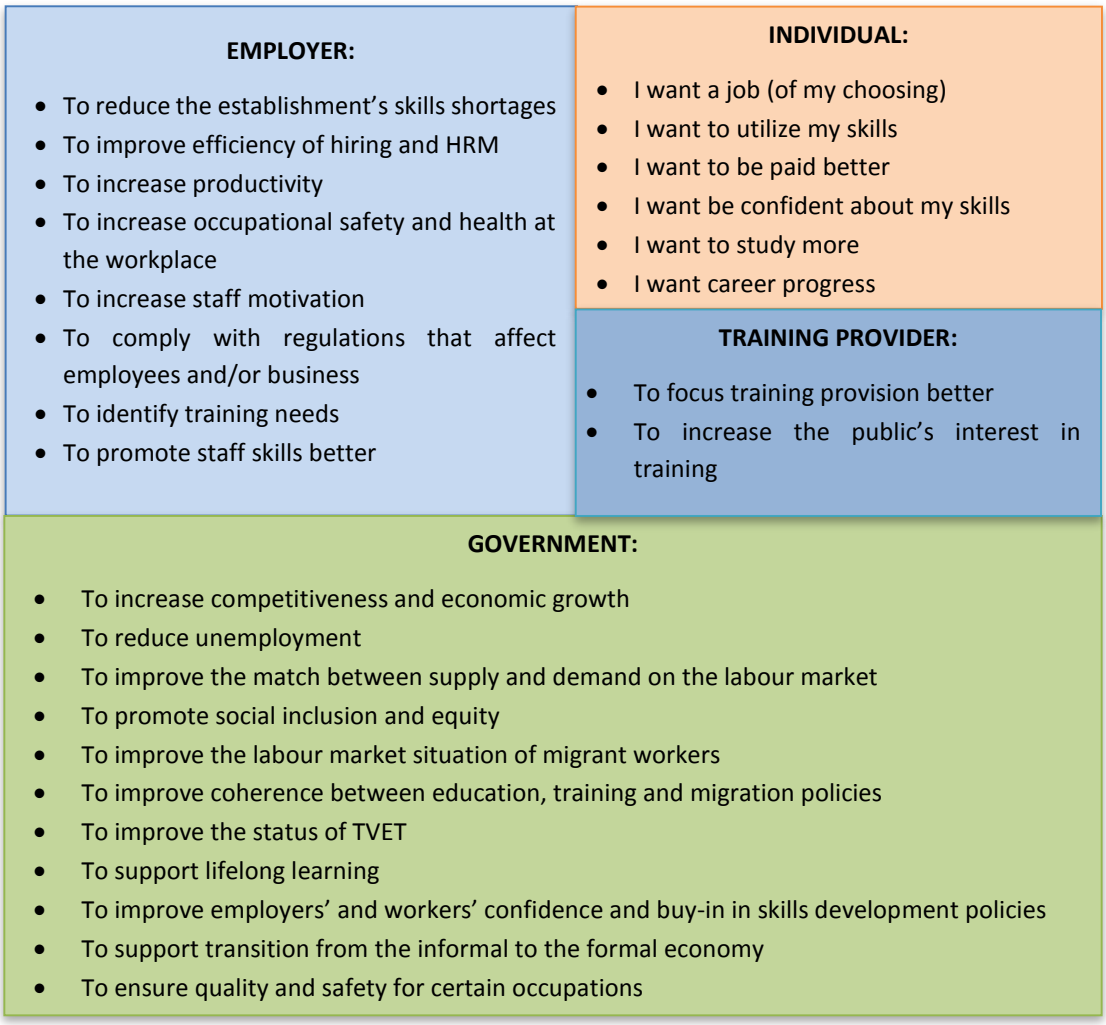
   In addition to public sector-driven skills development policies, **skills recognition systems** are also emerging in the private sector, **in the form of employer-led initiatives**. Recognition of certain skills may be a prerequisite to work in the sector, or in its selected occupations (such as health care). The other potential benefit may be that employers consider the **recognition as a valued proof of the individual's skills**. Employer-driven skills recognition systems and certifications are usually good examples of how the labour market impact can be achieved; their **focus on the value added** of certifications for both individuals and employers is **significant**.

3. The research also focuses on understanding the importance of **skills recognition systems** as **part of broader skills development policies and systems** (in particular national, sector or regional) to identify current and future skills needs - and to avoid skills mismatches.

4. The fourth consideration is that of the training providers. Skills recognition also plays a role in **improving the focus and relevance of training systems,** and may encourage people to further develop their skills.

Figure 11 summarizes the various expectations and priorities of employers, individuals, public authorities and training providers that may be addressed by skills recognition.

Figure 11. Expectations of employers, public authorities, individuals and training providers



The matching of jobs and skills is the most important issue for employers and individuals - and is also one of the public sector's key priorities. As the major focus of this study is on the labour market impact of skills recognition, the gathering of evidence on ways in which skills recognition contributes to this process of matching jobs and skills is the main research line.

4.1. Drivers for recognition systems

Nation-wide skills recognition approach

Some skills recognition approaches – mainly nation-wide ones – were driven by factors such as:

- to improve jobs and skills matching,
- the need to curb unemployment (especially long-term unemployment),
- to combat social and economic exclusion by providing lifelong skills development,
- to support transition from the informal to the formal economy,
- to improve the labour market situation of migrant workers,
- the need to shift towards skills-biased technological change,
- the need to tackle challenges such as low levels of education including TVET,
- to improve skills utilization, and
- to promote university education

Box 12 presents some examples from case studies on nation-wide skills recognition systems.

Box 12. Cases studies examples: Drivers for nation-wide skills recognition systems

In the Netherlands, the key objectives were to: make the learning system more accessible to its citizens, enabling them to take up lifelong learning; stimulate human resources development strategies, in which employability was a shared concern of both employer and employee; tackle labour market obstacles for jobseekers, by making it easier for people to make their qualities or competences more transparent - thus turning Dutch society into 'a learning society', in which learning is considered important or valuable, where people are encouraged to continue to learn throughout their lives, and where the opportunity to participate in education and training is available to all.

In India, the survey conducted by the National Sample Survey Organisation NSSO) revealed that the lack of skilled manpower in the manufacturing industry was very strongly linked to the fact that only 2 per cent of India's youth and only about 7 per cent of the whole working age population had received vocational training. In addition, the survey revealed that even among those who had received vocational training, there was a considerable skills mismatch. Such issues are significantly driving (and shaping) the development of RPL processes in India.

In South Africa, the key labour market challenges were identified as: high levels of unemployment, especially youth unemployment; one of the highest NEET rates in the world; inadequate employment growth; low levels of educational attainment; poor TVET participation rates; a decisive shift towards skills-biased technological change; and a skills mismatch. The recognition system for occupational skills faces significant labour market challenges to address this problem. There must be improved employability and skills utilization; a reduction in the skills gaps identified by employers; and a contribution to successful human resource management at company level.

In the Russian Federation, the skills recognition system has to respond to or overcome a number of key challenges to the labour market. These consist of: a dwindling workforce with a prevalence of lower skills sets, entailing changes in the main socio-demographic characteristics of the workforce; and the promotion of university education, resulting in a diminishing set of blue-collar workers. As a consequence of this, white-collar workers are no longer called upon to do intellectual work but to perform a set of standard activities. Added to all this is the overall instability of the social and political situation. In the current conditions, practically no company is bold enough to plan even for the medium term (three to five years). This absence of planning makes the training of employees and the hiring of young specialists "for the future" totally pointless. On the contrary, companies want to hire people who are already capable of tackling the tasks in hand; the prospects for career development are weak.

Source: Case studies.

Skills recognition systems may even be built within a country's regions. The system in Manitoba, Canada (box 13) is a good example of the way in which a skills recognition system can be promoted if

the employers are strongly involved. Generally speaking, if the skills recognition system is driven by the industry or identified industry needs, its focus is primarily on jobs and skills matching - and there is usually a very strong link to training provision.

Box 13. Drivers for regional skills recognition system in Manitoba, Canada

In Manitoba, the PLAR (Prior Learning Assessment and Recognition) system has been established under the business, labour and government partnership as a workforce development tool, focusing on three priorities: (i) more effectively matching workers with employment and training options; (ii) providing better coordination between employment, referral, assessment and training services; and (iii) contributing to cost effective training options and better utilization of the skills of Manitoba workers.

Source: http://wplar.ca/

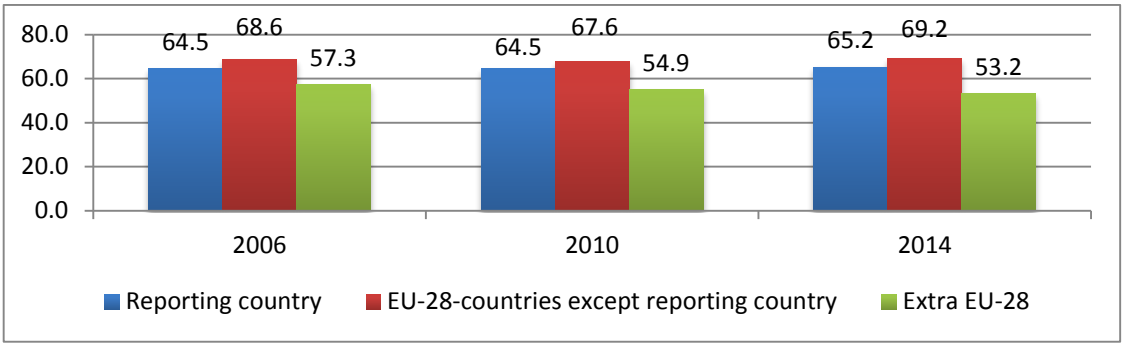
Skills recognition approach for migrants

With lower unemployment rates, the domestic labour force cannot provide sufficient means to address recruitment difficulties, as the pool of free available labour shrinks. The OECD has concluded that skills shortages are major drivers for support for labour immigration in developed countries. Lists of shortages in skills are used in a number of OECD countries to determine eligibility for migration or to facilitate international recruitment for certain occupations. The methodologies for determining shortage lists vary, but generally include consideration of a number of labour market indicators such as registered unemployment, vacancy rates and duration, and consideration of qualitative factors such as stakeholder testimony or negotiation with employers' and workers' representatives (OECD, 2003).

Skills mismatch can be addressed by labour migration, but this only results in a further skills mismatch as migrant workers are usually the victims of skills underutilization or skills waste, both in terms of lower employment rates and over-qualification. When it comes to labour market outcomes in developed countries, much is contingent upon whether the migrant comes from another developed country or not.

Recent data on the EU labour market show that employment rates for nationals in their home country are more or less stable – around 65 per cent. In the case of those coming to that same country from another EU Member State, the figure is even better – 69 per cent on average. However, for those coming from outside the EU, the figure is only 53 per cent – and decreasing constantly (figure 12).

Figure 12. Employment rates for nationals and third-country migrant workers



Eurostat: Employment rates by sex, age and nationality (%). Table code: [lfsa_ergan]. Own calculations. Retrieved from: http://appsso.eurostat.ec.europa.eu/nui/show.do

Even when migrant workers are employed, they are much more likely to be in occupations whose skills requirements are lower than their educational attainment and/or professional qualifications, compared with their national counterparts (IOM, 2013). This issue has also been identified in the OECD Migration Outlook 2014 (box 14).

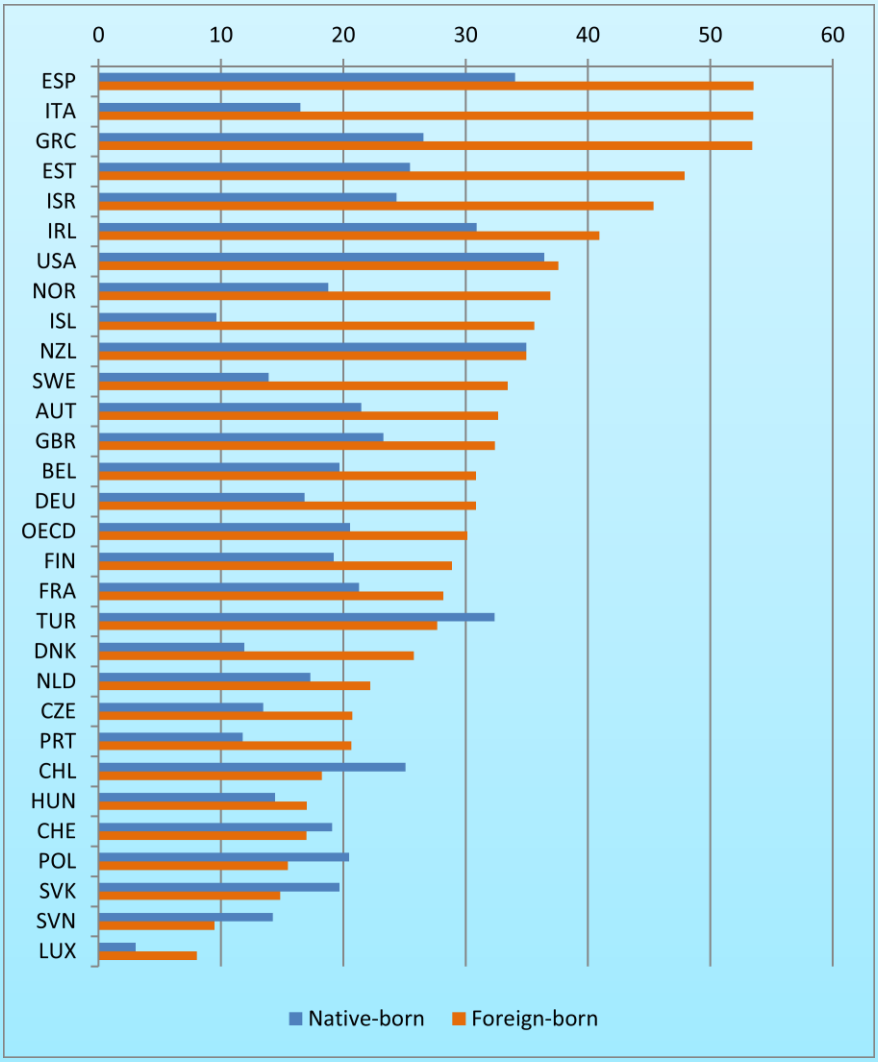
Underemployment and over-qualification might result from a number of factors. In the case of native-born workers, this might be due to the discrepancy between the level of demand and supply of labour in specific sectors/occupations; in the case of immigrants, however, additional factors might play a

Box 14. Utilization and recognition of skills of migrant workers (OECD Skills Strategy Framework)

The OECD *International Migration Outlook 2014* concluded that the over-qualification of migrants was widespread among OECD member countries. This was generally an issue for the highly educated, although it could also affect those with intermediate levels of education. Over-qualification rates (share of people with tertiary education working in occupations with ISCO codes 4-9) for migrants were on average almost 50 per cent higher than those for native-born workers (see graph below).

The report suggests that skills recognition is one of key instruments to address the issue, and it adds that the proper assessment and recognition of migrants' existing skills will avoid any unnecessary investment in developing them and focus on any additional training required for the critical missing skills.

Over-qualification rates among the highly educated in employment, 15- to 64-year-olds, by migration status, 2013



Source: OECD: International Migration Outlook 2014.

role – such as discrimination, language barriers and the difficulties of having their qualifications, which they have earned in their countries or origin, recognized in their countries of destination.

Despite this situation, the underutilization of migrant skills is another strong factor influencing the demand for skills recognition systems or for the upgrading of existing ones. The German case study on the adoption of new recognition legislation and the implementation of numerous measures in this area shows that solving the issue of labour shortages was as important as improving the quality of the recognition process itself.

Box 15. Case study example: Drivers for migrant skills recognition in Germany

Several reports pointed out that employers were finding it extremely difficult to fill jobs. In the SME Barometer, 72 per cent of respondents admitted (in 2011) that they had problems in hiring skilled workers, while the German Association of Chambers of Industry and Commerce (DIHK) report for 2011 stated that one third of companies considered skills shortage as one of the greatest economic risks – which was double that of the 2010 figure. In the DIHK's 2013-14 report, skills bottlenecks remained a key issue; among companies having recruitment difficulties, 42 per cent reported that their vacancies had not been filled for more than two months.

Apart from labour shortages, there are other reasons to improve the skills recognition system for migrants; for instance, there is a lack of awareness of the benefits, tools and processes of the whole scheme for migrant workers – both from the point of view of individuals and of companies.

These were the major drivers for a new approach that came with the adoption of the Recognition Act in 2012 (it was enacted two years later).

Source: Case study in Germany.

Skills recognition approach for informal economy. In countries where the informal economy accounts for a significant share of jobs, more discussion is warranted on recognising and certifying

Box 16. Drivers for skills recognition in the informal economy

In Brazil, the labour market still operates with high levels of informality that may impact accreditation services due to its large scale, diversity and links with formal activities. Around 38 million workers (38 per cent of the economically active population) are declared "informal" and this figure is expected to increase due to the economic recession. These workers perform not only odd jobs, but also activities that may require specific training and certification – which are mandatory under national legislation or international standards with respect to quality, safety, health and environmental issues.

There is a dual demand for recognition services: first, there is a need to prove and validate past unregistered experience – a basic requisite for formal jobs; and a need for workers to able to obtain required or valuable certificates that may improve productivity and employability. High turnover rates may increase this demand, since workers may be moving from job to job, both in the formal and informal sector, throughout their productive life.

Source: Case study in Brazil.

In Ghana, 55 per cent of those who have completed basic schooling are unable to proceed to secondary education. The majority of this group are "Not Employed, Not in Education and Not in Training" (NEET). They need to be equipped with employable skills to enable them to succeed in the Ghanaian labour market. Besides this, about 2.2 per cent of the employed population are apprentices, the majority being in the urban labour market. A system must be provided to recognize these apprentices' skills, to give them the opportunity to utilize their potential for gainful employment in specific trade areas of their choice or to continue their career path within the TVET Qualification Framework.

The key objectives of the skills recognition system are to address issues concerning the training, assessment and certification of skills acquisition in the informal sector. These involve recognising and certifying skills acquired in the informal sector as a path to productive employment, while acknowledging or validating the skills or competencies of an informal apprentice graduate.

Source: Case study in Ghana.

informal learning processes to promote decent employment and social equality (Singh, 2011). This theme is relevant not only in low-income countries; it affects also many emerging large economies such as Brazil, India and South Africa.

Informal apprenticeship systems are the most developed skills recognition approaches in the informal economy. They constitute an important provider of employment avenues and a path to poverty reduction in the informal economy (ILO, 2008). The challenge for these systems is that they are generally disconnected from formally recognized national training systems, so that the transition of informal apprentices into the formal economy and/or education and training is difficult (ILO, 2012b). Formalizing informal apprenticeships is an important way of improving their labour market relevance and of linking them with the formal education system - to ease the transition of informal apprenticeships graduates into the formal economy.

Sectoral skills recognition approach

On a sectoral level, the linkage of the needs and objectives of skills recognition with labour market outcomes is very strong. From the employers' point of view, skills recognition is necessary to improve productivity and the competitiveness of their enterprises; from an occupational point of view, recognition is a tool that improves a worker's status and value on the labour market.

Box 17. Drivers for skills recognition at the sectoral level

In the United States, skills mismatch has been identified as one of critical hindrances in the manufacturing sector, affecting as many as 80 per cent of manufacturers and causing them additional costs of up to 11 per cent of net earnings. Various measures have been applied as a response to pressing needs to tackle the skills mismatch and validation of skills according to industry-endorsed standards. Although considerable attention was paid to improving the relevance of initial education to industry needs, the validation of the skills and abilities of experienced workers (to prove that they had the skills required by the employer) was also a significant part of the process.

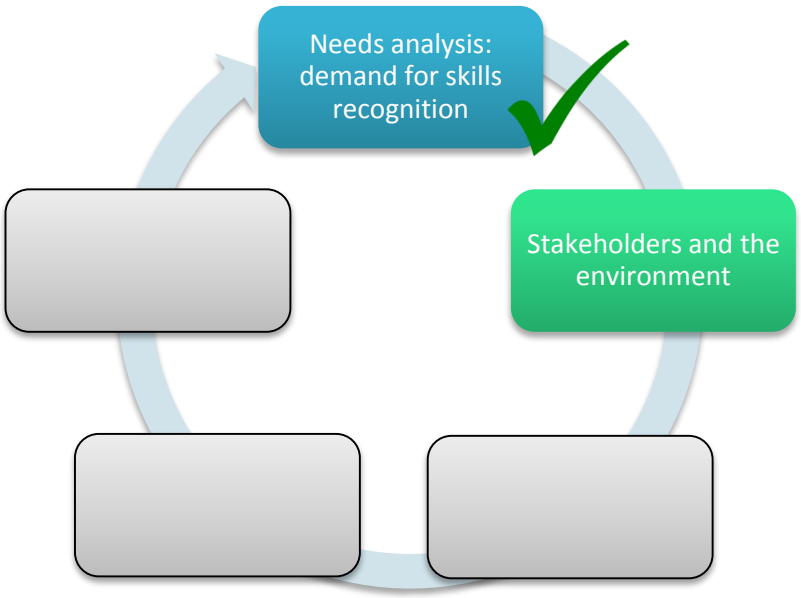
In the IT sector, which is considered a leader in skills certification, recognition provides a benchmark for skills delivered through training and accreditation, as it offers metrics that the training is aligned with tangible skills and knowledge required. IT skills certificates reflect the common practice in the IT sector to recognize and reward possession of specific skills (usually in a form of a premium).

In Australia, labour market analyses in major sectors of the Australia economy - so-called "Environmental scans" – identify changes and drivers shaping demand and supply for skills as well as skills shortages. These are subsequently addressed by the work of the Industry Skills Councils (ISCs) - independent, industry-led non-profit sectoral bodies. Skills recognition is seen as an important tool in enhancing labour market mobility; ISCs cooperate closely with training organizations and employers.

Three major drivers were present in the **Australian insurance brokers industry.** These set out to: (i) increase public awareness of the National Insurance Brokers Association (NIBA) brokers; (ii) enhance their competitive advantage of being the only group offering independent advice to consumers; and (iii) build recognition of broking as a worthwhile, professional career, thus attracting 'new blood' into the industry. The NIBA conducted extensive research on how this could be achieved. The result was the introduction of a professional certification known as the Qualified Practising Insurance Broker.

Source: Case studies.

5. Stakeholders and the environment



The external environment – like existing policies or different stakeholders – should be carefully analysed before developing any skills recognition system, because it can significantly influence the desired impact. For example, skills recognition may fail to achieve its objectives if it is not supported and promoted by employers' representatives or linked to a network of career counsellors or employment services. On the other hand, the effectiveness of a migrant skills recognition system may be boosted by changes in a country's migration policy and linkage to migrant welcome centres.

5.1. Sectoral and country context

The sectoral context also matters. As explained earlier in the text (chapter 3.2), the importance of qualifications varies from sector to sector - and if the acquisition of skills is strongly formalized and requires certification, skills recognition leading to qualifications is more likely to succeed.

Box 18. The sectoral context of skills recognition

Sectoral specifics that increase demand for skills recognition include:

- Nature of work
- Amount of time required for the accumulation of substantial skills and competence for adequate job performance
- Health/safety requirements
- Existing workplace/job regulation
- Employer preference in having clearly defined standards

Skills recognition seems to play an important role in the manufacturing industry, construction sector, IT and safety and security sectors - but also in the financial, health care and education sectors (Hansen, 2015). On the other hand, it is much less valued in service sectors, especially in those where the job turnover is high and there is a large pool of candidates to choose from. An example from Australia[5] shows that in the case of clerical and administrative jobs, even formal qualifications as proof of

[5] Zajda, J. 2008. *The importance of qualifications – Credentialism in the 21st Century: The use of qualifications and experience during the recruitment process*, paper for the AARE Annual Conference (Brisbane).

recognized skills are less important. The example indicated that a majority of employers considered formal qualifications as essential for recruitment process - more important than experience, with the stronger role of qualifications expressed in construction and manufacturing sectors.

Countries with a strong formal education sector and high levels of educational attainment (generally the majority of developed countries) tend to value qualifications more. Skills recognition procedures aiming towards formal acknowledgment of skills are much more likely to succeed in such countries. In countries where there is a strong informal sector and/or a low level of educational attainment, the value of formal qualifications may matter less.

5.2. Stakeholders' involvement

In order to boost the capacity and awareness of – and confidence in – skills recognition, it is vital that there should be interaction, information exchange and cooperation between the stakeholders (see Box 19) and the skills recognition system. For example, a skills recognition system that targets unemployed people should closely cooperate with institutions responsible for the delivery of an active employment policy; and a system that targets migrant workers should be in touch with the authority coordinating migration measures and its network of support centres. The involvement of employers (through sectoral bodies), of workers' representatives, of the career guidance system, of training providers and or/educational institutions is essential for ensuring the labour market impact of the skills recognition system.

Box 19. Major stakeholders of skills recognition systems

Sectoral specifics that increase demand for skills recognition include:

- Employers' representatives
- Workers' representatives (trade unions)
- Financing / governing authority
- Other ministries / authorities involved
- Training providers

Skills recognition systems often operate at two levels. Most systems have established a "Recognition Authority" – a body that has the responsibility for fulfilling the objectives of the system in question. It may be an existing public authority, a newly created one for the purpose of the recognition system, or a professional or sectoral body. As indicated in the following box, depending on needs of different skills recognition systems the type of skills recognition authorities varies greatly.

Box 20. Skills recognition authorities (examples from case studies)

Skills recognition for insurance brokers in Australia	The National Insurance Brokers Association (NIBA)
National skills recognition system in Belgium	Consortium de validation des compétences (CVDC)
National skills recognition system in the Netherlands	Kenniscentrum EVC
Skills recognition and development system in Singapore	Singapore Workforce Development Agency
Skills recognition through informal apprenticeships in Ghana	The Council for Technical and Vocational Education and Training (COTVET)
Skills mismatch and skills recognition in South Africa	Quality Council for Trades and Occupations (QCTO)
Global skills recognition for engineering graduates (The Washington Accord)	The International Engineering Alliance

Source: Case studies

These authorities may certify qualifications, provide information or coordinate with other stakeholders involved; they are often a first point of contact for potential applicants. There are generally a series of "Recognition providers" under such an umbrella organization. These may include:

- Professional bodies that assess and recognize qualifications in their field of expertise;
- Employers' representatives;
- Employers;
- Training providers;
- Universities / colleges;
- Regional / local authorities.

This list overlaps with that of the stakeholders (box 19). Indeed, capacity building for recognition is much easier when the stakeholders are involved in the recognition process: not only they may enlarge the pool of recognition providers, but the information about recognition can be more efficiently channelled to individuals and employers - the principal users of the system.

There is a number of interactions among the recognition providers, stakeholders and users within the skills recognition system (Figure 13). Figure 13 is built on the premise of the two-level recognition system (see above). There is also a "financing / governing authority"; this may either be a Ministry or an occupational association that provides financing, sets objectives and controls the work of the "recognition authority".

As far as the "recognition authority" is concerned, these interactions between the stakeholders and the users (as shown in figure 13) are a "must" – otherwise it may be impossible to fulfil the recognition objectives. The "recognition authority" and "governing authority" should also encourage other stakeholders to participate in the system, and to become involved in interactions of their own.

Figure 13. Interactions amongst stakeholders in the skills recognition system

	Recognition authority	Recognition providers	Individuals	Workers representatives	Employers	Employer representatives	Governing authority	Other ministries / authorities involved	Training providers
Recognition authority →		Build their capacity for recognition.	Identify their needs; Build their awareness; Involve them in development.	Identify their needs; Build their awareness; Involve them in development.	Identify their needs; Build their awareness; Involve in development.	Identify their needs; Build awareness; Involve in development.	Follow the objectives and rules of the authority; Suggest improvements.	Be aware of their priorities Communication of benefits	Articulate clear training outcomes Involve providers in recognition process and in development phase
Recognition providers →	Inform about feedback from users;		Provide recognition; Inform about benefits and processes; Gather feedback.	Build their awareness; Gather feedback.	Provide recognition; Build their awareness; Gather feedback.	Build their awareness; Gather feedback.			
Individuals →	Provide feedback on the recognition process; Provide feedback on the value of recognition for them.	Provide feedback on the recognition.							
Trade unions →	Provide information on their needs; Participate in development of the system; Provide feedback on recognition value	Provide feedback on the recognition.	Identify workers' needs.		Agree with employers on priorities for skills recognition.	Agree with employers on priorities for skills recognition.			
Employers →	Provide information on their needs; Participate in the system's development; Provide feedback on the value of recognition.	Provide feedback on the recognition.	Allow and support skills recognition for their employees.			Provide feedback on their skills needs.			
Sectoral or professional bodies →	Provide information on their needs and priorities; Participate in the system's development; Provide feedback on the value of recognition for them.	Provide feedback on the recognition			Support awareness building of the recognition system; Gather information on its members' priorities.				
Governing authority →	Provide support, guidance etc.		Be aware of their needs and priorities; Communicate benefits and processes.		Support awareness building of the recognition system.	Agree on common priorities and measures.		Agreement on common priorities and measures	
Other authorities →			Support awareness building of the recognition system.		Support awareness building of the recognition system.	Support awareness building of the recognition system.			
Training providers →	Participate in recognition; Provide feedback on skills development trends.		Share their needs for skills recognition and development.		Share their needs for recognition and development.				

Case studies and literature review may provide numerous examples to illustrate these interactions.

Box 21. Examples of interactions among skills recognition systems' stakeholders

In Belgium, the recognition scheme is implemented by the Consortium de Validation des Compétences (CVDC), which brings together the five most important public sector training providers, management and labour representatives from various sectors, and the public employment services (PES). The scheme is also embedded in developments in the education landscape. One crucial aspect has been the alignment of the standards used in the validation scheme with the occupational and training standards developed in French-speaking Belgium. Engaging PES is seen as key to the success of the scheme. Counsellors in PES play an important role in promoting skills validation. Today, part of their mission is to ask jobseekers whether they hold a Skills Certificate, inform them about the existence of the scheme, and provide them with the relevant information.

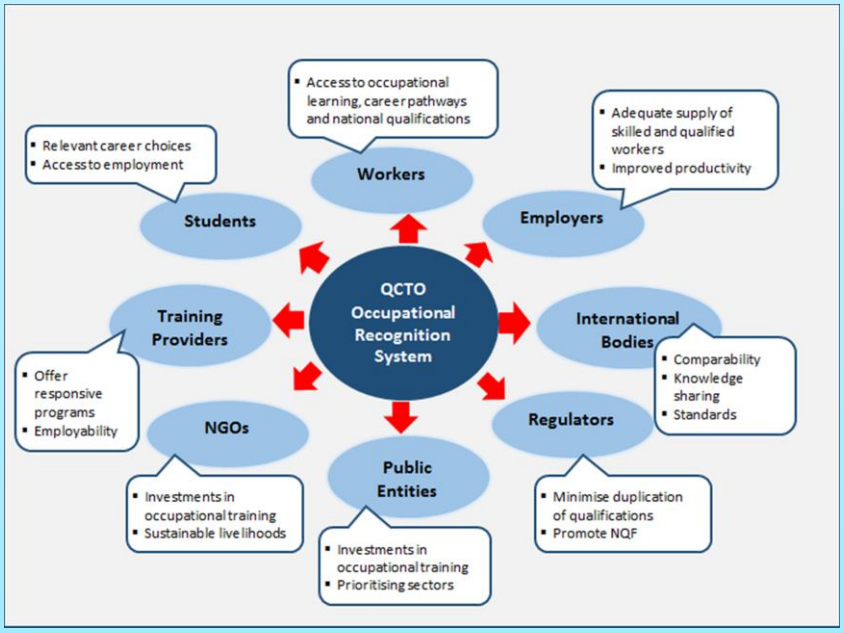
In Germany, the Assessment and Recognition of Foreign Professional Qualifications Act ("Recognition Act") is a subsidiary law. It gives priority to existing regulations for specific groups, such as the Blue Card for highly skilled non-EU citizens, and for handicraft occupations - for which the recognition is processed by local handicraft chambers. There is a relationship and equivalence between the Vocational Training Act and the Recognition Act. Furthermore, federal states in Germany (Länder) have, in relation to the Recognition Act, adopted relevant recognition legislation in order to have consistency at all levels where migrant skills recognition plays a role. The Bottleneck Analysis of the Federal Employment Agency (Bundesagentur für Arbeit) also identifies priority occupations.

In the Netherlands, the Government, schools/colleges/universities and social partners focus on creating favourable conditions in the RPL development phase in as many contexts as possible: work, voluntary work, reintegration; jobseeking, education and training. The Dutch Knowledge System APL (Kenniscentrum EVC) is the umbrella organization for this approach. As a result of dialogue with the stakeholders, three components of the RPL have been adopted.

In Ghana, skills are recognized formally when a government agency is included in the process. This process involves: a government agency (NVTI or COTVET), which only formally recognizes skills; a government agency, which recognizes skills in collaboration with a trade or business association, or in collaboration with an NGO, a faith-based organization, a civil society organisation, a private agency or service provider.

In South Africa, the Quality Council for Trades and Occupations (QCTO), which coordinates learning within the occupational skills recognition system, is responsible, inter alia, for liaising with the South African Qualifications Authority (SAQA), other Quality Councils and professional bodies responsible for establishing standards and qualifications, NGOs, regulators training providers and others.

The South African Occupational Recognition System



Although trade unions are important stakeholders within the context of skills development and employment policies, the research revealed very few examples of trade union involvement. ILO research on labour market outcomes of NQFs concluded that: "*in general we found little evidence of trade union involvement, with the exception of France*" (Allais, 2015). Cedefop has referred to a French example in a paper on sectoral partnerships (Cedefop, 2009; and box 23).

The case study on the skills recognition in the Netherlands confirmed a strong involvement of trade unions in the development of the whole system. In Belgium, trade unions had initial apprehensions concerning the skills recognition system, especially the risk that "*failure to pass the validation test could lead to downgrading (dé-qualification)*". Nonetheless, trade unions in Belgium supported the skills recognition approach under sectoral agreements. The skills recognition approach for migrant workers in the United Kingdom also involved trade unions, as they were strongly interested in improving migrant workers' labour market outcomes (employment, wages etc.) (Lucio, et al., 2007).

The involvement of training providers is critical in the skills recognition as they act as validation centres. The validation centres are usually compensated for organizing the validation sessions by the public funds set aside for the validation scheme; however the procedure does not generate profits and the validation centres often need to mobilize additional resources - often by using their own funds - to be able to provide guidance to candidates before and during the validation process. The involvement of training providers may also be difficult, as illustrated by the case of Belgium:

Box 22. The involvement of training providers

Organizing validation was initially experienced as cumbersome, due to administrative burdens as well as logistical challenges (e.g., candidates not showing up for the test). Validation might even have been perceived as competing with their core business (providing training). In addition, the centres' management contracts and their performance indicators focus on the provision of training rather than on the number of validation procedures carried out.

Source: Case study in Belgium

5.3. "System-of-systems"

There are many approaches to skills recognition. The range of their focus may run from just one occupation to nation-wide (or even international) systems that cover hundreds of occupations and scores of economic sectors. As the various user groups have different needs and motivations, there are usually many recognition frameworks in one country. A significant number of them are developed and implemented without any incentive from the public sector (mostly at sectoral level, or in the informal economy).

There is a need for greater coherence among existing policies and measures. This not only implies the development of new recognition systems, but also better linkages of existing recognition systems at all levels - the international the national and the sectoral.

One example of linking a sectoral level, a "bottom-up" approach, driven by the needs of private stakeholders, with national-level systems and frameworks for recognition, including NQFs.

The linking of different recognition approaches and frameworks can bring substantial benefits. At the inter-sectoral level, the greater mobility of individuals and the wider pool of suitable and recognized candidates for employers bring value added, as shown in the French example (box 23). Potential

drawbacks are substantial, too: harmonization and coordination are difficult enough even within one sector; reaching an agreement at the inter-sectoral level is even more challenging.

Box 23. Linking sectoral-driven approaches to national systems

The International Compliance Association (ICA) is a global provider of professional certificated qualifications and training in anti-money laundering (AML), compliance and fraud/financial crime prevention. Since 2001, over 100,000 people have undertaken ICA qualifications. The ICA offers its services in 30 countries all around the world. In 2006, the ICA partnered with The Financial Skills Partnership (today Financial Services Skills Council) in the United Kingdom to develop the first ever National Occupational Standards for those working in compliance, anti-money laundering and financial crime prevention in the country.

The qualifications of ICA align with benchmarks established for the United Kingdom's National Qualifications Framework (NQF) and the Quality Assurance Agency for Higher Education (QAA). All awards comply with the regulatory requirements for the NQF and FHEQ, and are devised in line with QAA guidance and descriptions of standards.

Source: http://www.int-comp.org/qualifications/accreditation-and-recognition

In France, joint qualification certificates (JQCs) are used to address skills needs in particular sectors. They are developed for activities for which there is no equivalent degree or professional title. They enjoy sector-wide recognition, are usually proposed by unions at the sectoral level, and developed by joint technical groups composed of sector stakeholders. JQCs bring benefits for both the employees and employers. Employees can use a qualification acquired in another sector, and employers can more easily access a larger pool of potential employees without lengthy assessment procedures. After implementation, certifications may be added to the national registry of vocational certification.

JQCs are recognized only in the sector in which they were issued, except for the few accepted by the Ministry of Education as being fully cross-sectoral. To overcome this, some sectors in France signed a multilateral agreement to develop inter-industry JQCs. Their aim is to build common definitions and terms of reference for similar professional activities, to recognize inter-industry JQC validity, to facilitate employee mobility and increase employability. Three inter-industry JQCs have been created so far *(Cedefop, 2009).*

Linking existing sectoral recognition procedures to the NQF and national recognition systems has the potential to increase the value and labour market outcomes of the public-driven systems and to encourage employers to be more involved in them. However, the need to comply with national standards and assessment tools may deprive sectoral approaches of their biggest advantage – the ability to react flexibly to changing demand and to tailor tools and methods to labour market needs.

As regards the skills recognition of migrant workers, it is also vital to harmonize approaches to recognition, making the system more transparent and easy to access (IOM, 2013). The German Recognition Act is a good example of this, as it connects and harmonizes recognition practices at various levels under the same umbrella.

Umbrella legal frameworks, such as the one in Germany, exist elsewhere. The Cedefop report on the validation of non-formal and informal learning (2014) concludes that there is an increasing trend towards the creation of national validation strategies. In addition, in most European countries there are legal frameworks for validation, even multiple ones: "…*Systems without validation laws may be more agile in reacting to changes…….. Yet having a legal framework has some clear advantages for users. One is the legal security regarding entitlements and responsibility that a law should offer to those to whom it concerns…… and the certainty that laws should provide*" (European Commission; Cedefop; ICF International, 2014).

At the regional level, Caribbean Vocational Qualification (CVQ) and the ASEAN Qualifications Reference Framework (AQRF) are built on existing recognition approaches at country level and try to harmonize approaches and tools that would significantly enhance regional labour market mobility.

The difficulties inherent in a "system-of-systems" - especially if such a system is multinational - multiply.

Box 24. Challenges of regional recognition frameworks

The CVQ represents the competency-based recognition (of both formal and informal skills development) of occupational standards developed by practitioners and employers among 12 Caribbean countries. It is an award that represents the achievement of a set of competencies that define the core work of an occupational area. Numerous challenges have been identified during the development and implementation of the CVQ, such as the lack of mutual understanding of particular national frameworks; mixed responses and suggestions from various stakeholders (regarding definitions, standards, terminologies, assessment practices); the need to fit CVQ into different country contexts; the need for stronger networking and support from the highest levels; and a lack of sources for marketing, etc. *(European Training Foundation, 2011).*

The AQRF aims at developing a "zone of trust" between the ASEAN Member States in terms of qualifications. To foster a trusted environment there needs to be an appreciation by people in key agencies (e.g. learning providers, qualifications bodies/quality assurance agencies, professional bodies, employers, and employee organisations) that the AQRF is useful for understanding the qualifications systems in other member states. This requires governance and collaborative management – to ensure smooth evolution and deepening trust; an agreed range of functions – e.g. to contribute to recognition of qualifications in other countries; agreed reference qualification levels and descriptors; Explicit and effective quality assurance arrangements with the active involvement of employers – to create confidence in the qualifications process; a specification for a referencing process – to allow levels of national frameworks to relate to the regional levels; a voluntary code of practice – how member states are expected to maintain commitment to the framework and monitoring arrangements – to identify challenges to the zone of trust. *(The ASEAN case study)*

In Europe, there is a network known as a ENIC-NARIC, which is based on national information centres in 55 countries that provide information on international recognition of national qualifications and related topics to individuals, employers, education institutions and others (Box 25).

Box 25. Information Centres on Qualifications

The ENIC-NARIC Network is made up of information centres in 55 countries that provide information on international recognition of national qualifications and related topics to individuals, employers, education institutions and others. The information centres collaborate by providing other members of the Network with the information they need to provide this service, both by providing general information about their countries' qualifications and by answering queries about specific qualifications. The Network is made up of information centres in the European region, including Turkey, plus the US, Canada, Australia and Israel. The ENIC (European Network of Information Centres on academic recognition and mobility) component of the network is established by the Parties to the Lisbon Recognition Convention on the Recognition of Qualifications concerning Higher Education in the European Region of 1997, and the NARIC (National Academic Recognition Information Centres) component is established under an initiative of the European Commission in 1984.

The exact functions of ENIC-NARIC centres vary between countries, but typically they provide information on: recognition of foreign diplomas, degrees and other qualifications; education systems in both foreign countries and the centre's own country; and opportunities for studying abroad, including information on equivalence. They also promote the mobility of students, teachers and researchers by providing authoritative advice and information concerning the academic recognition of diplomas and periods of study undertaken in other States.

As an example, the Irish ENIC-NARIC Centre operates within the Quality and Qualifications Ireland (QQI) agency under the Department of Education and Skills. The Centre:

- Facilitates the recognition of foreign qualifications in Ireland by offering advice on how foreign qualifications compare to Irish qualifications placed on the National Framework of Qualifications;
- Facilitates the recognition of Irish qualifications – at home and abroad ;
- Acts as a referral service for professional recognition;
- Receives approximately 2,000 formal applications annually and a similar number of informal queries; applicants are issued with a statement of comparability which compares their qualification to an Irish award.

Source: http://www.enic-naric.net

Another example pf approaches to harmonize is a Europass portal, an initiative of the European Union that aims to facilitate skills recognition through providing standardized documentation to record of skills, qualifications and experience in Europe (Box 26). The portal is developed and maintained by the Centre for the Development of Vocational Training (Cedefop) in 27 languages and is the reference resource of information related to the five Europass documents: Curriculum Vitae, Language Passport,

Europass Mobility, Certificate Supplement, and Diploma Supplement. In every country, a National Europass Centre promotes and provides information on the Europass documents (Box 26).

Box 26. Europass

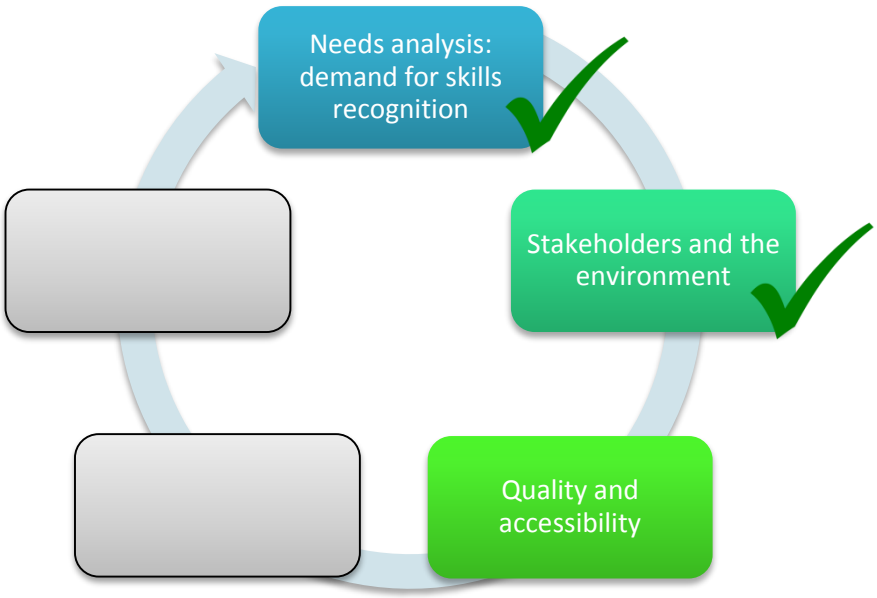
Europass is an initiative of the European Union, operated by Cedefop, the European Centre for the Development of Vocational Training. It aims to facilitate recognition through providing standardized documentation to record of qualifications, skills and experience.

The approach includes a standardized Europass curriculum vitae format and a Europass Skills Passport designed to support the CV. The Skills Passport is an electronic portfolio to give a comprehensive picture of an individual's skills and qualifications. It is intended to help document skills and qualifications to find a job or training and validate skills. It offers an online system to gather copies of degrees or certificates and attestations of employment, as well as documents generated through Europass. These Europass documents can include: a Language Passport; a Europass Mobility record of participation in international mobility opportunities; a certificate supplement providing additional information on vocational training certificates held; and a diploma supplement providing additional information on the knowledge and skills acquired by holders of higher education qualifications.

Europass supports recognition by making information on skills, qualifications and experience more accessible and more easily understood.

Source: https://europass.cedefop.europa.eu/en/home

6. Quality and accessibility



Chapter 5 focused mainly on stakeholders – not only in terms of their priorities and influence on the recognition processes, but also in terms of their access to and influence on the principal users (individuals and employers). In the case of the users, a skills recognition system provides an opportunity for some of their needs to be addressed. But for the users, choosing the services that such a system might offer requires two conditions: trust based on quality assurance; and accessibility in terms of cost and provision.

6.1. Quality assurance

Systems that recognize an individual's skills acquired by various means use different approaches and methods (see figure 6). **The quality, level of detail and relevance of these approaches** pose a significant **challenge**: if the recognition process is too lengthy, complicated and costly (both in terms of time and money invested in it), it will discourage potential users. At the same time, if the recognition process is easy and "light", employers may not have confidence in its quality in the certification.

Nation-wide systems for the recognition of prior learning (see examples in Box 27), assessments/exams are most frequently used in public validation initiatives that lead to a qualification. The private sector uses "classic" methods of validation, such as certificates, qualifications, references and CVs (to attest competences), as well as interviews and talks (European Commission; Cedefop; ICF International, 2014).

Box 27. Methods applied within national level systems for recognition of prior learning

Portfolios are by far the most frequently accepted methodology in documentation, followed by declarative methods, and simulations/evidence extracted from work. But when it comes down to assessment, tests and examinations become the most accepted methodology *(European Commission; Cedefop; ICF International (2014).*

In the French-speaking part of Belgium, anyone aged over 18 years, who has acquired professional experience but does not hold a corresponding diploma or certificate, has the right to get his/her skills recognised on the basis of a validation test. The test involves a professional jury at an accredited validation centre. Candidates are placed in a professional situation typical for a given occupation. All centres use standardized assessment procedures. If successful, the candidate is awarded a Skills Certificate – an official document recognised by the three French-speaking governments, certifying the mastery of skills that are part of a specific occupation *(Case study in Belgium).*

In the Netherlands, the recognition process consists of the following stages: (i) identification or listing of competencies in a portfolio; (ii) accreditation and evaluation (usually via observation on the job or by means of a criteria-based interview); (iii) development (action plan of skills upgrading); and (iv) implementation (in an organization or for an individual). *(Case study in the Netherlands).*

The skills recognition procedure **for migrant workers** usually includes the recognition of formal qualifications, which have been acquired in the receiving country before departure. Other forms of assessment include checking of individual evidence (outcomes of informal and non-formal learning – occupational experience and continuing training); and competence-assessment procedures (testing). In the case of migrants it is important to start the recognition procedure before they arrive in the destination country. In addition, an automated recognition process may be established – on the basis of an agreement reached between the countries involved. Supporting measures – such as guidance and recommendations for skills upgrading - is of a critical importance.

Box 28. Methods applied within migrant skills recognition systems

Evidence from Australia shows that pre-migration screening of credentials of migrants may considerably improve their chances of being employed within six months of admission into the country. This is especially important for nationals of developing countries *(IOM, 2013).*

In Germany, the recognition process for migrant workers starts with the relevant competent authority checking whether the professional or vocational qualification obtained abroad is equivalent to a German qualification. This equivalence checking is based on formal criteria, such as the content and duration of training. If differences are identified in regulated occupations, the applicant has to complete the compensatory measures stipulated by the competent authority, i.e. an adaptation period or test. For non-regulated occupations, the applicant is recommended to undergo appropriate training to compensate for the missing skills listed in the assessment notice (but this is not provided or paid for by the recognition authority). The important part of the process is the guidance service, which is provided by the ZAV International Placement Services, as well as by other institutions *(Case study in Germany).*

The skills recognition process at the sectoral level also has its own specific characteristics. It may, in fact, include both the recognition of prior learning of both nationals and migrants alike. But in many cases, the key feature of this approach is its link to training. While in other systems skills upgrading is often an option, the skills recognition at sectoral level usually requires – or recommends – training in order to obtain the formal acknowledgement of skills.

Box 29. Methods applied within recognition systems at the sectoral level

In Australia, the National Insurance Brokers Association (NIBA) offers professional recognition through the Qualified Practising Insurance Broker (QPIB) certification. Before being awarded QPIB status, applicants must show they have undertaken 25 hours of continuing professional education (CPD) in the year prior to application. To maintain their status, brokers must complete 25 hours of ongoing professional education each year to keep up-to-date with developments across the insurance industry. Skills can be acquired through a combination of formal study and experience. A self-study course specifically designed for brokers aspiring to QPIB status was introduced in 1995, based on the national competency standards.

The ACCA – the Association of Chartered Certified Accountants - is a professional body that offers the Chartered Certified Accountant qualification. While the skills recognition – the ACCA qualification – is the key outcome, with an impact that can be measured on the labour market, it must be stressed that it is based on a demanding training programme. This training develops a range of transversal, financial and management skills that are in demand by employers in industry, banking, auditing, consulting and other professional areas like taxation and law. To keep the qualification, extensive continuing training is also required.

The Workforce Skills Qualifications (WSQ) is a national credentialing system in Singapore. It trains, develops, assesses and recognizes individuals for the key competencies that companies look for in potential employees. WSQ is based on national standards developed by the Singapore Workforce Development Agency (WDA), in collaboration with various industries comprising industry sectoral frameworks. WSQ is therefore not a "recognition-only process"; training is also a key component of the system. Thus the impact of the WSQ cannot be attributed to the skills recognition itself. Aside from sectoral specific certification, the system also provides RPL.

The IT sector is considered to be a leader in the professional certifications of skills. This may be awarded on the basis of assessment only, but in most cases training is required. The certification applies in a number of sub-sectors (in which case it is usually provided by some industry body), and there are also certifications related to specific hardware and software systems and their providers, such as Microsoft, Apple, Oracle, Sun, HP, IBM and others.

Skills recognition in the informal economy differs significantly from other approaches. This may be carried out on the basis of traditions, customs, social norms and social networks. Important indicators for determining the skills of an apprentice in the informal economy include: attitude to work; efficiency in performing tasks to the satisfaction of the master craftsperson (MC), clients and customers; readiness to work at any time; ability to work without supervision; and performing excellent work repeatedly/consistently.

Informal recognition takes place at an individual level - and the process includes word-of-mouth recognition - or the blessing of the apprentice by the master craftsperson (MC) or by any other type of supervisors. There are also instances when the MC issues a written note, statement or written certificate to the apprentice. In such a situation, only those who know the MC recognize the apprentice's skills - thereby making the system still informal. The important aspect of the skills recognition of informal apprentice is the reputation of the MC (or other type of supervisors).

The second type of informal recognition consists of a collaborative effort by business or trade associations, which recognize skills on a semi-informal basis and issue membership cards to apprentices who have graduated. The skills recognized semi-formally can only be considered formal if a government agency is involved. When business associations recognise skills on a semi-formal basis

and issue a membership card that makes it possible to acquire a government licence or permit, the recognition becomes formal.[6]

To conclude, the trust in skills recognition delivery (guaranteed by thorough assessment methods) comes up against the problem of its accessibility. Accessibility is undermined by the cost of skills recognition and the access of its principal users.

6.2. Accessibility: Financing of skills recognition

Box 30. The challenge of financing

A further systemic challenge reported by many countries concerns the costs for the individual and the system of information and guidance, assessors, facilitators, auditors and awarding bodies *(*Singh and Duvekot, 2013*).*

The ways in which skills recognition systems are financed influence their labour market outcomes. The linkage is clear: the perceived value of skills recognition vs. costs associated with it.

Skills recognition costs may include costs of facilitation, guidance, translation, assessment, adaptation and training (Figure 14). There are many different ways of financing skills recognition costs and are shown in Figure 14.

More than in any other part of the research, the distinction between private- and public-led skills recognition approaches must be carefully analysed in this section.

6.2.1. Private-driven approaches

Private approaches to skills recognition are often developed at the sectoral level, in relation to occupational/skills standards that are an agreed mark of quality. Their distinctive attribute is usually a strong link to training. Recognition and training are often provided by the bodies/organizations that operate on a commercial basis, with the main value added being the competitive edge that the skills certification provides its holders on the labour market.

The cost of skills certification and training is, therefore, relatively high. Individuals are expected to bear the cost of the certification and training. However, this substantially limits the target group of potential users. Consequently, employers may cover a large – or even full – part of the cost of recognition/training, if they:

- ***(i)*** believe in the direct positive impact of it on their work or organization;
- ***(ii)*** consider recognition/training as a form of non-financial benefit for employees; or
- ***(iii)*** be motivated to do so by some public incentive aimed at the support of lifelong learning and skills development at the workplace (such as tax reductions and public-funded programmes targeting this type of activity).

The success of Private-driven approaches conducted primarily on a commercial basis: based on the employers' perception that the certificate is a valid proof of skills for recruitment process. Yet, a clear link between a certificate and an individual's real level of skills is sometimes hard to establish (see section 3.2). If this is the case, the demand for sectoral certification may be driven by strong marketing of the approach, without sufficient justification of its value.

[6] Source: Case Study in Ghana.

6.2.2. Public-driven approaches

Public-driven approaches target a wider range of objectives, both immediate and long-term: Direct labour market value for users, reduced unemployment, the prevention of skills waste, support for lifelong learning, social equity and the eradication of poverty.

If these wider and long-term objectives do indeed exist, measuring whether costs are lower than the labour market value of the skills recognition of an individual may not be the main issue at stake. In reality, skills recognition relies strongly on funding, at least in the initial phase – when it is closely tied up with awareness building and gaining the confidence of users that investing in it is worth it. The investment not only takes the form of direct costs, but also of time and effort. Many systems therefore cover 100 per cent of costs for users – especially when these are individuals. In many cases, full coverage by public funding is unavoidable even in the long term – when they involve disadvantaged groups, such as low-skilled, unemployed, low-income or migrant workers, who may benefit the most from skills recognition but lack sufficient resources to pay for it. If skills recognition is intended to contribute to social equity, making it accessible to disadvantaged groups is of prime importance.

Despite this, public financing cannot be full relied upon for the long-term sustainability and extension of the skills recognition system. Public money is always limited and it cannot provide sufficient sources for addressing of skills recognition needs of the society. Finding a cost-sharing model – in which users and stakeholders willingly participate – presents an enormous challenge, and the labour market impact of skills recognition is both the question and the answer.

Box 31. Case studies: Examples of funding of skills recognition

In Belgium, the system is funded by means of subsidies granted by the three French-speaking governments. Public funding has been maintained at a stable level since the inception of the scheme. However, while the number of candidates seeking to have their skills validated has steadily increased over time (on average, an annual 10 per cent increase), this has not been matched by a corresponding increase in the funds available (*case study in Belgium).*

In the Netherlands, the role of the private sector in VPL (Dutch system for the recognition of prior learning) is related to activities such as financing and raising awareness within sectors and companies or acting as VPL-providers. Training funds often finance agreements on VPL. Both employees and employers pay a small amount of their income to these sectoral funds, which were originally set up to support educational initiatives for employees. In addition, private sector institutions may, like public institutions, offer VPL if they are registered as a VPL-provider with the Knowledge Centre and adhere to the quality code *(case study in the Netherlands).*

In relation to the skills recognition of employees, some industrial branches, trade unions and employers' organizations have combined their efforts and started Training and Development Funds (O&O-fondsen), to support educational initiatives for employees. These funds are also used for the evaluation of personal competences of employees *(IOM, 2013).*

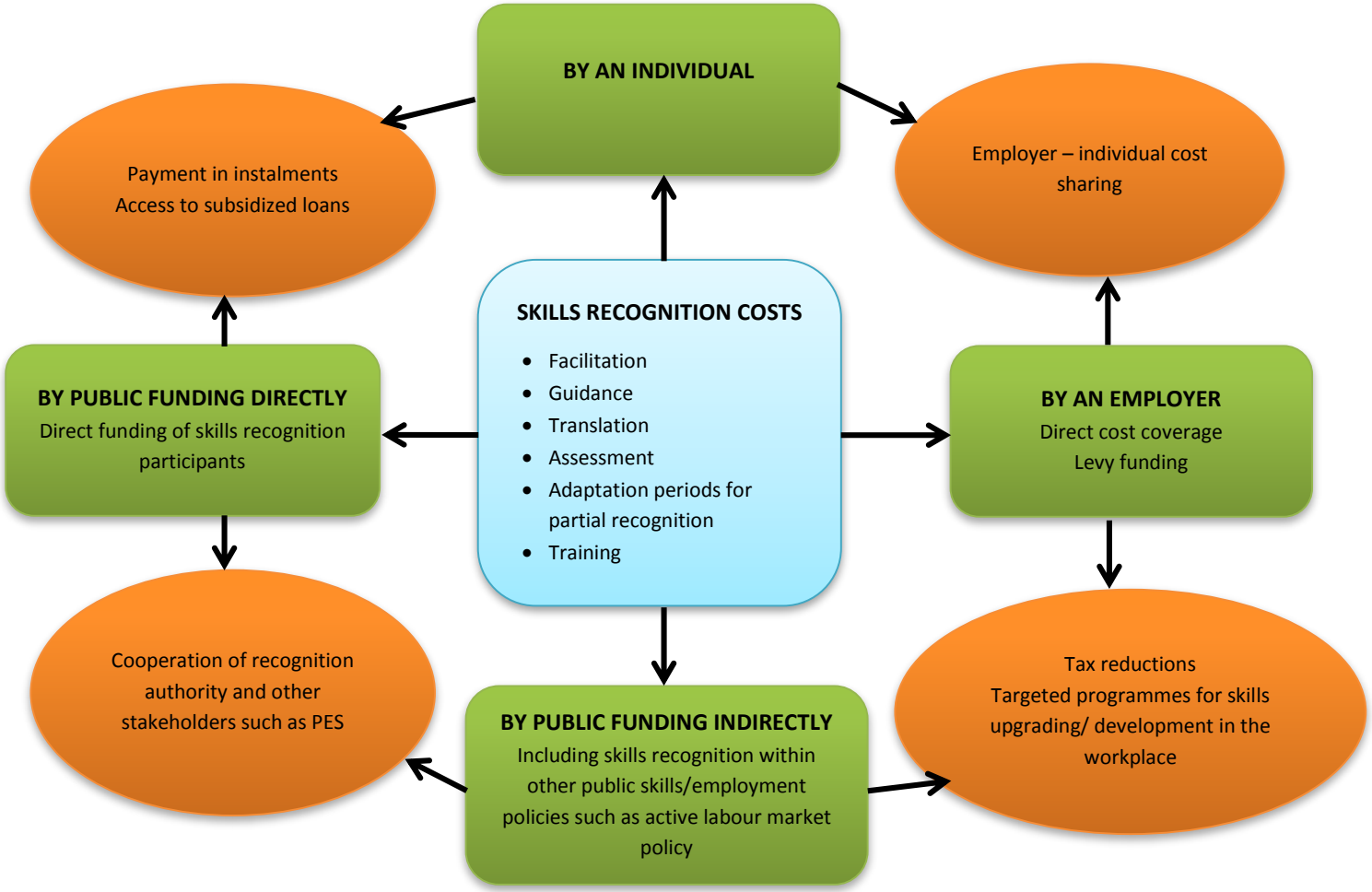
In Germany, the unemployed and jobseekers may receive financial support from the PES. This applies both to skills recognition (especially in the case of recognition of foreign qualifications) and to subsequent training - if it is recommended.

In Ghana, the Ministry of Finance and Economic Planning provides funding, logistical and technical support for the training and certification of MCs apprentices *(case study on Ghana).*

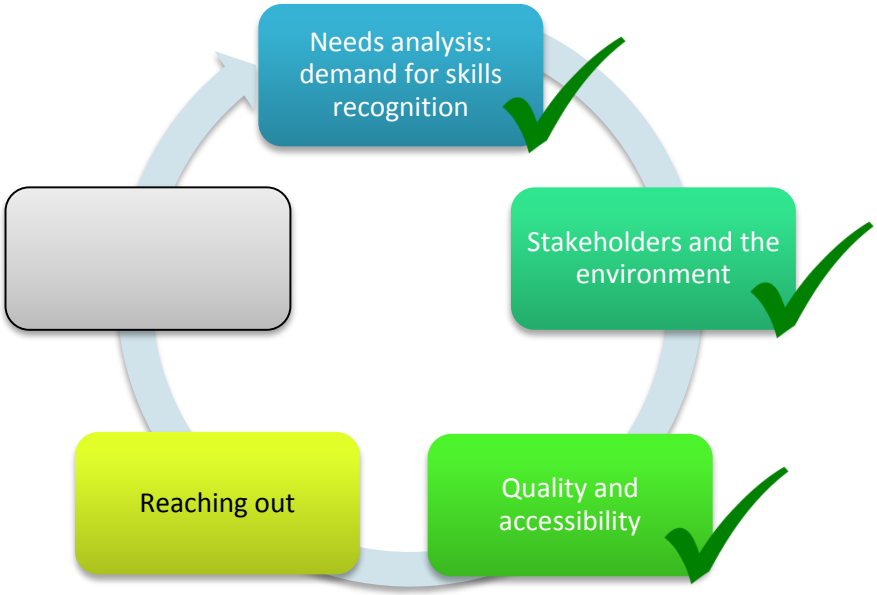
In India, the sectors chosen for RPL implementation were agriculture, healthcare, gems and jewellery, all implemented through their respective Sector Skill Councils (SSC) and fully funded by the National Skill Development Agency (NSDA). RPL in the construction sector was due to be implemented through the Directorate General of Employment and Training (DGET) from available funds in the Building and Other Construction Workers' (BOCW) Welfare Fund *(case study in India).*

On the basis of experience gathered through desk research and case studies, we may identify the following approaches to the financing of skills recognition on a long-term basis (figure 14).

Figure 14. Ways of financing of skills recognition



7. Reaching out: The awareness challenge



The low level of awareness of a potential validation system – or, in fact, the lack of it - resonates in most analyses and in many case studies conducted on the subject. Many skills recognition systems report low participation rates, despite strong evidence of the target group's needs and benefits. One

Box 32. The challenge of awareness

"…in around a third of the (33) countries covered by the Inventory … it was reported that most guidance practitioners are aware of validation … however, in 19 countries awareness was reported as medium or low … In most countries there is limited evidence on the level of awareness of the potential value of a validation system especially amongst the general public." *(European Commission; Cedefop; ICF International, 2014).*

"…creating awareness and setting objectives for RPL within the organizational context and at the individual level … are critical success factors (without which) the RPL process will run aground immediately" *(case study in the Netherlands).*

"Not everyone is yet familiar with the Recognition Act. The main aim needs to be on raising awareness and also interest on the company side in deploying staff in the skills areas listed in the assessment notice" *(case study in Germany)*

"…increased awareness of the recognition system and its outcomes, both on the side of the migrants and of the employers, is necessary to reduce information barriers which may hamper job-skills matching for third-country nationals in their receiving countries' labour markets" *(IOM, 2013).*

"…Many companies in Denmark, including some of the countries' largest ones, are reported to ignore the work performed by the Agency for the assessment of foreign qualifications. This lack of awareness implies a serious wastage of resources, if one considers the leading position that Denmark has among EU countries for developing databases and standardized procedures for assessment of foreign qualifications and competences" *(Ibid)*

"Outside higher education and the health sector, immigrants and integration service-providers may simply not know that there is such a procedure or that it can convey benefits" *(OECD, 2014).*

"A further explanation is that immigrants know about assessment and recognition but perceive the procedure as too burdensome or complex. Indeed, authorities responsible for this process are often numerous, disconnected from and unrelated to the bodies generally responsible for integration and employment" *(Ibid).*

of the key success factors of skills recognition systems is creating awareness of the systems and their outcomes in potential users such as individuals and employers as well as other stakeholders.

7.1. Levels of awareness: evidence from the research

There are three facets to the issue of awareness: no knowledge of skills recognition at all, not aware of its benefits and/or not aware that skills gained in informal and non-formal settings can be formally recognized. As a result, many systems observed low participation in the recognition process, despite the fact that there was strong evidence of the target group's needs and benefits. This issue is significant for both individuals and employers – but also for other stakeholders, including career guidance services, public employment services and integration service providers.

With regard to NQF and the skills recognition schemes related to it, a study conducted by the UNESCO Institute for Lifelong Learning provided evidence from the countries it covered that awareness was a major issue, with no major difference between developed and developing countries (Singh and Duvekot, 2013). The same study gave examples within a number of case studies. In New Zealand (chapter 14): *"Challenges include the lack of awareness and understanding of the RPL process, the costs, sometimes significant, associated with RPL, and the time taken to collect and collate evidence …"*, which resulted in a lack of confidence in its outcomes - thus demotivating applicants from going through the RPL process. The Norway case study (chapter 20 of the same publication) cites examples of lack of cooperation between the stakeholders, namely with regard to jobseekers, so that relatively few unemployed people use the opportunity to have their learning validated. It noted that *"…the fact that only 26 per cent of employees are sufficiently informed about their rights and opportunities* (concerning validation) *calls for a more targeted information strategy*" (Ibid).

A report on RPL experiences in India gave also evidence on the awareness problem on the side of individuals, suggesting that "… *participants may be less likely to buy in to the RPL programme due to not being aware of its potential benefits"* (Sims, Shamash and Freccero, 2012).

The case study on RPL in Belgium also confirms that the lack of awareness of skills validation is a key concern. The impact study commissioned by the *Consortium de Validation des Compétences* in 2012 revealed that only 12 per cent of employers were aware of the scheme (case study on Belgium).

In Germany the employers' awareness issue has also been raised, and the suggestion was made to develop and utilize a database compiling the results of the recognition procedures, which would improve their awareness of the recognition practices and outcomes. One of the background studies on the Recognition Act concluded that: "*Most companies are not well informed about the Recognition Act. As the Act's wording shows, the German government assumes that having qualifications recognized should result in more hiring. However, companies have been left to fulfil this expectation on their own*". From the individuals' standpoint, the awareness issue is exacerbated by language barriers and the inability to start the recognition process before actually entering Germany, thus making the process even longer and more demanding (case study in Germany).

Various studies have also highlighted a lack of awareness amongst employers of the functioning and outcomes of the recognition procedures.

It may thus be concluded that although the benefits of skills recognition for users – both individuals and employers – are widely accepted, involving them in recognition systems is still not a straightforward matter. The challenges here are twofold:

(i) The involvement of employers in the development and implementation process; and

(ii) The lack of users' awareness and understanding about methods, processes, outcomes and benefits of the recognition system.

7.2. Involving users

Box 33. Challenges in involving users

…employers' and private sector, have apprehensions about the maintenance of high quality and standards in RPL process; the increased turn-out of employees or the demands for promotions and wage increases as a result of acquiring additional qualifications through RPL; … employers view RPL as an onerous process, very labour intensive without having any real returns on investments *(AggarwaL, 2015).*

Ultimately, however, it is up to the employer to accept the…(recognized)…. skills and qualifications as "equivalent." Validation and recognition procedures should therefore involve employers. Indeed a feature of many of the most successful … measures is precisely strong employer involvement *(OECD, 2014).*

In most of the countries studied, the employers are scarcely involved or not involved at all in the design of foreign credentials assessment methods and in their implementation. This is particularly the case for non-regulated professions. Involvement of the employers in the recognition process should be increased to ensure that assessment procedures are tailored to the real labour market needs *(IOM, 2013).*

"…(there was a fear) on the employers' side that skills validation would lead to large number of requests a for pay rise *(case study in Belgium).*

The involvement of employers in the development of the recognition system may be considered a benchmark for public-driven approaches, especially if labour market outcomes are a major priority. Here again, it must be stressed that the real recognition of skills lies with the employers, as they either accept the recognition certificate as a respected proof of skills or not. *It is thus important that they have confidence in the outcome of the accreditation process* (OECD, 2014). Public private partnerships in skills development can also contribute to develop and facilitate skills recognition. Partnerships can be built, for example, in planning and delivering specific training programs; managing training institutions; analyzing current or future skills demands; or developing skills/competency standards, qualifications or training materials/programs. There is much evidence that employers are becoming more involved in the development and implementation of recognition systems. But there are also shortcomings. The ILO study on the implementation and impact of NQFs, conducted in 2010, stated that employers were still insufficiently involved. It also argued, on the basis of case studies, that a greater number of employers would become involved if they had more information, because they would be more aware of the potential benefits of the system (Allai s, 2010). The update on the study, developed five years later, still found "…*instances of lack of employer involvement or belief in this type of approach* (Allais, 2015).

When it comes to RPL, Cedefop's report on the validation of non-formal and informal learning concluded that "*The engagement of private sector actors … in the development of validation and awareness raising is notable in a number of countries"* (European Commission; Cedefop; ICF International, 2014). At the same time, challenges in achieving high levels of engagement of the private sector were still reported.

The involvement of individuals in the design and development of skills recognition systems is usually indirect, through institutions or organizations (including employers and trade unions) that know their needs and speak on their behalf. The key issue here – as in the case of the employers - is their awareness.

Box 34. Examples of employers' involvement

In Australia, skills recognition is one of tools/measures implemented by the Industry Skills Councils (ISCs), which are independent, industry-led, non-profit sectoral bodies. Industries are strongly involved in the definition of aims and priorities of skills recognition approaches. Skills recognition is seen as an important tool in enhancing labour market mobility – a matter on which ISCs cooperate closely with training organizations and directly with employers.

In Germany, employers (through professional bodies like the German Association of Chambers of Industry and Commerce) strongly participate in the definition of priorities for the migrant workers' skills recognition approach and its design. The views of employers (but also those of individuals) have contributed towards improving procedures and supporting services inherent in this approach.

In Belgium, priority occupations covered by the RPL system were also chosen on the basis of employers' knowledge of their respective sectors. Employers' representatives are actively involved in the Consortium via the ad hoc Commissions working on the elaboration of the validation standards (COREF). Individual employers receive information on the skills validation scheme through direct contacts with PES consultants. In Brussels, Actiris consultants can inform employers about the certificates that might match their skills needs.

In South Africa, skills recognition is driven by analytical inputs from sectoral bodies - SETAs - that develop Sector Skills Plans (SSPs), which identify scarce skills occupations (skills shortages) and pivotal skills (top 10 scarce skills occupations) in their respective sectors. The SETAs are responsible for registering and funding "learnerships", apprenticeships and skills programmes. As delegated quality assurance bodies, they conduct provider accreditation. They also monitor the training and assessment process, as well as learner progress.

In the Netherlands, the Training and Development Funds set up by the social partners (industrial branches, trade unions, and employers' organizations) participate in the design of assessment methods.

Source: Case studies

7.3. Building awareness

As recognition system and procedures are often considered difficult and over-complex, the extent and quality of marketing, information support, guidance and other services matters are of considerable importance. Individual users – learners – must be addressed especially, because if they fail to see the need for recognition of skills they acquired, there may be no demand for such service (Duvekot, Halba, 2015).

The focus should be on:

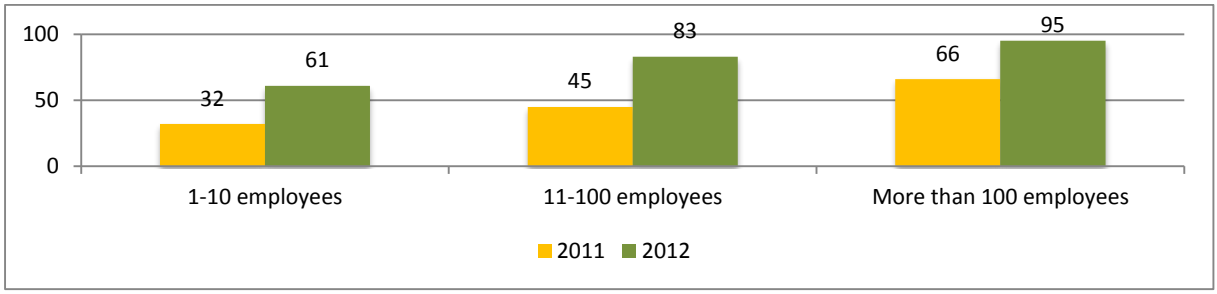
- Ways in which the system is presented and marketed;
- Collection and presentation of practical skills recognition examples: from all levels: individual, organisation and system;
- Availability of information, websites etc., in multiple language versions;
- Cooperation with organizations that are in touch with the most relevant target groups, such as migration guidance centres, employment services, chambers of commerce, professional associations etc.

In gathering information for the purposes of awareness building, it would be relevant to determine: the occupations that are searched/asked for; the nationals of which countries are interested in the recognition procedure; the type of information individuals and employers mostly need; those who are asking for this information, and why; and the information channels that seem to work best.

The involvement of employers in the development of the recognition system does not necessarily guarantee trust and awareness among the employers' target group as a whole. Many skills development systems, including national frameworks, are built with employers – but these are usually

large ones, or represented indirectly through sectoral bodies. In most sectors, however, most employment is generated by SMEs – for example in Europe, their share in employment accounts for around two-thirds (Eurostat, 2015). The awareness rate of the recognition system decreases with the size of the establishment. In Singapore, despite its well-promoted and established skills development system WSQ (of which skills recognition is one part), particularly small establishments may never even have heard of it.

Figure 15. WSQ awareness rates in 2012 by company size (per cent)



Source: WDA, 2015.

The challenge of SMEs awareness is particularly important from the point of view of migrant workers. SMEs face higher information-related obstacles in foreign recruitment compared with bigger firms. In addition to that, cumbersome and lengthy immigration procedures limit migrant recruitment in SMEs, where uncertainty about the length of time and about administrative steps required to obtain a work permit for a migrant worker translate into costs and planning difficulties (Desireo and Schuster, 2013). To increase SMEs' awareness of skills recognition systems and their use may significantly improve in addressing of their skills shortages.

With regard to awareness, the ILO study on RPL emphasizes the key information that needs to be channelled to users of the system: "... *publicizing what is RPL, whom to contact, the process, estimated costs, timeframe, eligibility requirements and assistance available",* and the importance of *"counselling and facilitation support"* (Aggarwal, 2015).

For individuals, it is important to avoid a situation in which skills recognition increases labour market imbalances; in other words, a situation in which more educated, higher skilled - and thus more easily employed - persons are much more knowledgeable about the service. Persons who are the most threatened by unemployment or skills waste (those with a low level of education, unemployed or immigrants) seem to have less information. The UNESCO study claimed that "*Opportunities for validation are not widely known, particularly among people with low formal education*" and "*relatively few unemployed people use the opportunities to have their learning validated*" (Singh and Duvekot, 2013). The targeting of vulnerable groups *"with specific needs, interests and circumstances is useful, not only in reaching those that are disadvantaged, but also to create a demand for RVA"* (Ibid).

As Figure 13 illustrates, the responsibility for awareness building lies with the recognition authority itself, the network of recognition providers, but also the stakeholders – employers' and workers' representatives, PES, career guidance, educational and training providers and others. Cedefop suggests that provision of information, advice and guidance (IAG) on the benefits, opportunities and procedures of validation is an important arrangement to ensure the success of validation. "…*In around a third of the countries covered by the Inventory* (Cedefop research) *most guidance practitioners are aware of validation, a significant improvement over the situation in 2010……. In 19 countries*

information and counselling was reported to be available for all aspects of validation, and this is publicly available and financed" (European Commission; Cedefop; ICF International, 2014).

Employers, although also being on the users' side, play important role in awareness support. In many countries, the private sector informs, promotes and raises awareness about validation opportunities (e.g. in Spain, Bulgaria, Iceland, Turkey and the Netherlands). In Iceland, private companies often motivate their employees to participate in validation allowing for flexibility in their working hours during the validation process (IOM, 2013).

Box 35. Reaching out: case study examples

In Belgium, PES are the primary channel for reaching individual users. Jobseekers have been the main target group of the scheme since its inception. Validation centres also provide information to anyone interested in the scheme. Prior to registering for a test, guidance is provided to candidates to assess their chances of success. Other ways to reach potential users include the Consortium website, the diffusion of information material, targeted emails to jobseekers, and media campaigns. As part of the Year of Competences in 2013 (2013, Année des compétences) , a number of initiatives promoted the various ways in which citizens could have their competences recognized. One of the outcomes was the creation of an online portal providing information about all types of validation procedures in French-speaking Belgium (case study in Belgium).

In the Netherlands, information and guidance practitioners in the Netherlands are raising awareness of the potential of VPL for users and stakeholders. They are well informed about validation initiatives and practices since they work at all levels of stakeholdership and in every domain of the learning and working systems to which they need to link people (their customers) (case study in the Netherlands).

In South Africa, the occupational learning system is a relatively new innovation. A number of marketing and communications activities are being undertaken to keep stakeholders informed about occupational qualifications development and assessment processes: (i) national road shows are held in all nine provinces; (ii) a website has been developed providing vital information; (iii) a management information system has been installed;(iv) a marketing and communication strategy has been developed; (v) QCTO participates in major exhibitions and produces a range of printed materials (case study in South Africa).

In Germany, a new website, "Recognition in Germany", has been developed in order to provide a one-stop-shop information centre, focusing mainly on individual users - but also on employers and stakeholders likely to influence the system. For individual users, it provides information that can help them to understand the recognition process and to orientate themselves. As its main target group are foreign nationals, the website is constantly improving its availability in other languages – another proof that the use of labour market data (in this case information on countries from which migrant workers mainly come to Germany) are an important source that shapes the skills recognition system and thus increases the probability of its positive impact. Currently the website is available nine languages, and also in a simpler German language for those who have some – but limited – knowledge of German. The website also provides information on success stories of people going through the recognition process and how it improved their chances of finding better jobs: It also provides guidance related to working in Germany, indicating ways of how to find counselling providers, information on legal matters and on the recognition procedure itself, and, most importantly, information on occupations covered and on authorities that may provide the skills assessment. The website has recently produced a new app for Android, iOS and Windows devices. It is available in German and English as well as in the five major languages spoken by refugees (Arabic, Dari, Farsi, Tigrinya and Pashto) (case study on Germany).

In Ghana, awareness is supported through meetings, workshops, stakeholder consultations, exhibitions, trade fairs and participation in graduation ceremonies for the recognition of skills of graduated apprentices (case study on Ghana).

Examples from case studies show that a good communications strategy should be developed for both employers and individuals, which reflects their needs and expectations and takes into account the most effective ways they must be approached.

Success stories highlighting the benefits of recognition can also raise awareness among users. For individuals, this is done very engagingly by the German website *Recognition in Germany*[7]; for employers the Manitoba *WPLAR website*[8] may serve as an interesting example. Success stories may not only demonstrate the positive outcomes of skills recognition, but also show how individuals and employers approached the process and the problems they had to overcome.

[7] http://www.anerkennung-in-deutschland.de/html/en/success_stories.php
[8] http://wplar.ca/case-studies

8. Measuring the outputs and impact of skills recognition

Box 36. The measurement challenge

"…gaps in data collection systems at national level hamper evidence base regarding access to validation significantly and this should be a priority aspect for the future. There is thus no systematic feedback loop to show the education and labour market outcomes of validation" *(European Commission; Cedefop; ICF International, 2014).*

"In addition to the slow uptake in some countries, there is another major challenge in collecting sufficient data about RVA outcomes and in presenting an accurate picture of how successfully RVA has been implemented" *(Singh and Duvekot, 2013).*

"The limited availability of statistical information on recognition outcomes is a common issue which has been highlighted in most country studies. In order to get a clear picture of the relative role that recognition may play for jobs-skills matching in the EU, improvement is needed in the area of data collection and analysis of the effects for immigrants" *(IOM, 2013)*

This chapter sets out to provide detailed views on measurement of outputs and impact, dealing with:

- Tools and indicators;
- Comparison of tools used by different systems; and
- Good practice examples.

Figure 16. Outputs and impact of skills recognition system

OUTPUT

Result of an activity incorporated in the recognition system, such as the number of participants, the share of employers involved, level of awareness, etc.
It can be measured more easily and it is directly linked to the performance of the recognition system.

IMPACT (OR OUTCOME)

Positive change or influence on users that can be measured, such as an increase in earnings, improved skills matching, and the effective addressing of skills shortages. Soft indicators, such as the increased self-esteem of individuals, also matter.
Measurement of impact is more difficult, and care needs to be taken when interpreting indicators – there are strong external factors that also influence the impact.

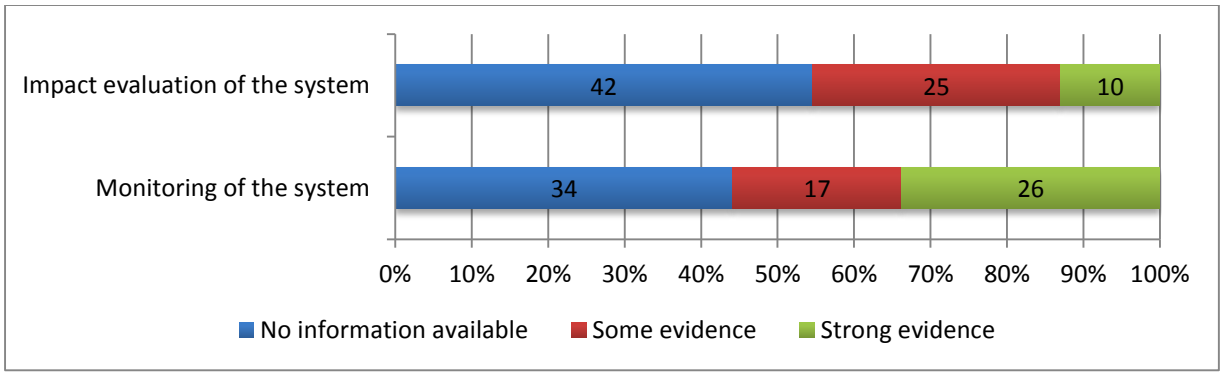
8.1. The importance of measurement

Almost every analysis that has been recently published on skills recognition systems stresses the fact that measuring their performance is a critical issue, yet not adequately addressed. A summary of 33 country-level case studies concluded that it was not possible to systematically measure trends in the take-up in the validation process due to data limitations, and that "*Obtaining data on the users of validation of non-formal and informal learning is … notably challenging (European Commission; Cedefop; ICF International, 2014).*"

ILO research on the NQFs that targeted 16 countries in 2010 – and subsequently six countries five years later - found that data sources on outputs and impact were scarce. The 2010 study concluded that: "*There are few specific data in any of the countries that show that qualifications frameworks have improved the match of supply and demand between educational institutions and the labour market, or that qualifications frameworks have raised the qualifications levels of the workforce, or led to more appropriate skills and knowledge being obtained by learners*" (Allais, 2010). A follow-up study in 2015 revealed a similar situation, as "*… little information was found by researchers about monitoring and evaluation systems with regard to the aims and objectives of qualifications frameworks in the study*" (Allais, 2015).

This review, which included 78 skills recognition systems found out that in more than half (56 per cent) had some evidence of monitoring of activities and outputs (figure 17); 46 per cent conducted impact evaluation (46 per cent). Only 10 of the 78 systems showed evidence of impact evaluation

Figure 17. Monitoring and impact evaluation of skills recognition systems: desk review



To sum up, findings both from the literature review and field research confirmed that data gathering and analysis are usually weak in skills recognition systems. Our research targeted both public- and private-driven skills recognition approaches. In general, the skills recognition is a private-driven initiative, there is a much higher probability that the impact evaluation will be well developed and implemented. It is understandable: if employers finance the system, or if they pay their employees for having their skills recognized, they must have clear evidence that the process is worth it. The same applies to individuals – if they have to pay for the recognition themselves, they must be confident that it will bring benefits.

Public-driven initiatives often have other objectives, apart from the direct labour market impact. But even in the case of users of public-driven systems, a lack of available data on impact evaluation is a significant drawback. If there is no evidence of potential positive outcomes, it may be difficult to raise awareness about and confidence in the benefits of systems, which is also important for public-driven initiatives.

8.2. Measuring the outputs

Outputs of the skills recognition system are related either to the provision of skills recognition itself, or to the provision of related services (such as guidance, but also communication, which is reflected in the level of awareness of the system).

Relevant data includes number of candidates undergoing the recognition process; and number of successful candidates obtaining the skills recognition certificate. The data on candidates should be disaggregated by various characteristics, which demonstrate trends in demand for skills recognition. Even these indicators are fraught with potential issues, given the range of providers and collection mechanisms (See Box 37 for an example from Germany).

Box 37. Examples of indicators from the monitoring system and their interpretation: Germany

The success rate of individuals undergoing the recognition process: the figure now stands at 96 per cent, compared to the previous year of just 76 per cent, which represents a tremendous improvement. Given the perceived difficulties for migrants (related to understanding and orientation in the recognition scheme), this indicator is quite important for measuring the impact of recognition arrangements.

List of occupations and number of successful recognition procedures for them: this indicator can be used for assessing whether the recognition system is really effective in areas in which it is expected to help – skills mismatch, labour shortages, etc. Again, the case of Germany shows the high relevance of the recognition outcomes and labour shortages: around 60 per cent of the successful recognitions were in occupations with the most significant bottlenecks, like health care occupations or other highly skilled jobs.

Reasons why individuals opt for the recognition procedure: 40 per cent claim that they want to increase their chances of finding a better job, and 33 per cent because it is mandatory for their occupation. Those who readily responded to the survey may be those who have the greatest confidence in the quality of the recognition process and its value on the labour market.

Source: Case study in Germany

The case study in Belgium provides similar examples of indicators. As the recognition system in this country focuses on priorities of employment policy in general, it also traces candidates by their level of education and employment status.

The *Consortium de Validation des Compétences* has set up a statistical database to collect candidates' registration details, and it records the outcome of their skills validation examination. Validation centres regularly feed the centralised online database (VAL'ID), which is used by the Consortium to generate monthly statistics about the scheme's users. The information on outputs contains:

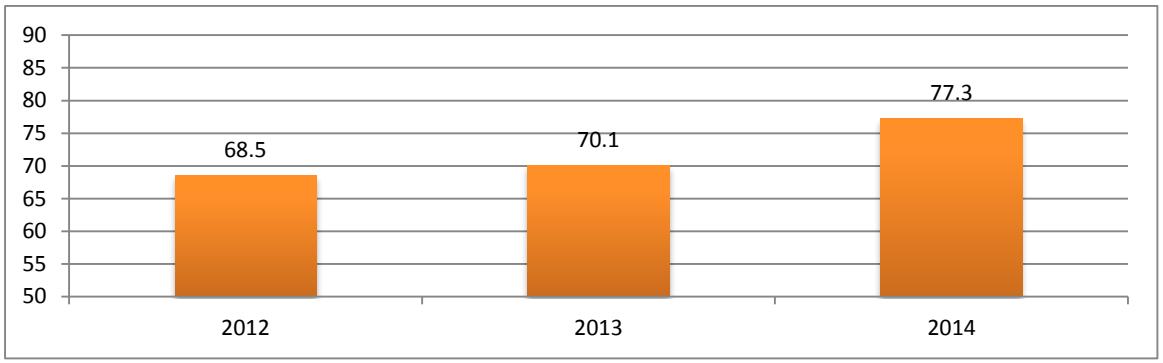
- User profile (age, gender, existing formal qualifications and/or further training, employment status, professional experience; certificate targeted);
- Number of users;
- Number of validation standards created;
- Number of validation sessions organized;
- Number of certificates awarded;
- Duration of the validation process (by certificate, by sector);
- Success rate (by occupation, sector);
- Number and follow-up of users' complaints;
- Cost of validation tests, of the scheme in general, and of monitoring results.

The recognition system in the Netherlands works with the aid of 70 registered providers (2013 figure), who provide data on applicants and validations. In addition, the Knowledge Centre APL carries out surveys in various economic sectors in order to understand factors that influence a successful implementation of the recognition system. These are used for assessing ways of better approaching industries, individual employers and workers to improve the impact of the recognition system.

8.2.1. Communication and awareness

The level of awareness among employers and individuals may be measured directly, for example by conducting a survey asking them whether they know about the skills recognition system in question – and about the benefits it is supposed to bring. A case in point is the Singapore's Workforce Skills Qualifications (WSQ) system; in 2014, an awareness and adoption survey was carried out among 10,000 employers. The results revealed that the awareness rate was climbing steadily, reaching 77.3 per cent in 2014 (figure 18).

Figure 18. WSQ Awareness Rates 2012-2014



Source: WDA, 2015.

In order to focus the communications strategy better, it is worth examining specific segments of the target group, as the awareness rates may vary significantly, and there may be a need for more targeted communication. A previous example of an WSQ survey indicates this very clearly (see figure 15 in Chapter 7).

The abovementioned follow-up survey on outputs and outcomes on the RPL in Belgium in 2012 revealed that only 12 per cent of employers were aware of the scheme (case study in Belgium).

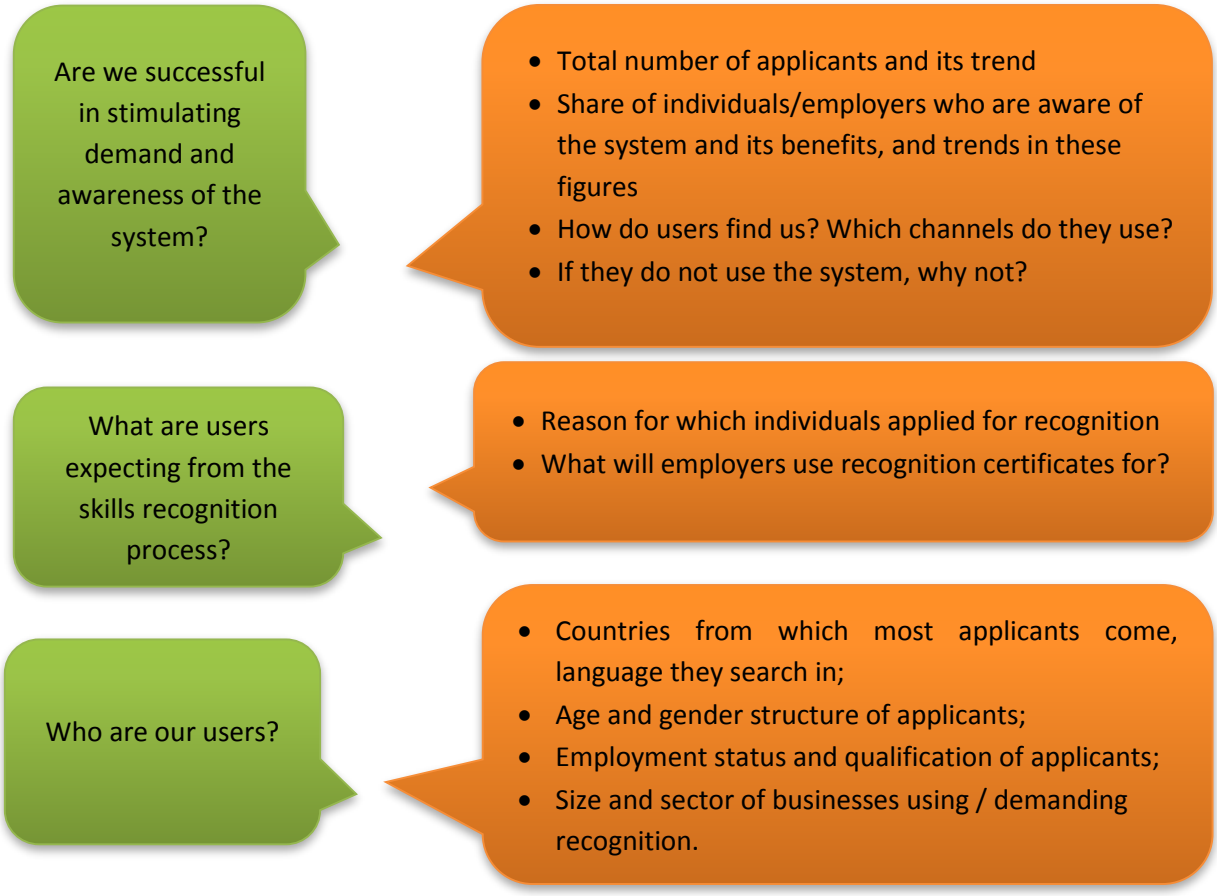
As surveys are usually quite costly, there may be cheaper solutions for measuring awareness. One of the key features of the German skills recognition system for migrant workers is the website "Recognition in Germany"[9]. The regular survey measuring outputs of this skills recognition system provides data on visitors to this website over time. *"The total number of single visitors of the portal "Recognition in Germany" was around 257,000 in 2012. In just two years in grew to 1,117 million. Fifty-three per cent of these visitors were either outside Germany or had been living in Germany for less than one year* (Bundesministerium für Bildung und Forschung, 2015).

In the case of migrant workers, the share (and increase in number) of individuals who either approach the website from their country of origin, or who view a language version of the site that is different from the language of the receiving country, may also indicate a positive awareness trend.

The regular monitoring and analysis of outputs is far less difficult than impact measurement. It basically requires gathering data on recognition participants and, in an ideal scenario, conducting a survey on awareness among both employers and individuals.

Monitoring can provide extremely important information required for steering the skills recognition procedure in the right direction. The link between possible indicators, which may be gathered through monitoring and information needed by the recognition authority, may be as follows:

Figure 19. Information gathered through monitoring and its value



[9] http://www.anerkennung-in-deutschland.de/

8.3. Measuring impact

Measuring the impact of skills recognition is a complex and very challenging task. The success of a skills recognition system may be observed years after its implementation, and it is much harder to differentiate the impact of the system itself from the impact of other measures and policies - and from the impact of economic developments in general, which may either increase or negate its influence.

The process of identification of the impact consists of several steps:

(i) Definition of what the impact is;
(ii) Measurement of the impact; and
(iii) Assessment of the measurement.

On the basis of the perspectives of employers, public authorities, individuals and training providers (figure 11), it is possible to draft the following indicators for measuring the impact. . Indicators of impact should provide a sign of how well the recognition systems have achieved the changes they were hoping for as a result of skills recognition process. Hence there are about measuring change.

IMPACT OF SKILLS RECOGNITION ON EMPLOYERS:

- Changes in share of hard-to-fill vacancies and (opinion-based) assessment of employers on influence of skills recognition on it;
- Changes in share of accidents prior to and after recognition; self-assessment on staff productivity by employers;
- Self-assessment on staff motivation by the employers;
- Changes in share of workers complying with regulations;
- Self-assessment by employers; average length of the hiring process; average length of vacancy posted.
- Changes in establishments' spending on skills recognition
-

IMPACT OF SKILLS RECOGNITION AT AN INDIVIDUAL LEVEL:

- Self-assessment on productivity;
- Self-assessment of confidence, activation and motivation;

- Employment status prior to and after recognition;
- Job held prior to and after recognition, its link to recognition focus;
- The wage / salary prior to and after recognition;
- Training / education started after recognition, its link to recognition focus;
- Job held prior to and after recognition, its link to recognition focus;
- Acceptance of obtained skills recognition certificate by employers.

IMPACT OF SKILLS RECOGNITION ON TRAINING PROVIDERS:

- Self-assessment of provider; number of new courses developed and marketed on the basis of skills recognition;
- Self-assessment of provider; number of participants of courses developed and marketed on the basis of skills recognition
- Changes in number of certificates and qualifications issued on the basis of skills recognition

IMPACT OF SKILLS RECOGNITION ON GOVERNMENT PRIORITIES:

- GDP growth; company-level productivity growth; total sectoral sales and output growth; sectoral export growth; sectoral product growth;
- Growth of labour mobility (occupational, sectoral, territorial)
- Decreases in unemployment rate total and/or for specific target groups (focused by skills recognition);
- Increases in skills and jobs matching for specific target groups (focused by skills recognition);
- Changes in hard-to-fill vacancies by employers;
- Changes in indexes on inequality; wage difference; poverty etc.;
- Comparison of migrant workers and nationals in terms of:
    - Employment status
    - Over-education / under-education
    - Level of earnings
- Increased interest and enrolment in TVET;
- Increased participation in lifelong learning;
- Decreased level of informality for occupations / sectors targeted by skills recognition;
- Changes in share of persons with required certifications within these occupations;
- Changes in number of accidents or other issues related to these occupations.

These are more or less direct ways of capturing the labour market outcomes of skills recognition. But there are also indirect ways of assessing the labour market impact. For example, if employers are willing to pay for the skills recognition of their employees, this may be seen as an indicator of positive labour market impact. Employers would not invest their resources in a scheme that would not bring them benefits.

The challenge of distinguishing between the influence of skills recognition and that of other factors is considerable, and in some cases impossible to tackle (especially in the case of needs on the government side). Despite this, many interesting and successful examples of such measurement exist. Very strong evidence can be found in private-driven initiatives. One of the key aspects of these initiatives on skills recognition is that they are emerging in selected sectors only – and often in those where there is a high concentration of multinational companies and thus also higher international labour mobility, such as IT, financial services, safety and security, health and social care, accounting or

even engineering. Some studies agree that in certain sectors, the certification process can significantly improve career prospects.

However, here the recognition is mostly closely linked to training, so the impact of the recognition itself often cannot be measured alone. Nonetheless the cases here-below provide excellent good-practice examples on measurement and indicators of impact.

Box 38. Examples of labour market impact measurement in accounting

The ACCA – the Association of Chartered Certified Accountants - is a professional body that offers the Chartered Certified Accountant qualification. This qualification has now more than 500,000 members and students in 170 countries, and is often considered as being equivalent to those countries' local qualification. An annual employer survey measures the impact and market recognition of the ACCA qualification. In its annual report 2012-13, the ACCA stated that its qualification was respected by 93 per cent of employers, and that 79 per cent of them believed that the ACCA qualification helped their business to grow.

IT is one of those sectors where skills recognition really matters, and it may also contribute to a growing demand for similar tools/approaches in other sectors. The skills recognition (certification) applies here in a number of sub-sectors (in which case it is usually provided by some industry body), and there are also certifications related to specific hardware and software systems and their providers, such as Microsoft, Apple, Oracle, Sun, HP and IBM.

Not only is the IT sector considered a leader in certification systems, but it also makes a significant effort to analyse their impact on employability and company productivity (box 39).

Box 39. Examples of labour market impact measurement in the IT sector

In March 2015, **a report on IT certification outcomes** by CIO.com and CompTIA (based on establishment survey) revealed that:

- 65 per cent of employers use IT certifications to differentiate between equally qualified candidates;
- 72 per cent of employers use IT certifications as a requirement for certain job roles;
- 60 per cent of organizations often use IT certifications to confirm a candidate's subject matter knowledge or expertise;
- 66 per cent of employers consider IT certifications to be very valuable -- a dramatic increase from the 30 per cent in 2011.

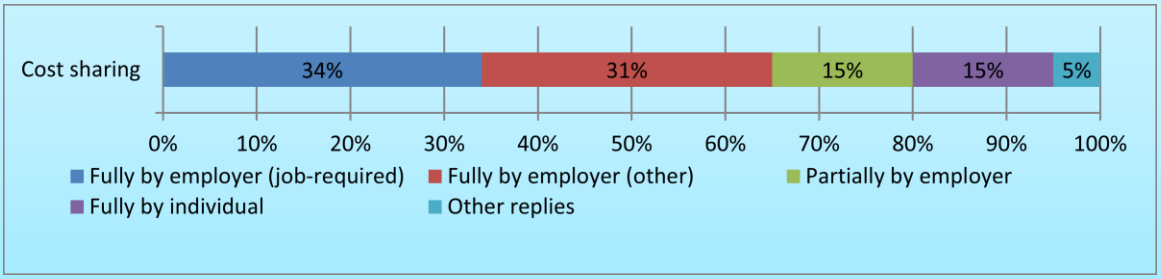
But even in IT there may be drawbacks to the labour market impact of skills recognition. A report by the advisory/consulting company Foote Partners, LLC, which regularly monitors certifications outcomes within the IT sector found that *"…employees with tech skills for which certifications don't exist … are reaping increasingly fatter premiums …* (which) *… signifies that certification programs aren't always keeping pace with the hot IT skills employers are seeking*". According to Foote Partners: "*… employers tend to value real on-the-job experience over lessons learned in the classroom*", even if this is a classroom of a valuable and certified IT-training provider. As a related analysis put it, "*Employers are paying higher premiums for IT skills that don't come with a piece of paper*"[10]. In the IT

[10] http://www.infoworld.com/article/2621871/it-training/the-hottest-it-skills-are-noncertified.html

Box 40. Examples of labour market impact measurement in cyber-security

The value of the certification for employers can be measured by the willingness of employers to cover its costs. One survey in the cyber-security sector revealed that four out of five employers fully or partially covered the cost of the certification for their employees, and that every third employer was doing so even if the certification was not totally job-required.

Employer contribution to payment for certification-related costs in cyber-security



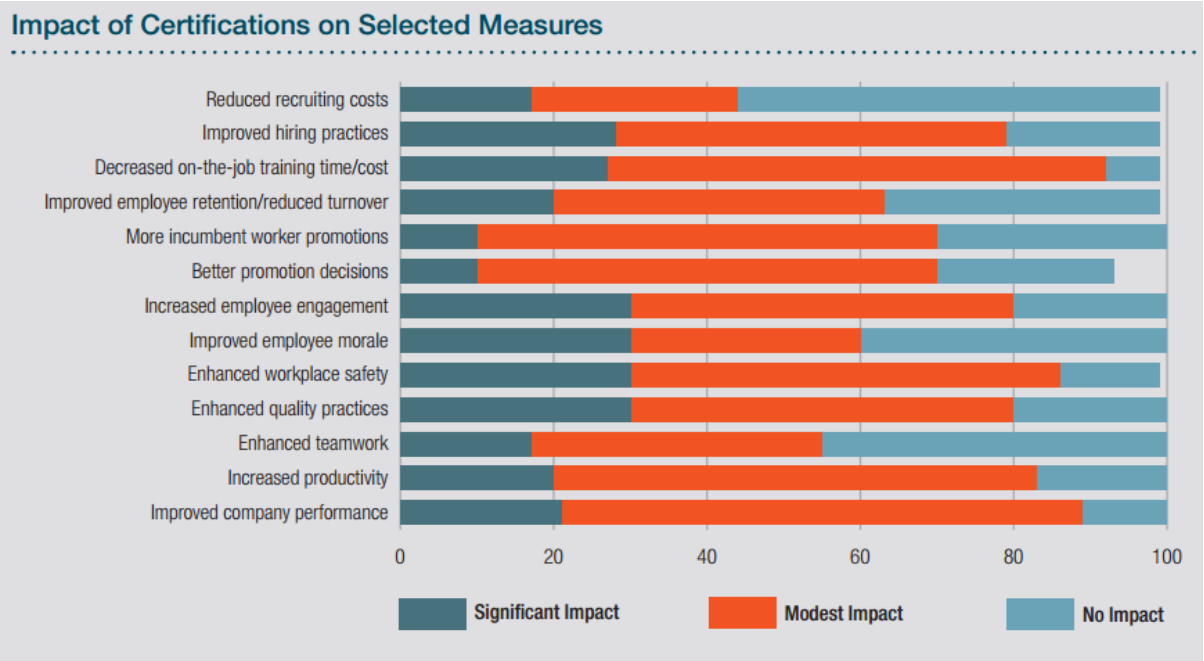
Source: Pescatore et al., 2014.

sector the reason for such outcomes may lie in the fast speed of technology and systems development, with which certification providers cannot keep pace.

An example from the United States manufacturing sector shows that skills recognition approaches largely follow analyses on skills mismatch and employers' HR priorities. The employers saw the recognition as a way to "*gain confidence that their employees are able to perform at a given level of skill* … (and) … *employees gain confidence in their own abilities as they acquire new skills certifications*". They also believed that "*employees place a high level of value on achievement-based recognition, and this enhances employee morale, productivity and retention for companies that offer these opportunities*" (The Manufacturing Institute, 2013).

The outcomes of skills recognition in manufacturing sector have been according to employers:

Figure 20. Perceived value of skills certification by employers in the manufacturing (United States)



Source: The Manufacturing Institute, 2013.

The study also provides an interesting insight into reasons why employers do not use certifications. The most common responses were:

- *"Not clear on the value to my hiring and promotion practices*
- *Don't know about industry certifications*
- *No one applies with any certificate"*.

These responses indicate three significant opportunities to increase certification use:

- "*Expanded awareness of the programs;*
- *Increased availability of relevant information that will move manufacturers to action;*
- *Improvements in the ability of certification programs to validate their value to manufacturers*".

This US initiative was partly public and partly public-driven. Examples of purely **public-driven initiatives** can also provide some interesting approaches to impact measurement.

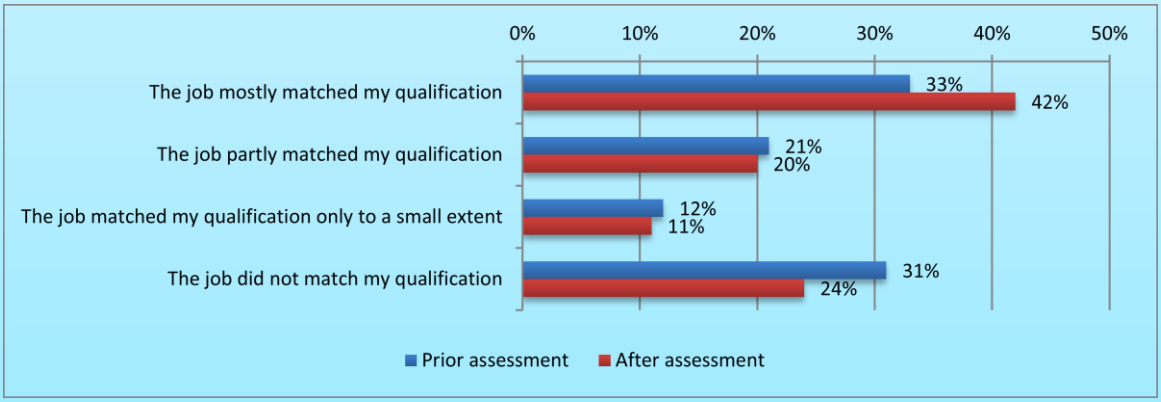
In 2008, the Danish authorities commissioned a survey targeting the impact of the recognition of foreign qualifications on the labour market in Denmark. It focused on qualification holders who received recognition, employers who had experience with persons holding that recognition and guidance professionals who had experience with persons holding that recognition.

Box 41. Examples of labour market impact measurement in Denmark

The survey gathered data (by means of a questionnaire) from among those who had received this recognition (assessment), and it was supported by interviews with persons from each target group. The major findings were:

- Around 80 per cent of qualification holders were satisfied with the process, including the quality of the support, information provided and timeframe. The guidance professionals and employers expressed a similar degree of satisfaction;
- Seventy-six per cent of the respondents stated that they actually used the assessment certification. About half of them use it when applying for a new job to prove their skills. A quarter of them use it to get an admission to a degree study programme. Only around 5 per cent of respondents found the assessment not useful at all;
- The assessments seem to have a positive effect on the qualification holder's chance of finding relevant employment or continuing studies. Although other factors may be involved, it is clear that the situation of qualification holders significantly improved during the period after assessment - and at the same time, the qualification holders themselves found that the assessment has played a positive role;
- The best example is the summary of answers to a question that was put to the qualification holders: If you worked in Denmark prior to the assessment, how did your job match the qualification you gained in your home country before and after the assessment? As seen in the figure below, the assessment contributed to increased skills matching, although it is not clear whether the possible impact of other factors on the improvement of skills utilization was also taken into account.

Impact of skills recognition on participants in Danish User Survey, 2008

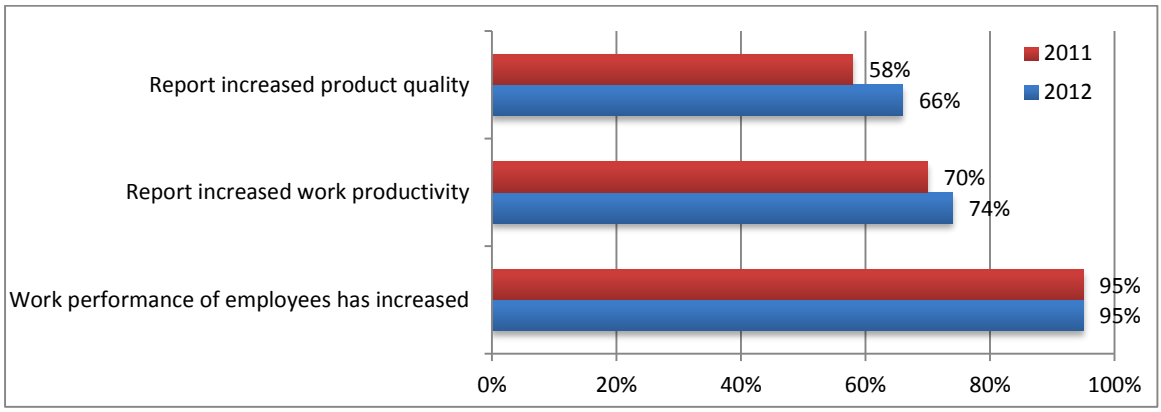


Source: *Niras Konsulterne (2008)*

The Singapore's WSQ is another recognition system whose key feature is training, but it also provides RPL. Its impact evaluation measures are state-of-the-art. There are several tools that the WSQ use for impact measurement. They focus on the satisfaction of both employers and employees with the WSQ system, the impact of WSQ training on wages, and also the awareness and adoption of the WSQ among employers.

The Outcomes Evaluation Survey targets both employers and WSQ participants. The sample size was around 1,400 companies and 8,400 individuals in 2012 (figure 21). The evaluation of WSQ benefits for employers was overwhelmingly positive, and an improvement over the previous year.

Figure 21. Impact of WSQ among employers: Share of employers that:



Source: WDA, 2015

Among other things, employees reported better work performance (92 per cent) and greater motivation at work (77 per cent).

A full impact evaluation of the system for the recognition of skills and competences of migrants in Germany is not available, although such research is being prepared. But information gleaned from the monitoring of the system – from surveys of employers and individuals that have experience with it – provide some interesting information on its impact (box 42).

Box 42. Examples of labour market impact measurement in Germany

As regards the employers, the surveys' very important finding is that they are interested in recognition, and they actively search for relevant tools and information in the case of new employees. It is rarely used as a HR development tool. Also, two-thirds of the companies surveyed would be willing to support employees during their recognition procedure.

Moreover, **79 per cent of employers stated that recognition improved the workers' ability to perform more responsible tasks; 54 per cent stated it also led to a higher salary**.

An impact study on the skills recognition system, carried out in Belgium, provides a very interesting example (Box 43). Impacts related to the use of Skills Certificates include:

- Impact at the individual level (motivation, training project, professional project);
- Recognition of the Certificates by training providers;

- Effective links between training providers;
- Impact of Recognition Certificates to further training pathways (e.g., duration shortened);
- Impact of Recognition Certificates in the area of guidance and career management;
- Impact on employment status;
- Effectiveness of the guidance process set up by validation centres.

Box 43. Examples of labour market impact measurement in Belgium

An impact study was conducted in 2012. As part of the study, a survey of skills validation candidates was carried out in order to establish the impact of the scheme in terms of self-esteem, employability, occupational mobility, employment satisfaction, and overall satisfaction with the scheme. After obtaining their Skills Certificate, successful candidates were more likely to be in employment or education, and to have a position corresponding to their level of competences. Certificate holders were more likely to be in employment, with 58 per cent having a job at the time of survey (compared to only 41 per cent of those who had failed to obtain at least one Certificate being in a job). The situation of candidates who failed to obtain a Certificate deteriorated strongly after 12 months, compared with Certificate holders. This suggests the possible longer-term positive impacts of Skills Certificate in terms of job security.

Overall, 35 per cent of candidates experienced positive developments in their professional pathways (e.g. greater recognition by colleagues, promotion, or impact on salary). For 80 per cent of Certificate holders, the first job after obtaining the first Certificate was related to the occupation targeted by the Certificate. Another positive indicator is that 38 per cent of Certificate holders have taken on new tasks since obtaining the Certificate, and 83 per cent of those surveyed believed these tasks were partly or fully related to their validated skills. 20 per cent of candidates were promoted to a new position after obtaining their Certificate.

The survey also provides useful information regarding the use and recognition of the Skills Certificate. A worrying finding is that among successful candidates, 81 per cent reported that they were never asked about their Certificate. According to the Consortium, the fact that less than 20 per cent of candidates were asked whether they held a Certificate during a job interview, or during a meeting with the PES, indicates that the scheme was not well publicised at the time of the survey in 2012. More than 40 per cent of candidates never use their Certificate or show it on their own initiative, while about half of them make use of it occasionally or regularly. 20 per cent did so regularly.

As regards self-confidence, 60 per cent of users felt more confident after obtaining the Certificate: candidates had a better awareness of the value of their skills on the labour market, and were more confident about accepting a new position or pursuing further training. Almost half of the candidates felt that they belonged to an occupational group after their experience, and 52 per cent felt more motivated to find a job.

Other data suggest that the scheme could have positive effects on opening new training pathways. Agreements with training providers ensure that Certificate holders are granted exemptions for modules corresponding to their validated skills, potentially decreasing the length of the training pathway. More than 1,000 Certificates were used to access adult education during the 2013 academic year.

Regarding employers, the survey conducted as part of the impact study focused on the impact of skills validation in terms of visibility, perceptions and attitudes towards the Consortium, the testing sessions and the Skills Certificate itself. Overall, a poor knowledge of the scheme emerged as the main problem (only 12 per cent of employers stated that they were aware of the scheme), a serious obstacle to the recognition of Certificates on the labour market. The scheme is comparatively better known in certain sectors (services and construction).

A more encouraging indicator is the value of the Certificate: after receiving a short explanation of the functioning of the scheme, more than 70 per cent of employers believed that Certificates had the same value as a formal qualification. Another positive indicator is that there is potential for development as 76 per cent of employers said that they were relatively interested (40 per cent) or very interested (36 per cent) in the scheme; 44 per cent would be ready to use the mechanism for their own employees, and 69 per cent would use it for recruiting new staff. When concerns were expressed, they were related to the fact that the validated skills would not correspond to the current needs in the corresponding occupation. Only 5.6 per cent were worried that the staff concerned would claim a higher salary.

Finally, data collected by the Consortium via PES indicate that the Certificates issued in 2013 contributed to the reduction of tensions on the labour market.

Another interesting approach for measuring the impact of skills recognition systems may be based on the number (and share of) recognition awards for regulated and non-regulated occupations. As box 11 suggests, one of the major drivers for skills recognition is occupational regulation; in this particular case, skills recognition is a prerequisite for anyone wanting to work in the areas covered by this regulation.

However, it is really important to look for evidence of the labour market value of skills recognition that is not affected by regulation. Only by looking at such examples may we ascertain whether skills recognition also brings a **competitive advantage** to those who have the certificate. There are many examples that private-led recognition systems achieve this objective - although often on the basis of training (boxes 37-39). Much more evidence is required about government-owned systems to confirm that individuals actually benefit from skills recognition - in the way that they are supposed to do (see figure 11).

8.3.2. How can impact be measured?

On the basis of existing examples, we can say that measurement is mostly based on four sources:

- ***(i)*** Evaluation of participants after the recognition procedure;
- ***(ii)*** Other kinds of administrative data, such as PES statistics;
- ***(iii)*** Tracer studies;
- ***(iv)*** Employer surveys.

It should be noted that many of the answers related to these sources may be based either on subjective feelings about the recognition benefits ("*I feel much more confident about my skills and employability*"), or on answers that may be scaled, but not quantified ("*our employees work better after the recognition*"). Both of these types of answers are relevant and important. The most precise and correct way to gauge the impact of skills recognition would be to conduct a survey or longitudinal study with a control group of participants, who have not had the opportunity of having their skills recognized, or assessing the participants prior to and after the recognition process. However, this kind of approach (as used in Belgium) is very hard to find in this area of research – and to develop a questionnaire in such a way that the respondents would be able to distinguish between the impact of skills recognition and other circumstances poses a significant challenge.

Figure 22. Possible ways of measuring the labour market impact of the skills recognition system

Employer		
The need	**Indicator**	**Measurement**
I want to reduce my skills bottlenecks.	Changes in share of hard-to-fill vacancies.	Establishment survey.
I want to increase productivity and workplace security.	Changes in share of accidents prior to and after recognition; self-assessment on productivity of the staff by employers.	Establishment survey
I want to increase the motivation of my staff.	Self-assessment on motivation of the staff by employers.	Establishment survey.
I need to comply with regulation that affects my workers.	Changes in share of workers complying with regulation.	Establishment survey.
I want to improve efficiency of our hiring process and HRD.	Self-assessment by employers; average length of the hiring process; average length of vacancy posted.	Establishment survey.
I want to identify training needs.	Self-assessment by employers.	Establishment survey.

I want to "sell better" the skills of my employees.	Self-assessment by employers.	Establishment survey.
Individual		
The need	**Indicator**	**Measurement**
I want a job (of my choosing).	Employment status prior to and after recognition.	Survey on individuals (tracer).
I want to utilize my skills.	Job held prior and after recognition, its link to recognition focus.	Survey on individuals (tracer).
I want to be paid better.	The wage / salary prior to and after recognition.	Survey on individuals (tracer).
I want be confident about my skills.	Self-assessment about the process and outcomes of recognition.	Evaluation survey on recognition participants.
I want to study more.	Training / education started after recognition, its link to recognition focus.	Survey on individuals (tracer).
I want career progress.	Job held prior to and after recognition, its link to recognition focus.	Survey on individuals (tracer).
I want to "sell my skills Better".	Acceptance of skills recognition certificate by employers.	Survey on individuals (tracer).
Training provider		
The need	**Indicator**	**Measurement**
I need to focus training provision better.	Self-assessment of provider; number of new courses developed and marketed on the basis of skills recognition.	Establishment survey.
I want to increase interest in training.	Self-assessment of provider; number of participants of courses developed and marketed on the basis of skills recognition.	Establishment survey.
Government		
The need	**Indicator**	**Measurement**
We want to increase competitiveness and economic growth.	GDP growth; company-level productivity growth; total sales and output growth; sectoral export growth; sectoral product growth.	Macroeconomic indicators; Establishment surveys.
We want to reduce unemployment.	Changes in unemployment rate total and/or for specific target groups (focused by skills recognition).	Surveys on individuals / households; PES data.
We want to improve the match between supply and demand on the labour market.	Skills and jobs matching for specific target groups (focused by skills recognition); Hard-to-fill vacancies by employers.	Surveys on individuals / households; Establishment surveys.
We want to promote social inclusion and equity.	Changes in indexes on inequality; wage difference; poverty etc.	Surveys on individuals / households.
We want to improve the labour market situation of migrant workers.	Comparison of migrant workers and nationals in terms of: • Employment status; • Over-education / under-education; • Skills mismatch; • Level of earnings.	Surveys on individuals / households; Administrative data on migrant workers.
We want to improve coherence between education, training and migration policies.	Qualitative assessment only.	

We want to increase the status of TVET.	Increased interest and enrolment in TVET.	Administrative data on enrolments.
We want to support lifelong learning.	Increased participation in lifelong learning.	Administrative data on enrolments; Surveys on individuals / households.
We want to improve employers' confidence and buy-in skills development policies.	Changes in share of employers confident of benefits and positive outcomes of skills development policies.	Establishment survey.
We want to support transition from the informal to the formal economy.	Decreased level of informality for occupations / sectors targeted by skills recognition.	Surveys on individuals / households.
We want to ensure quality and safety for certain occupations.	Changes in share of persons with required certifications within these occupations; Changes in number of accidents or other issues related to these occupations.	

8.3.3. How can we assess the information on impact?

Measuring the impact of skills recognition systems is no easy task; even when data or information on impact are available, assessing the data is not straightforward.

The methods and approaches that work best target the users of skills recognition systems directly; these may include conducting surveys on participants, including tracer surveys and surveys on employers (not general surveys, but those concentrating on their experience with skills recognition and the participants of the process). Existing surveys of this kind (for example Boxes 40-43) usually work with either hard evidence (reduced recruitment costs, time granted to find a new job, wage increases etc., prior to and after recognition) or more subjective assessments (increased self-confidence, enhanced teamwork), or a combination of both.

However even here we must be aware of the fact that any change that happened after recognition process may be attributed to other factors as well and that to say that better labour market outcome is the result by skills recognition only may be quite misleading. The only way to prevent such external influences is to include a control group in the survey, as shown on Belgium example (see Box 43).

When the impact assessment moves away from measuring the direct impact on users, the challenge of interpretation becomes even greater. For instance, indicators related to government priorities in skills recognition (see figure 22) may be subject to many additional factors - and the impact of the recognition system is unlikely to be the major consideration. Skills recognition may have a positive influence in terms of lower unemployment, reduced skills bottlenecks, a better match between jobs and skills, or reduced informality - but it is just one of many tools that are in place, and influential external factors, such as economic or sectoral development, are a decisive force in shaping the labour market.

In conclusion, methods for measuring labour market impact – despite their inherent difficulties - are a crucial component of any skills recognition system. Without reliable information on impact, it is impossible to say whether the objectives of the whole approach have been fulfilled or not – i.e., what has worked and what has not. Everyone involved – recognition governing authority, recognition authority, recognition providers, users and other stakeholders – need to know these outcomes, and for a variety of reasons.

There is important information that can be based upon the labour market outcomes of skills recognition: how it influences the labour market and the behaviour of its stakeholders. Figure 23 brings together the most important information needs that have been identified throughout the research. These we consider to be instrumental in demonstrating the labour market impact of skills recognition systems.

Figure 23. Information needed and related indicators from the various standpoints of

… INDIVIDUALS

… TRAINING PROVIDERS

Does skills recognition increase demand for training and lifelong learning in general? Are persons failing to obtain recognition more willing to further their own development to overcome their skills gaps? Does skills recognition improve the focus and efficiency of the training?	• Training enrolments based on recognition process outcomes • Impact of such training on employability and skills matching
Are training courses linked to occupations and skills sets, which are mostly subject to skills recognition. more demanded?	• Analysis on linkages between skills recognition and training provision

… EMPLOYERS

Did the recognition speed up the recruitment process, make it more effective and improve skills-job matching?	• Average length of the recruitment process • Perceived effectiveness of matching
Did the productivity of employees increase? Can they work more efficiently and/or carry out more demanding tasks?	• Perceived productivity of employees • Employees morale, teamwork • Employees performance, ability
Did the recognition help to comply with safety standards and other regulations related to jobs and the workplace?	• Share of accidents prior to and after recognition • Share of workers complying with regulations
Did the recognition increase the perceived value of the employer on the labour market? Did it help win more competition, as employers were able to demonstrate skills of their staff better?	• Perception of value of recognition certificates by employers in business relations • Evidence of influence of recognition certificates on outcomes of selection procedures
Can skills recognition support the HR process, in terms of better promotion or wage increase decisions?	• Perception of employers on validity of recognition certificates in HR process

Can skills recognition help to reduce workers' turnover and increase the retention rate?	• Retention rate prior to and after skills recognition
How many employers use recognition certificates in the recruitment process, and what value do they attribute to them?	• Share of employers using recognition certificates in recruitment • Assessment of weight of such certificates on recruitment decisions
Do employers support employees in going through the recognition process? How? And is it only workplace-related recognition, or not?	• Share of employers allowing employees to go through the recognition process • Analysis of benefits employers provide in such a case, including cost payments
Is the recognition certificate used or asked for by career guidance counsellors and during the job-matching process carried out by the employment services?	• Information on utilization of recognition certificates in reviews/reports of activities of career guidance and employment services

9. Concluding comments

Skills recognition systems are an important component of skills development, employment and migration policies. If designed and implemented properly, they bring benefits to individuals, employers and to the economy as a whole.

However, this development and implementation give rise to a number of challenges, namely in the areas of stakeholder involvement, awareness raising and impact assessment. A lack of capacity and access to data, as well as to state-of-the-art methodologies and approaches, have a negative impact on effectiveness and a return on investment in these systems. The role of skills recognition will likely gain more importance in years to come; the focus must be placed on improving the labour market impact of existing systems, as well as on providing assistance to those that are about to develop - and implementing them in years to come.

The research focused on skills recognition systems that are the product of public-driven initiatives, while also giving comparisons and examples of private sector initiatives. As an important policy measure in the areas of learning and the labour market, skills recognition systems are supposed to address challenges such as skills mismatch, poverty and informality. They have considerable potential for delivering desired outcomes, and expectations in what these systems might provide for their users are high.

However, despite extensive desk research and the number of case studies conducted, there was little hard, direct evidence that skills recognition systems contribute towards addressing these challenges and benefit end users.

In addition, the research brought to light numerous examples of design and implementation challenges: lack of trust, awareness and involvement of the stakeholders and users; insufficient coherence with other measures and existing policies; and scarcely any proper monitoring and impact assessment at the system level. Consequently, the value of skills recognition is not sufficiently acknowledged, and many systems struggle to attract attention, capacity and resources for further development.

All this results in a waste of the potential of skills recognition systems:

- Skills certificates are insufficiently recognized and valued by employers in the labour market;
- Recognition providers do not have the capacity to provide services for a sufficient number of users to make a change;
- Skills certificate holders are not motivated to use them as a springboard to new careers and paths of learning;
- Potential users (individuals) are not interested in obtaining skills certificates on account of their low awareness of these systems, their lack of access to them, their scarce resources and their limited trust in skills recognition.

The research also illustrates that by amending methods of development and implementation, these stumbling blocks could be successfully overcome or significantly reduced. But this requires capacity, methodologies and access to state-of-the-art tools, which developers of such systems often do not possess.

On the basis of this research, it is evident there is a need for guidelines for developing, implementing and evaluating the impact of skills recognition systems. These should focus on providing guidance and assistance in five most key areas:

- Needs analysis;
- Stakeholders and the environment;
- Quality and accessibility;
- Reaching out; and
- Monitoring and evaluation.

There is a need for greater capacity building and technical assistance to integrate these guidelines into existing national skills development systems and employment policy design, in order to improve the efficiency and outcomes of existing recognition systems.

Lack of proper monitoring and outcomes measurement is one of key issues that prevents both stakeholders and the users from understanding the value inherent in skills recognition, thus limiting its impact. Examples of existing monitoring and impact measurement tools are convincing in terms of the evidence they provide; but most of these are the result of a one-time impact assessment, conducted on a limited scale. In order to gain trust in skills recognition outcomes, as well as a sufficient knowledge base to enable recognition authorities to adjust provisions, regular monitoring and impact measurement are essential components of the system.

Many skills recognition systems are stand-alone, focusing on a narrow area – such as one sector or a few occupations. Others are extensive, closely linked to nationwide measures; NQFs are a case in point. There is a tendency towards unification and the creation of a “system-of-systems”, for which the NQF (or its national equivalent) seems to provide the soundest structure.

Skills recognition systems and qualifications frameworks may help to strengthen each other and achieve a strong impact; however, the skills recognition system may work well without any linkage to the NQF. The benefits and drawbacks of consolidating skills recognition approaches must be carefully assessed. It is not necessarily the best solution for every system.

Skills recognition has a great – and mainly untapped – potential at the national or sectoral level. Its potential at the international level is also considerable, and this has been drawn upon even less. Skills recognition can play a significant role in fostering labour market mobility and improving the working and living conditions for migrant workers. Collaboration with regional economic communities to enhance the portability of skills at a broader geographical level, and improved migration governance, are key objectives. The ILO should strive to achieve these objectives, and its projects should address this priority more.

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Annex 1: Full list of case studies

1. Amankrah, John Yaw (2015). *Labour market outcomes of the apprenticeship system in Ghana* (hereinafter referred to as "Case study in Ghana")
2. Banerjee, Partha Sarathi (2015). *Skills mismatch & recognition in BRICS: Case of India* (hereinafter referred to as "Case study in India")
3. Branka, Jiri (2015). *Case study on sectoral certification in Australia: Financial services* (hereinafter referred to as "Case study in Australia")
4. Branka, Jiri (2015). *Recognition Act: Case study on improvement of German skills recognition system for migrant workers* (hereinafter referred to as "Case study in Germany")
5. Duvekot, Ruud (2015). *Labour market outcomes of system for validation of non-formal and informal learning in the Netherlands* (hereinafter referred to as "Case study in the Netherlands")
6. Leite, Elenice M. (2015) *Skills mismatch & recognition in BRICS: Case of Brazil* (hereinafter referred to as "Case study in Brazil")
7. Lythe, David (2015). *Skills recognition for migrant workers in ASEAN* (hereinafter referred to as "Case study in ASEAN")
8. Mathou, Cécile (2015). *Labour market outcomes of skills validation system in French speaking part of Belgium* (hereinafter referred to as "Case study in Belgium")
9. Oleynikova, Olga (2015). *Skills mismatch & recognition in BRICS: Case of Russia* (hereinafter referred to as "Case study in Russia")
10. Panzica, Francesco and Popova, Natalia (2015). *Improving skills matching across borders – the case of Italy* (hereinafter referred to as "Case study in Italy")
11. Rasool, Hoosen (2015). *Skills mismatch & recognition in BRICS: Case of South Africa* (hereinafter referred to as "Case study in South Africa")
12. Vaillancourt-Laflamme Catherine, dela Rosa Jennifer Frances (2015). *Labour market impact of skills recognition system for nursing occupations* (hereinafter referred to as "Case study in nursing sector")
13. Wang Xiaojun, Dong Jing, Tao Lili and Zeng Yanlin (2015). *Skills mismatch & recognition in BRICS: Case of China* (hereinafter referred to as "Case study in China")

A report consisting of set of examples on monitoring and impact measurement of skills recognition systems has also been developed. They include:

14. Impact measurement of skills certification in the manufacturing sector in the United States
15. Examples of impact measurement of skills certification in the IT sector
16. Impact measurement of global skills certification in the accounting sector
17. Labour market impact of the Washington Accord
18. Impact measurement of skills recognition for migrant workers in Denmark

19. Monitoring of national skills development and recognition Workforce Skills Qualifications system in Singapore

Annex 2: Further evidence from case studies

➢ Demand for and drivers of skills recognition

Case study in Ghana
In Ghana, 55 per cent of graduates from basic school are unable to enter into secondary education level. The majority of this group are "Not Employed, Not in Education and Not in Training" (NEET). These vulnerable groups need to be targeted to be equipped with employable skills to enable them to succeed in the Ghanaian labour market. Besides this, about 2.2 per cent of the employed population are apprentices with the majority of them in urban labour markets. Also, some studies on employment outcomes from apprenticeships in Ghana indicated that years of schooling alone do not lead to positive returns on education. However, initially the needs assessment has not been a characteristic feature of skill recognition system in Ghana. Needs assessment became essential in initiatives aimed at reforming the traditional apprenticeship system. The first major attempt at government intervention in apprenticeship training was the World Bank supported Vocal Skills and Informal Sector Support Project (VSP) from 1995 to 2001. The most important users of skill recognition as well as those who are much interested in skill recognition are Ministries, Departments and Agencies (MDAs) including District Assemblies, Others include Employers, MCs, Apprentices, Parents and Guardians, Individuals, Apprentices and other stakeholders. The objectives of skills recognition systems are to: • Address the responsiveness of apprenticeship training systems to labour market needs; • Address the disconnection between the formally recognized national training systems and the informal systems; • Set skill standards for the basis for the assessment; and • Strengthen dialogue between apprentices and their master craftsmen and women.
Case study in India
The National Sample Survey Organization survey revealed that the lack of skilled manpower in the manufacturing industry was very strongly linked to the fact that just 2 per cent of India's youth and only about 7 per cent of the whole working age population have received vocational training. In addition to that, the survey also found that within those having vocational training there was significant skills mismatch taking place. Also, about 90 per cent of the Indian workforce is employed in the informal sector. Due to shortage of skill training institutes, it is not possible for these workers to acquire skill trainings through formal channels. Most of skill acquisition happens through on-the-job training under senior skilled craftsmen, family occupation, learning-by-doing, etc. No formal training is provided and minimum wage norms, social benefits stipulations are often not followed. Consequently, 79 per cent of the informal or unorganized sector workers belong to the poor and vulnerable groups managing with meagre incomes. The Government of India sees the Recognition of Prior Learning (RPL) as a possible step to enhance the employability, mobility and income of those unorganized sector workers who have acquired and honed their skills on the job mostly under the guidance of more experienced peers. The RPL objectives were set as follows: • Facilitate formal recognition of skills/competence, against specified standards, acquired through non-formal and informal channels, opening up education, career advancement and growth opportunities for the individuals concerned. "Competence" as defined in the NSQF (National Skills Qualifications Framework) notification refers to the proven ability to use acquired knowledge, skills and social abilities, in discharge of responsibilities. It is the ability to do a job well. • Provide a basis for structuring procedures and criteria for RPL implementation, monitoring and evaluation, including resourcing and quality assurance.

- Support social inclusion efforts, by providing access to those currently excluded from the formal sector due to lack of skills recognition and certification.
- Aim to establish the connection between increased skills, certification and wages. This will enable certification of skills, productivity and quality assurance for the workforce. Thereby provide a pathway for increase in income and increased job mobility, including overseas migration.
- Encourage industry/employers to facilitate certification of their employees through RPL.

Case study in Australia

In an example from Australian broker industry, major drivers were threefold:

- increase public awareness of National Insurance Brokers Association (NIBA);
- enhance their competitive advantage of being the only group offering independent advice to consumers; and
- build recognition of broking as a worthwhile, professional career thus attracting 'new blood' into the industry.

The NIBA conducted extensive research on how this could be achieved. The result was the introduction of a professional certification known as the Qualified Practising Insurance Broker.

Case study in Germany

In Germany, employers experience severe difficulties in filling jobs. Already in the SME Barometer 2011, 72 per cent of respondents admitted that they had problems in hiring skilled workers, while the German Association of Chambers of Industry and Commerce report in the same year showed that one third of companies had seen skills shortage as one of the greatest economic risks, double the figure for 2010.

Significant shortage of skilled labour has been linked to ageing of the population. This process is much faster in Germany than in most European countries as the country's workforce now shrinks by 200 thousands of persons every year. In order to tackle this challenge, significant effort has been invested into improving of the skills matching and in particular into tapping of potential of migrant workforce.

Aside from labour shortages, other issues have been identified with existing migrant recognition schemes that reduced their labour market impact, such as lack of awareness of the benefits, tools and processes of the skills recognition for migrant workers – both from the point of view of individuals and of companies.

These were the major drivers for a new approach that came with the adoption of the Recognition Act in 2012 (it was enacted two years later).

The key objectives of changes to migrant skills recognition approach in Germany are therefore:

- To improve utilization of migrants' skills on the German labour market;
- To reduce skills bottlenecks perceived by employers;
- To make skills recognition process for migrants in Germany easier, faster and more transparent;
- To improve awareness of benefits, tools and processes of the skills recognition.

Case study in the Netherlands

The key objectives of the national system for validation of non-formal and informal learning in the Netherlands were:

- to open up the learning system towards the citizens, in order for them to take up their lifelong learning;
- to stimulate human resources development strategies in which employability is a shared concern of employer and employee;
- to tackle labour market obstacles for job seekers, by easing the way people can make their qualities or competences more transparent; and
- to help turn Dutch society into 'a learning society', in which learning is considered important or valuable, where people are encouraged to continue to learn throughout their lives, and where the opportunity to participate in education and training is available to all.

Case study in Brazil

Despite of this legal and institutional framework, reinforced by public policies toward decent work implemented since the 90s, Brazilian labour market still operates with high levels of informality. Around 38 million workers (38 per cent of the economically active population) are declared "informal" and this figure is expected to increase due to the economic recession. These workers perform not only odd jobs, but also

activities that may require specific training and certification, mandatory by national legislation or international standards concerning to quality, safety, health and environment issues.

Therefore, there is a demand for recognition services in two ways: to prove and validate past unregistered experience – a basic requisite for formal jobs; to obtain required or valuable certificates that may improve productivity and employability. High turnover rates increase this demand, since workers are moving throughout different jobs both in formal and informal market all along their productive life.

Informality and low education contribute to chronic mismatches in the labour market, together with unattractive work conditions (low wages, rigid schedules, risks, distance or transport). The SINE (National Employment Service) reports indicate that most applicants to jobs are not qualified for the available vacancies. In the years 2010-13, at best 20 per cent of them have succeed in job interviews and most of the vacancies remained open.

Many candidates have difficulties to proof past experience, also failing in basic tests on math, writing and oral communication, due to the poor quality of basic education in Brazil. The labour market, by its turn, is becoming more selective: in 2014, formal employment increased only for more educated workers, at secondary and higher levels.

The most required certification in Brazilian labour market is the secondary education. It has been increasingly demanded even for jobs that used to concentrate low educated people (such as army soldier, policeman, porter, janitor, caretaker, waiter, cashier and sales clerk).

Case study in ASEAN

The number of migrant workers in South-East Asia is growing rapidly. In 2013, there were an estimated 10,206,000 international migrants currently working and living in ASEAN countries. Of the international migrants living and working in ASEAN, 6,788,000 of them, are estimated to have come from within the region.

To promote fair recognition for migrant workers with only modest skill sets, the ILO has encouraged all ASEAN member states to identify priority skill areas and to plan, at the very least, for their mutual recognition.

To support the free movement of skilled labour, the ASEAN Leaders in 2010 declared a commitment to "Develop national skills frameworks in ASEAN member states through sharing of experiences and best practices as an important strategy to strengthen HRD and management and to enable member states to raise their respective levels of skills standards, as an incremental approach towards an ASEAN skills recognition framework".

To implement that commitment, an ASEAN Qualifications Reference Framework (AQRF) has now been developed to support the broad objectives of increasing trade in services and the movement of persons throughout the region; and strengthening national education and training systems so as to make ASEAN workers, and the region, more competitive.

There are several important purposes for the ASEAN Qualifications Reference Framework:

- It will provide a common reference point, while not restraining the diversity of national training and qualifications systems;
- It will strengthen mutual trust and cooperation among ASEAN nations;
- It will support and inform reform in individual member states, providing guidance and promoting good international policy and practice in HRD;
- It will facilitate commonality of qualifications systems among the member states in the region;
- It will accommodate national requirements and not force a standardised system onto ASEAN members;
- It will reduce barriers to the mutual recognition of the skills and qualifications;
- It will promote labour market mobility with fair recognition of competencies.

Case study in Belgium

The skills recognition system in French-speaking Belgium was set up in the context of new policies promoting lifelong learning at the Federal level. In 2001, the Federal Government introduced the right for all workers to undertake a "skills audit" (*bilan de compétences*).

The strategic objective of the system was two-fold: to ensure the social integration of all citizens, especially those without formal qualifications; and to enhance the employability and professional mobility of workers,

employed or unemployed. The skills validation scheme was initially targeted primarily at individuals who did not hold any kind of formal qualification. But soon enough other priorities emerged:

- to help employers to hire better-suited candidates;
- to better manage employees' professional development and to optimize their training plans and
- better match of labour market supply and demand; better coordination between public stakeholders, i.e. public employment services (PES), guidance services, and training centres; sharing common standards; improving mobility between training providers and more efficient use of available funds (as training pathways can be more targeted or may be shortened).

Case study in Russia

The skills recognition system in the Russian Federation actually began developing from the time when the system of occupational standards was launched. The official start to the process was given in 2012. Occupational standards shall, among others, be used by employers when organising training for and assessment of employees, when developing job descriptions, rating different types of works, and awarding grades to employees.

Skills recognition is one of tools that should help to combat major labour market challenges in Russian Federation:

- High level of latent unemployment;
- Existence of millions of displaced persons and refugees in need of employment but in most cases having medium or low level of skills, which generates acute problems of deteriorating labour quality as well as migrants retreating into the illegal sector;
- Lower utilization of the society's labour potential due to limited use of a vast variety of individual capabilities and qualities of the labour resources, of professional knowledge and skills acquired by people outside formal education and training system;
- Significant level of skills mismatch caused by aging of population, strong growth of enrolment into tertiary education resulting in depletion of the blue-collar layer labour force and downgrade of the work of white-collar workers to carrying out a set of standard activities;
- Overall instability of the social and political situation. In the current conditions, practically not a single company is bold enough to plan even for the medium term (3–5 years). Lack of such plans makes training of employees and hiring of young specialists "for the future" totally pointless. On the contrary, companies want to hire such people who are already capable of tackling the tasks at hand.

Case study in Italy

Skills recognition system in Italy which is analysed in the study focuses on migrant workers. In 2014, the number of migrants regularly residing in Italy was estimated to be 5,364,000, accounting for 8.1 per cent of the total population. The situation at present is further complicated by the need to deal with the high waves of migration. In last two years, more than 300 thousands of new migrants came to the country.

The employment rate for migrants is higher than that of Italians (61.9 per cent compared to 59.5 per cent), as it is the unemployment rate (17.3 per cent and 11.5 per cent, respectively). Both data are not surprising as migrants are highly motivated to find a job and accept to work on jobs that are below their skills (more than half of migrant workers is exposed to risk of over-skilling) and very often work in the informal sector. Although more often employed, migrants are much more threatened by a risk of poverty. Non-EU migrants earn on average only 70 per cent of pay of nationals.

Better utilization of migrants' skills – both for improving of their social situation and for improving of labour productivity of enterprises – were drivers behind the skills recognition system.

Case study in South Africa

The key characteristics of the South African labour market from a skills-related perspective are the following:

- high levels of unemployment, especially youth unemployment;
- one of the highest NEET rates in the world;
- inadequate employment growth;
- low levels of educational attainment;
- poor TVET participation rates;
- a decisive shift towards skills-biased technological change; and
- skills mismatches with high employment and high job vacancies prevalent.

The Skills Development Act 97 in 2008 introduced the Quality Council for Trades and Occupations (QCTO), which coordinates learning within the occupational skills recognition system. Based on the occupational qualifications framework, the QCTO should address abovementioned challenges. The QCTO was established to carry out the following functions, amongst others, with respect to occupational recognition:

- develop and manage the occupational qualifications framework (OQF);
- make recommendations and advise the Minister on matters relating to the OQF;
- develop, maintain and quality assure occupational standards and qualifications;
- certify learners who have demonstrated occupational competence;
- maintain a database of learner achievements;
- conduct or commission and publish research;
- inform the public about its sub-framework; and
- liaise with SAQA (South-African Qualifications Authority), other Quality Councils and professional bodies responsible for establishing standards and qualifications.

The establishment of the QCTO opened the way for the establishment of an occupational learning system and the recognition of occupational qualifications based on the NQF.

Case study in nursing sector

The need for establishing a system for recognition of skills for nurses emerged due to the long-term skills shortage of health-care professionals which could only be solved by labour migration.

Norway stakeholders stated that there was a need for more "flexibility on the part of Norway with regard to the assessment of Filipinos nursing skills and this is the value added of the skills recognition system".

It was thought that the absence of such system leaves too much discretion in the hands of local authorities who may use rigid requirements as a barrier to entry to the profession. It was perceived that a fair recognition of skills is essential to ensure the full potential of migration and development and to ensure decent work for nurses across borders as well as avoid skills wastage.

Case study in China

Following the economy transformation and population aging, China has shifted gear from the previous high speed to a medium-to-high speed growth, and the structure of working-age population is changed. Recruitment difficulties, skills mismatch and senior technician shortages gradually become apparent.

A need for better vocational skill training and perfecting public service system to relieve the problem of structural unemployment has been identified and in recent years, departments, localities and enterprises made various explorations on setting up Chinese Vocational Training and Skill Recognition System.

In May 2015, a grand plan named "Made in China 2025" was unveiled with the intent of upgrading the manufacturing sector, such as high-speed rail, information technology, robotics, aerospace equipment, automotive, electronics, etc. To transform the economy from low-end manufacturing to more value-added production, there would be a great demand of skilled workers.

According to the statistics of labour market of the past three quarters of 2015, the demand for the different levels of skills and professionals exceed the supply. Among the recruiters, 56 per cent recruiters put forward a clear demand and requirements for the skills and professionals. In the coming years, apart from the tertiary industry's rapid development, owing to the advent of an aging society, China's employment and its structure related issues will be more and more complex.

Whether it is to solve the problem of total employment or structural unemployment, extensive vocational trainings, skill recognition services and workers' skill upgrading and strengthening of human resources development are needed.

➢ Stakeholders and the environment

Case study in Ghana

There is a number of Government agencies that are involved in skills recognition in Ghana. This they do by recognising skills formally in two main ways: Recognising skills formally either (1) alone by itself, or (2) in

collaboration with Trade/Business Association, Non-Governmental Organisation (NGOs), Faith Based Organisations (FBOs), a Private Agency or Service Provider. These include:

- The National Vocational Training Institute (NVTI)
- The Council for Vocational and Technical Education and Training (COTVET)
- The National Board for Professional and Technician Examinations (NABPTEX)
- The Energy Commission
- The Driver and Vehicle Licensing Authority (DVLA)
- The Food and Drugs Authority (FDA)
- The Ghana Tourism Authority (GTA)
- Other sectoral skill recognition systems

Successive governments have pursued policies to situate/embed skill recognition system in the overall human resource development agenda. A National Employment Policy developed by the Ministry of Employment and Labour Relations was launched by the Director-General of the ILO and the President in April 2015. The policy which aims to create decent employment opportunities for the growing labour force in Ghana identifies the need to modernise the traditional apprenticeship system and to move it from informality to formality.

Skills of graduated apprentices may also be recognised formally by issuing Certificate of Participation to apprentices in dual apprenticeship training programmes mostly at graduation ceremonies. These programmes are run by government as well as non-government agencies in collaboration with service providers such as MCs, workshops, training institutions, enterprises and factories. The Rural Enterprise Programme (REP), Action Aid Ghana, TechnoServe Ghana, World Vision and the ILO Decent Work Programme are involved in such programmes.

Under the COTVET Act (it formulates national policies for skills development across the broad spectrum of learning types) labour market actors work through three standing committees namely:

(1) The National TVET Qualifications Framework Committee,

(2) The Training Quality Assurance Committee and

(3) The Industry Training Advisory Committee;

to ensure the maintenance of a credible, rigorous, effective, and efficient qualifications framework to ensure confidence in the system. All the Committees are manned by industrialists with memberships drawn from relevant industries, professional bodies and trade associations who work to ensure standardisation and quality assurance to achieve confidence in the system.

Case study in India

States in India have varied demographic and (consequentially) skill development challenges. However, there needs to be a common and shared sense of urgency to address the challenges of the changing demography. This has now begun to emerge. While State Skill Development Missions (SSDMs) have been launched in almost all States, there is an imminent need for capacity building and empowerment of the SSDMs in many states in order to upscale quality skill development.

National Skill Qualification Framework (NSQF) - a competency-based framework that organizes all qualifications according to a series of levels of knowledge, skills and aptitude – were implemented in India. After NSQF was notified, all other frameworks stand superseded by the NSQF. The NSQF is anchored at the National Skill Development Agency (NSDA) and is being implemented through the National Skills Qualifications Committee (NSQC) which comprises of all key stakeholders.

The skills recognition (RPL) initiative pursuant to the launch of qualifications framework was taken up by National Institute of Open Schooling (NIOS). It was designed on a national framework to assess the competencies acquired by the learner through prior formal and informal experiences and culminating in qualifications awards. The framework has been designed to serve as the guideline for RPL adoption in various industries.

The various experiments which can lead towards adoption of RPL in the country have been somewhat disconnected. Neither they were RPL pilot projects in the true sense, nor were they linked to the NSQF or the SSC approved QP-NOS. Such experiments have also not been very effective in attracting the target population which got excluded from the formal vocational education setup.

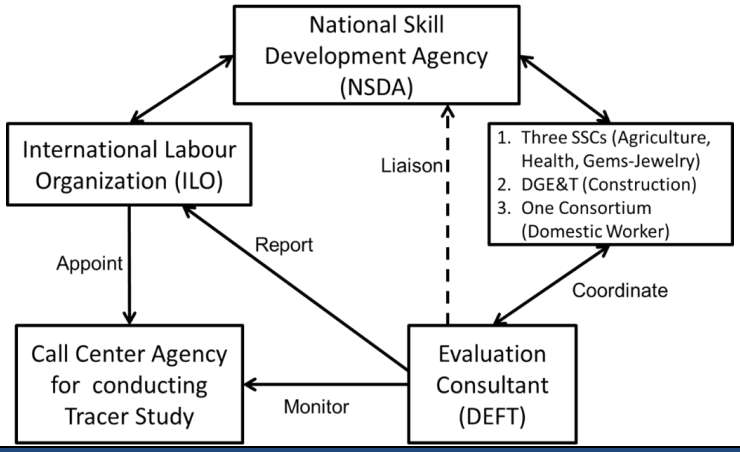
The ILO developed and submitted an initial design to NSDA for implementing a RPL pilot program in India (January 2014). The sectors chosen for RPL implementation were agriculture, healthcare, gems and jewellery,

all implemented through their respective Sector Skill Councils (SSC) and fully funded by the National Skills Development Agency (NSDA). RPL in the construction sector were to be implemented through Directorate General of Employment and Training (DGET) from available funds in the Building and Other Construction Workers (BOCW) welfare fund.

The institutional stakeholders in this project and their roles were:

(i) NSDA: Being vested with the authority, be the sponsor and undertake the RPL pilot project on behalf of Government of India.
(ii) SSC: Be the nodal agency responsible for work with employers, Vocational Training Partners (VTP) to implement the RPL pilot project in their respective sectors. For domestic workers, in absence of any SSC, a non-governmental consortium undertook these works.
(iii) Assessment Agencies: Be appointed by the SSCs; responsible for conducting RPL assessments and reporting outcomes to the SSCs or DGE&T (as the case may be).
(iv) ILO: Be the evaluation agency and report findings to NSDA.

Figure 2: Project stakeholder structure



Case study in Australia

On a sectoral level, Australia has invested a significant effort into developing and implementing measures and tools how to react to labour market needs and skills shortages. The Industry Skills Councils (ISCs) - independent, industry-led non-profit sectoral bodies – has been gradually established to identify and respond to the skill development and workforce planning needs of their respective industries. There is now 12 of them and are covering major sectors of Australia economy, also providing roofing for non-sector specific, cross-cutting skills.

From so-called "Environmental scan" – in fact a detailed analysis on changes and drivers shaping demand and supply for skills in Australia – each Industry Skills Council produces a plan outlining the changes to be made to skills development programs to meet industry's new and emerging skill needs or comply with new industry licensing or regulatory requirements.

The skills recognition is one of tools/measures implemented by the ISCs. Skills recognition is seen as an important tool in enhancing of labour market mobility, on which ISCs cooperate closely with training organizations and employers.

The financial sector in Australia falls under the responsibility of the Innovation & Business Skills Australia (IBSA) ISC. One of key industry associations that are members of IBSA is the National Insurance Brokers Association (NIBA).

Formed in 1982, as a result of a merger of two earlier broker associations, NIBA is the sole voice of insurance brokers in Australia, representing around 350 member firms and 4,600 individuals the majority of whom are QPIB's - Qualified Practising Insurance Brokers. In all, it covers over 90 per cent of the medium and smaller insurance brokers in the country.

Case study in Germany

The Recognition Act for migrant workers is a subsidiary law. It means it gives priority to existing regulations for specific groups, such as Blue Card for high skilled non-EU citizens, handicraft occupations for which the

recognition is processed by local handicraft chambers and so on. There is a relation and equivalence between the national Vocational Training Act and the Recognition Act.

In addition to that, federal states in Germany (Länder) have, in relation to the Recognition Act, also adopted relevant recognition legislation in order to have consistency at all levels where migrant skills recognition plays a role. There is also relation to labour market priorities and employment policy through identification of priority occupations in the Bottleneck Analysis of the Federal Employment Agency (Bundesagentur für Arbeit).

Several institutions and bodies are engaged in the development and implementation of the Recognition Act. The Act itself is falls within the responsibility of the Federal Ministry of Education and Research (BMBF). This Ministry is also responsible for Vocational Training Act – this is an important factor improving relevance and equivalence of these two Acts and therefore improving impact of the Recognition Act to labour market outcomes of migrants that go through the recognition process.

The Recognition Act has been designed by the Federal Institute for Vocational Education and Training (BIBB) in cooperation with other key actors in the area of employment and migration, such as the Ministry of Labour and Social Affairs (BMAS), the Federal Ministry of Economics and Technology (BMWi) and the Federal Office for Migration and Refugees (BAMF). Federal states (Länder) and employer representatives (Chambers of Commerce and other institutions) also participated in the development.

Case study in the Netherlands

The Dutch system is known under abbreviation 'EVC' – which stands for 'Erkenning van Verworven Competenties' or in English 'Validation of Prior Learning' (VPL). In 2000, a national working group (ministries, social partners) on Validation of Prior Learning formulated a broad vision on VPL and the implementation process. VPL had to bridge the gap between the education supply and the demand on the labour market side.

In the VPL development phase, government, schools/colleges/universities and social partners focused on creating favourable circumstances for developing and implementing.

VPL (previously acquired competencies) in as many contexts as possible: work, voluntary work, reintegration and job-seeking, education and training. This approach was managed by the Kenniscentrum EVC and focused on the change of the learning culture in general. Based on dialogue with stakeholders, their perspectives of the VPL were adopted.

From 2006 a greater focus was put on quality assurance to increase the accessibility, transparency and to guarantee the summative effects by means of certification or qualification.

Since 2013, a new change of strategy for validation took place in relation with the government's drive to move towards 'a participation-society' in which all stakeholders have to take ownership and responsibility for their own role in (lifelong) learning.

Key responsibilities for VPL lie on three groups of stakeholders:

A. **Providers of VPL** - When registered in the Quality Code for VPL, any organisation may offer VPL-procedures that can lead to a formal Ervaringscertificaat. This registration process entails a number of steps concerning the quality of the process offered, the quality of involved staff, the independence of the organisation.
B. **Formal education and training sector** - Any official VPL-procedure results in an *Ervaringscertificaat*. This certificate describes value of someone's skills portfolio. The candidate can use this report to ask the exam committee of an institute (school, university, training institute) either to access a learning programme, to obtain exemptions or to receive a full certificate/diploma.
C. **Private sector** - In almost all sectors, recruitment and selection of personnel is increasingly also covering target groups without the formal requirements. VPL is also used to address formative issues such as retention of personnel or outplacement (from 'work to work') and employability. The role of the private sector is related to activities such as financing and raising awareness within sectors and companies or acting as VPL-providers.

The National Quality Code for VPL (based on the 'European Common Principles for Recognition and Validation of Non-formal and Informal Competencies') was initiated in 2006 as an instrument for stimulating the use of VPL in VET and higher education by creating control and trust in the quality of VPL-providers.

In 2012, the code was upgraded to a tripartite governed quality-instrument. Government, employers and trade unions declared by signing the EVC-convenant that VPL now – on top of the qualification-instrument – also was to be grounded as a labour market tool for career guidance.

Case study in Brazil

Historically, VET in Brazil has been developed as partnership between government and entrepreneurs to cope with a poor educated and low skilled labour force. Therefore, VET has been benefited by important investments and has advanced earlier and better than basic education itself.

VET market in Brazil has two faces: a formal-visible one, that encompasses courses and programs at secondary (technical) or higher (technological) level; and almost invisible-informal side referred to the basic, initial or continuous training. In other words, Brazilian VET market constitutes actually a "non-system" composed by a vast array of training and education activities that do not result from public policies nor are under any sort of national governance and accountability mechanisms.

The recognition practices in Brazil reflect directly these "non-system" main characteristics, namely:

- diversity/heterogeneity of agencies, programs and governances;
- partnership between private management and public financing;
- poor monitoring and precarious accountability.

Brazil does not have a national recognition system, although this topic has been in the public agenda for more than 40 years. Since then, several programs and mechanisms have been implemented aiming at recognize knowledge and skills obtained either by formal or informal means (education, training and practical experience).

Presently, Brazilian recognition models and practices are usually classified in two categories: "occupational" and "educational". The first one refers to the recognition of competences required for a regulated job; the other concerns to accrediting knowledge required for continuity or conclusion of formal studies. Both categories may be molten in the same program or institution, with a similar output: *certificates required for regulated occupations*.

Thus, recognition in Brazil may be seen both as a "quality label" and a "job license" for several regulated occupations. This regulation, by its turn, may be determined in two ways: a) by Ministry of Labour; b) by other public or private organisms, according to national/international standards/commitments – an expanding universe that includes mostly autonomous or informal activities.

These labels/licenses are usually supplied by several mechanisms that may be classified in four branches:

- Two accrediting national systems under federal governance (Inmetro and Certific Net) formally responsible for accrediting public-private organizations in charge of skills/occupational certification;
- A few public/private organizations accredited by these two systems (like S system organizations);
- Public programs focused on specific sectors/categories, such as health (nursing) and oil and gas chain;
- A vast array of VET programs providing diplomas either *required* (as "job licenses") or *valued* (as "quality labels") by labour market.

Case study in ASEAN

Skilled labour mobility is seen to be essential for effective implementation of services liberalisation as well as a goal in itself for deeper economic integration in the AEC (ASEAN Economic Community). The ILO has assisted the ASEAN members to select priority sectors through which they can make their first step towards mutual recognition for their migrant workers.

Most important tools for implementation of skills recognition are MRAs (Mutual Recognition Agreements) in areas of professional service (Engineering, Nursing, Architecture, Surveying, Medical, Dental and Accountancy).

All ten ASEAN member states are already participating members of these seven MRAs. Different mechanisms are being established to administer the implementation of MRAs in the services sector to ensure that professionals across the ASEAN region derive tangible benefits from the agreements.

The ninth MRA on tourism professionals provides a mechanism for agreement on the equivalence of tourism certification procedures and qualifications across ASEAN. There are 32 job titles covered under this MRA, ranging from housekeeping, front office, food and beverage services, and food production for hotel division; to travel agencies and tour operator for a travel division.

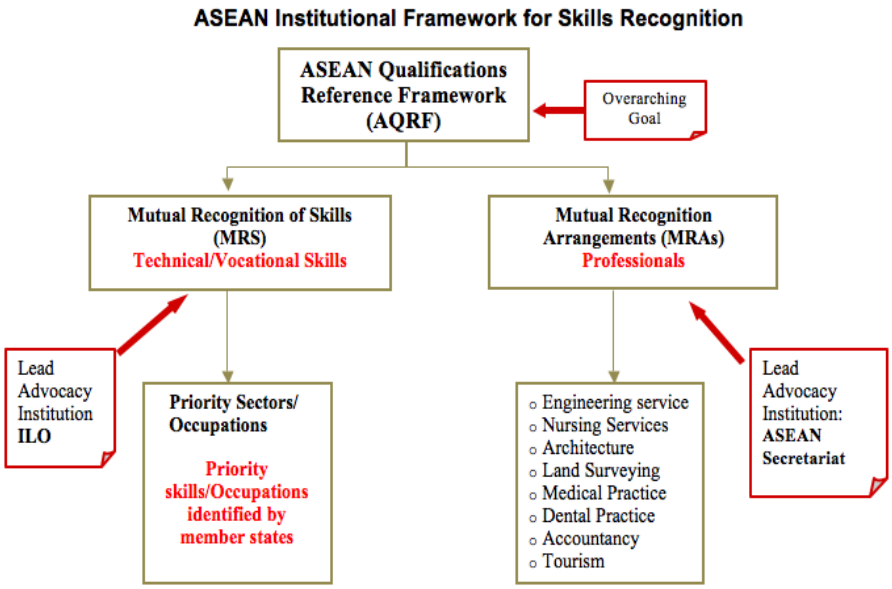
Furthermore, development of the ASEAN Qualifications Reference Framework has been undertaken through a project of the ASEAN-Australia-New Zealand Free Trade Area (AANZFTA). It has had two main objectives:

- Increase trade in services, particularly education services and the temporary movement of natural persons, through the development of mutually comparable national qualifications frameworks based on a common reference framework;
- Strengthen education and training systems within each country through the development of policy frameworks for national qualifications frameworks.

A Multi-sectoral Working Group was established to design the ASEAN Qualifications Reference Framework (AQRF) comprising officials from the AANZFTA Committee on Trade in Services, staff from Ministries of Education, Labour, Manpower Development, and other relevant ministries and agencies involved with skills recognition. The Chair has been the Philippines; with Indonesia as the Vice Chair.

ASEAN members will be encouraged to implement their own qualifications frameworks in the context of the regional recognition framework. This has the support of key ASEAN Ministers: Economic Development, Education and Labour.

Figure 3: ASEAN Skills Recognition Framework



Case study in Belgium

The recognition scheme is implemented by the Consortium de Validation des Compétences, bringing together the five most important public sector training providers, management and labour representatives from various sectors and public employment services (PES). The scheme is also embedded in developments in the educational landscape.

The identification of the occupations initially included into the scheme was carried out jointly by social partners and public employment services (PES). This was meant to ensure that the skills to be validated correspond both to employers and to job seekers' needs. the first phase of the scheme, priority was to given to:

- occupations representing a large number of workers in French-speaking Belgium;
- occupations in sectors experiencing shortages of workers;
- occupations corresponding to secondary level qualifications;
- occupations in sectors that expressed a willingness to get involved in the scheme (participation in the Consortium Committees; involvement in awareness-raising activities; recognition of the Skills Certificates by sector regulations concerning qualification levels, wage levels, and access to training);

One crucial aspect has been the alignment of the standards used in the validation scheme with the occupational and training standards developed in French-speaking Belgium. Engaging PES is seen as key to the success of the scheme. Counsellors in PES play an important role in promoting skills validation. Today,

part of their mission is to inquire with job seekers whether they hold a Skills Certificate, inform them about the existence of the scheme, and provide them with the relevant information.

Case study in Russia

Skills recognition in the Russian Federation exists in the forms of personnel certification, internal personnel assessment and an independent assessment of qualifications.

- Internal personnel assessment is an element of HR work which amounts to a periodic attestation of the worker's being fit for their work and job. What personnel are subject to such attestation is set for each industry.
- Personnel certification is establishment of the personnel's qualitative characteristics compliance with national or international standards.

The system of voluntary personnel certification in the Russian Federation has been in existence since 1997, after the Labour Ministry Resolution On the Development of the Personnel Certification System in the Russian Federation was adopted. For works and services which are subject to technical regulation, use of certified personnel is compulsory. Rostechnadzor, the Russian Federal Service for Environmental, Technological, and Nuclear Supervision, is the controlling body in respect of personnel engagement for work at hazardous facilities. In this case, personnel certification, i.e. recognition of their skills, is viewed by both individuals and employers as a permit to work and not as a step in career development.

Along with areas controlled by Rostechnadzor, there are other industries where personnel certification and assessment systems were created and are successfully functioning – construction, medicine, legal practice, aircraft piloting. There are regional personnel certification systems — in the Samara and Belgorod Regions, in St. Petersburg, the Republic of Tatarstan, Krasnodar Territory, etc.

Despite the fact that personnel certification (skills certification) in this country has been in place for over 20 years now, the system has not yet become integral and uniform. However, currently some radical changes in skills recognition and assessment have become manifest:

- occupational standards as the basis for qualification requirements are being implemented (by the end of 2015, around 500 occupational standards have been approved);
- organization and coordination of skills assessment activities are led by the National Council under the RF President and Industry Qualifications Councils (18 such councils have already been set up);
- the Federal Law On Independent Assessment of Qualifications and Amendment of Certain Laws of the Russian Federation has been drawn up.

Creation of an occupational standards-based independent skills assessment system serves as a basis for developing uniform approaches to procedures and results of skills recognition. This mechanism may be used as a confirmation for the employer that their employees have the qualifications which meet the occupational standard, addressing the skills mismatch in Russia's labour market and improve opportunities to get jobs for unemployed.

The procedure for development, approval and application of occupational standards is set by the Russian Federation Government taking into account the opinion of its Tripartite Labour and Social Relations Commission (Article 195.1 of the Russian Federation Labour Code). Responsibility for coordination of and support for occupational standards development is placed on the Russian Union of Industrialists and Entrepreneurs and the National Agency for Qualifications Development.

Case study in Italy

Example: Egypt-Italy Labour Mobility Agreement

In 2005, Italy signed an agreement on employment with Egypt in order to set norms and regulations for the management of Egyptian labour mobility towards Italy. The Italian Government granted Egypt an annual average quota of 8,000 workers allowed to enter the Italian labour market.

An Addendum to the abovementioned agreement allowed the Egyptian Ministry of Manpower and Emigration to carry out the process of assessing and selecting the potential migrants. The Egyptian Administration became responsible for the drafting of the list of "certified" workers, to be published, through the IMIS informative system, on the pages of the Italian Ministry of Labour website.

Example: International Labour Mobility Programme

The programme's overall objective is to create an integrated system of management for labour migration flows from selected third countries to Italy (the countries with the strongest migratory pressure), thus promoting the practical application of the bilateral cooperation agreements concluded between Italy and the selected countries.

With the technical assistance of the International Organization of Migration (IOM), the programme developed - during the 2011-13 period - a network of Local Coordination Offices (LCO) in 10 "countries of interest" for Italy: Albania, Moldova, Egypt, Morocco, Tunisia, Ghana, Peru, Philippines, Pakistan, Sri Lanka.

Bilateral agreements have been signed with Albania (2008), Egypt (2005), Mauritius (2012), Moldova (2011), Morocco (2005) and Sri Lanka (2011). Other countries have also signed a repatriation agreement and can therefore benefit from a quota for seasonal work.

Case study in South Africa

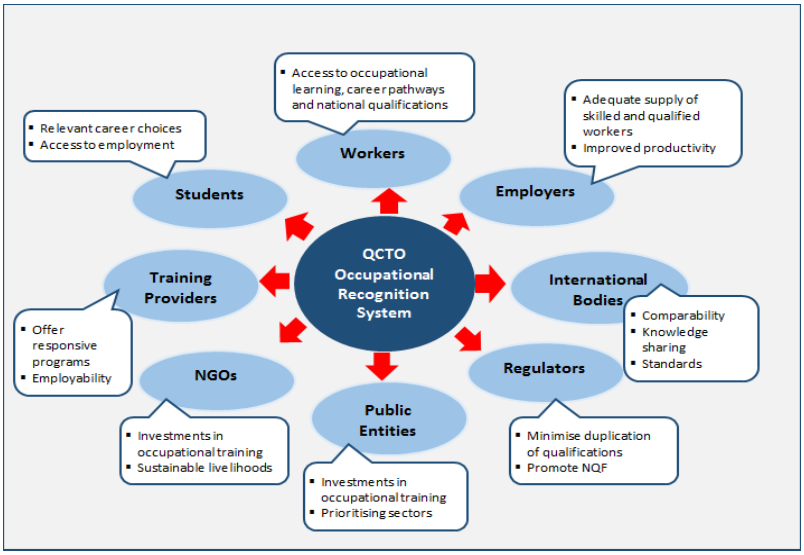
Since 2003, the Quality Council for Trades and Occupations (QCTO) is understood as a key structure which opened the way for the development of an occupational recognition system as a sub-framework of the NQF.

The QCTO tasks include:

- develop qualifications acceptable to industry;
- effective roll-out of the newly constructed qualifications;
- accredit, support and monitor training providers;
- reviewing qualifications for their appropriateness;
- accredit Assessment Centres; and
- certification of those successfully completing qualifications.

The QCTO is, among other things, responsible for liaising with the South Africa Qualifications Authority (SAQA), other quality councils and professional bodies responsible for establishing standards and qualifications, NGOs, regulators, training providers and others.

Chart 4: South Africa Occupational Recognition System



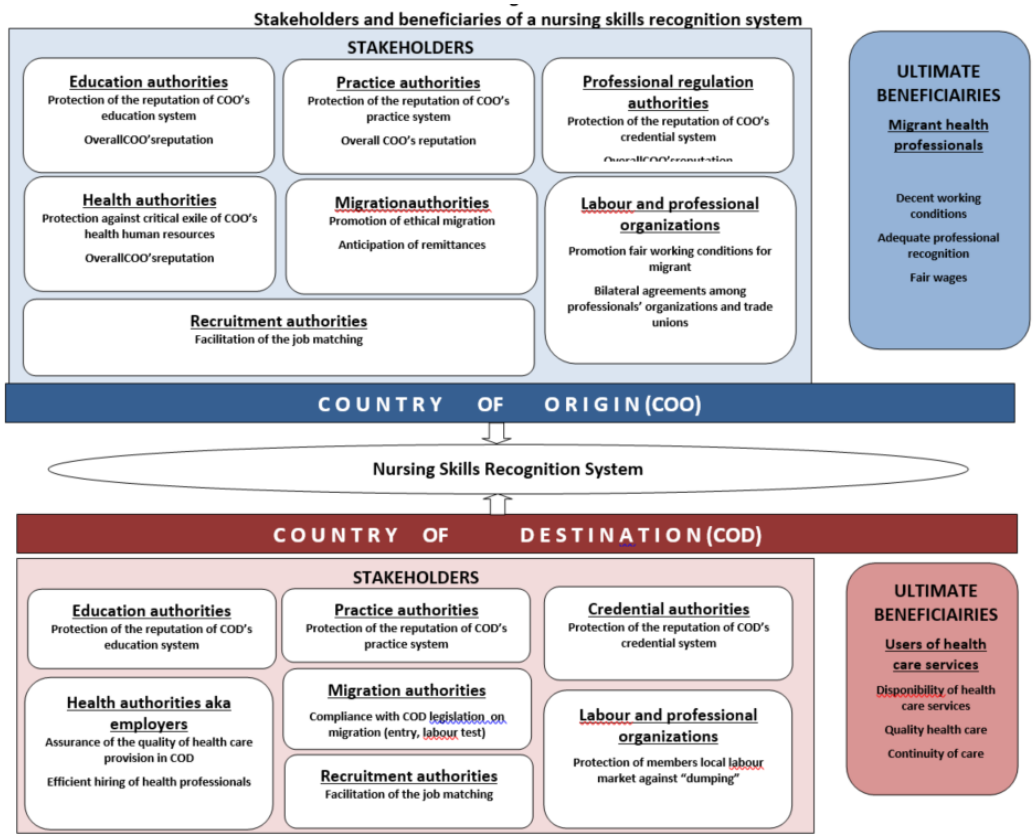
Case study in the nursing sector

The immediate stakeholders of the skills recognition mechanism are the various education, practice, accreditation, health, labour and migration authorities in both countries of origin and destination.

In this regard, it was perceived that the "pan- government" approach is necessary to fulfil the objectives of a skills recognition system as some agencies will have the role of a policy or decision maker, some will be implementers, while others will be knowledge brokers.

Coordination and collaboration of agencies within countries and across will highly be necessary to ensure interoperability of agencies. Other stakeholders include destination country employers and private recruitment agencies as they are perceived to have key roles in facilitating the matching of qualified nurses to relevant.

Chart 5: Stakeholders and beneficiaries of a nursing skills recognition system

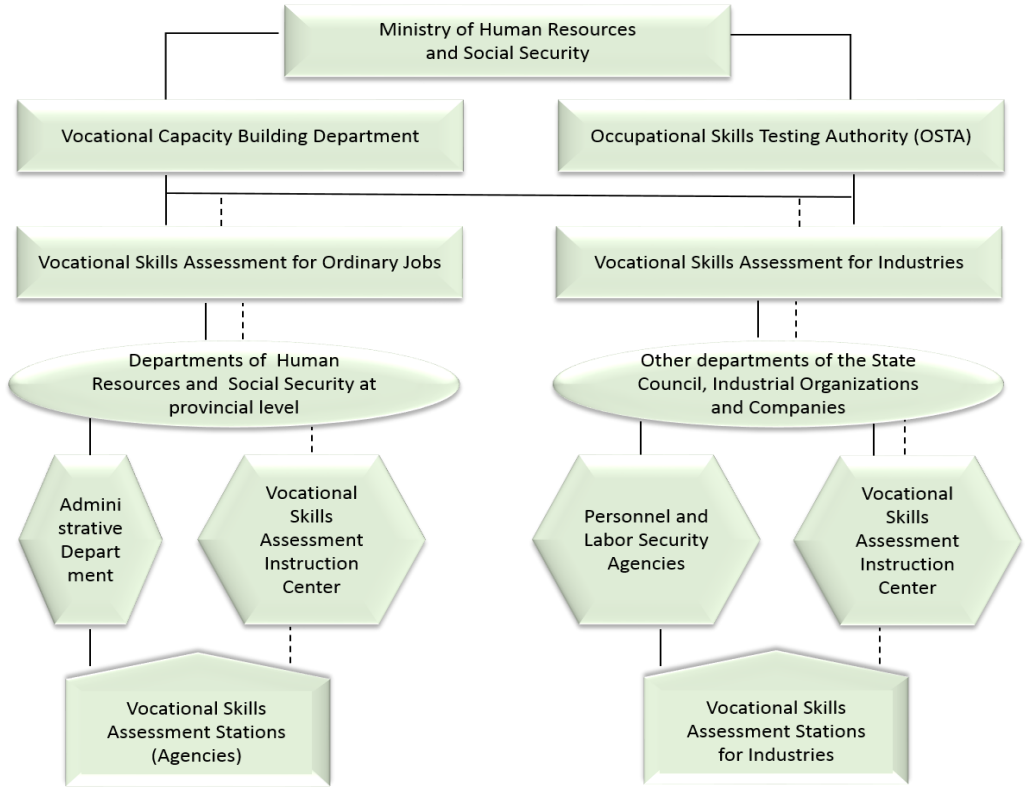


Case study in China

The Ministry of Human Resources and Social Security (MoHRSS) is responsible for the development of national vocational qualifications framework, related policy making and planning, and the overseeing of the implementation of these policies and planning. The Department of Capacity Building within MoHRSS is tasked with formulating policies on skill assessment and qualifications. This skills assessment targets on students as well as adults. The certificates represent a recognition of the workers' occupational skills and competencies, and can be used to support a worker's application for a job, to get employment or to start his/her own business, and can be used by employers as a reference to assist with recruiting and hiring. The aim is to make the certificate has the same value as a diploma from school.

The Occupational Skill Testing Authority (OSTA) under MoHRSS is tasked with day-to-day management and the provision of technical guidance for vocational skill assessment. Provincial Human Resources and Social Security Departments (PHRSSD) and relevant State Council departments (industries, associations and corporate groups), under the guidance of MoHRSS, are each responsible for general management of vocational skill assessment within its area or industry. The organizations and functions of vocational skill assessment in various levels are set out below in:

Chart 6: System of vocational skills assessment in China



➢ Quality and accessibility

✓ Quality assurance

Case study in Ghana

In Ghana, skills are recognised informally through tradition, custom, social norms and social networks. Informal recognition is done at an individual level and the mechanism includes word of mouth, blessing the apprentice by the MC or by a Pastor/Priest. Other modes of recognising skills informally are pouring of libation, performing "setting-free" rites according to tradition and custom., the payment of "Setting-Free" fees to the MC and the provision of some drinks and/or animals to the MC, which are normally crowned with Setting-Free or Graduation Ceremonies.

MC may also issue a Written Note, Statement or Written Certificate to the graduated apprentice. In such a situation the apprentice is recognized by only those who know the MC thereby making the system still informal. Skills may also be recognised informally through family lineage and also by priests from shrines, Traditional Rulers, Pastors, Families and Friends.

Unlike informal recognition where recognition is solely by the MC, skills of graduated apprentices are also recognized semi-formally where recognition is done through a collaborative effort by Business/Trade Associations - through exhibitions, trade shows and trade fairs. Semi-informal recognition may also be done by clients and customers and also through competitions. The Ghana Tourism Authority (GTA) in collaboration with the Traditional Caterers Association and the Ghana Chop Bars Operators Association periodically organise cooking competitions at regional and national levels to give recognition of skills in the sub-sector. Skills may also be recognised semi-formally by trade mark and trade names.

Semi-informal recognition of skills of graduated apprentices may involve registration with a Business or Trade Association. Where Business Associations semi-formally recognise skills and the membership card issued provides access to the acquisition of government licence or permit, then the recognition becomes formal. Access to formal product markets such as supermarkets and shopping malls, cheaper prices and bulk sales granted to Business Associations does not connote formal recognition because it does not provide a job in

the supermarket or shopping mall. Skills that are recognised semi-formally can only be considered formal only if a Government Agency is involved.

For the recognition under projects of the National Vocational Training Institute (NVTI), the assessment includes Proficiency Tests for apprentices who have not followed any course of study but have acquired skills directly from workshops in the traditional apprenticeship system for a minimum period of 3 years. It is 100 percent practicals. NVTI also awards the National Craftsman Certificate which is the advanced form of recognising skills formally through the Proficiency recognition system. NVTI also conducts Trade Tests for candidates who have acquired their skills through formal training in TVET institutions and are able to write a theory test (30 per cent) as well as orals and practicals (70 per cent).

Case study in India

The RPL certification, as being conceptualized in India, would be at par with the certifications following various skill trainings in the country. It will provide both horizontal and vertical pathways to an individual for acquiring additional skills for better livelihoods. Adequate resources will be earmarked under various Government schemes for equitable access to RPL programs. At the conclusion of this pilot RPL program, the Government intends to develop guidelines to ensure quality and consistent outcomes during rolling out of the RPL initiative.

The final assessment conducted by the assessment agencies were in no way different from those carried out for other candidates who go through VTP courses and appear for assessments. In summary the key assessment activities were:

- Brief, advise and instruct candidates on the assessment process.
- Review and authenticate the evidence provided.
- Conduct assessments at designated centres.
- Record results and make certification recommendation, if found qualified.

Based on assessment recommendations, certificates were issued by the SSC to the qualified candidates. For domestic workers, in absence of any SSC, the assessment results were shared with NIOS for validation and issuance of certificates. For the construction sector, the NCVT certification framework was followed.

Case study in Australia

The NIBA offers professional recognition through the Qualified Practising Insurance Broker (QPIB) certification.

QPIB status is awarded to brokers who have achieved a minimum standard of broking skills and knowledge. Extensive research was undertaken within the broking industry to identify essential standards for broking professionals. Many QPIBs achieved these skills through a combination of formal study and experience. A self-study course specifically designed for brokers aspiring to QPIB status was introduced in 1995 based on the national competency standards. NIBA has now expanded this educational program which incorporates training from entry level to managing their own business.

Alternative procedures exist for senior brokers without academic qualifications to gain QPIB recognition on the basis of their extensive experience and prior learning. This is called senior professional assessment. Experienced QPIB applicants must have at least four years of experience as an insurance broker, or seven years of experience in an insurance brokerage or insurance company in a position where they were responsible for insurance advice to the public.

Before being awarded QPIB status, applicants must show they have undertaken 25 hours of continuing professional development (CPD) in the year prior to application.

To maintain their status, brokers must complete 25 hours of ongoing professional education each year to keep up-to-date with developments across the insurance industry.

Case study in Germany

The recognition process for migrant workers starts with a check by the relevant competent authority whether the professional or vocational qualification obtained abroad is equivalent to a German qualification.

The equivalence check takes place on the basis of stipulated formal criteria such as content and duration of training. If differences are identified in regulated occupations, an applicant has to complete the compensatory measures stipulated by the competent authority, i.e. an adaptation period or test, in order to work in the occupation in question.

For non-regulated occupations, appropriate training to compensate for the missing skills listed in the assessment notice is recommended (but it is not provided or paid for by the recognition authority). The

important part of the process is the guidance service, which is provided by ZAV International Placement Service as well as by other institutions.

Case study in the Netherlands

A candidate who wants to reflect his/her prior learning outcomes in relation to a qualification, has to list his/her learning experiences to match with the competences in the qualification s/he has chosen. In an assessment s/he is judged and is given a report stating all the learning outcomes that match with the learning outcomes that are defined for the chosen qualification. With this ErvaringsCertificaat s/he can turn to an awarding body (the exam committee) of a school or university. The outcome of an VPL procedure is foremost an official advice for the candidate with which s/he can go to the awarding body. Only the awarding body is allowed to turn the advice into an official exemption. This awarding body can decide on exemptions in the learning programme. On the basis of these exemptions it is possible to achieve a (partial or full) qualification. Usually, a mix of methods is used in EVC procedures because every situation and every individual is different.

The process of recognition consists of the following parts:

A. **Preparation -** This phase comprises two steps: creating awareness and setting objectives for VPL within the organizational context and at the individual level. These are the critical success factors for the use of VPL.
B. **Identification or listing of competencies through a portfolio -** The participant compiles the portfolio personally. It is a look back at the individual learning experiences and documenting them.
C. **Accreditation and valuation -** It usually happens via observation on the job or by means of a criteria-based interview.
D. **Development -** This is a conversion of the advising received into an action plan of skills upgrading.
E. **Implementation** - in an organization or for an individual.

Case study in Brazil

Provision of recognition services varies significantly by context and provider. For example, accrediting federal system of Certific Net encompasses three groups of members: accrediting institutions (38 Federal Institutes of Technical and Technological Education); eligible entities for skills certification purposes (such as public and private schools, unions, enterprises, NGOs); associated organizations in areas concerned to the Net, such as education, metrology, standardization and/or inspection (including the Inmetro).

Certific Net has initially defined more than 30 skills profiles in areas as construction, tourism, electricity, music and fishing; it has also accredited a few Federal Institutes and Senai for supplying these certifications, registering 2.4 thousand people certified in an initial phase (2010-11).

SENAI has been developing methodologies and supplying recognition services since the 80s, mainly in partnership with private companies and the above mentioned specialized associations. Presently, Senai is the only Brazilian institution accredited both by Inmetro and Certific Net, holding a nationwide certification system (SSCP).

Thus, Senai is able to provide “licenses” for regulated occupations as well as “quality labels” that may be required for other activities.

Third example comes from the nursing sector – formerly low skilled activity, mainly performed by low educated women, barely trained in short term courses. In 1986, a Federal Law (7.498) fixed a deadline (10 years) to upgrade this profile at least to secondary education, including specific training. In 1999, the Ministry of Health (MS) launched the Profae, financed by IDB (International Development Bank) and FAT (Brazilian Workers Fund).

Profae was designed to train and certificate assistant nurses, prioritizing “practical” workers in risk of losing their jobs and applicants for new jobs in public and private health services. In a first intensive phase (2000-2002), over 225 thousand people have been trained and certified by a national “net” formed by around 300 centers (mostly private and public technical schools and universities). This “net” has included 40 schools hold by “RetSus” (National Health System), managed by MS in partnership with Fiocruz (Oswaldo Cruz Foundation) – a prestigious P&D center for health in Brazil.

Case study in ASEAN

Skills recognition will be achieved primarily through the ASEAN Qualifications Reference Framework (AQRF). Member states working with the ILO may use the Regional Model Competency Standards as a vehicle for

achieving an internationally-referenced standard; but the formal recognition will only come through referencing to the AQRF. However, referencing in itself does not provide for labour market outcomes. On the basis of that recognition, ASEAN Ministers will be able to consider declarations of mutual recognition.

The AQRF will enable existing qualifications frameworks and training systems at national level to be related to one another. This aims to increase transparency, support mutual trust, and consequently facilitate the transfer and the mutual recognition of the skills and qualifications of workers, through the acceptance of broad equivalence or comparability of outcomes of national qualifications. ASEAN member states may also adopt the ASEAN Qualifications Reference Framework, in whole or in part, for their own national qualifications arrangements.

The regional framework will serve as a translation device or grid among the qualifications systems of participating ASEAN member states. It will provide a common reference point for members as they attempt to compare qualifications and skills of migrant workers. In the interests of further promoting mutual trust in national qualifications, the ASEAN Qualifications Reference Framework also provides guidance in such areas as the setting of standards for skills and wider personal and professional competencies, as well as the quality assurance of training, student assessment and certification.

The specifications of the AQRF make clear the AQRF levels and level descriptors. The regional framework includes eight levels of complexity of learning outcomes. The level descriptors include the notion of competence which is the ability that extends beyond the possession of knowledge and skills. It includes:

- Cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially;
- Functional competence (skills or know-how), those things that a person should be able to do when they work in a given area;
- Personal competence involving knowing how to conduct oneself in a specific situation;
- Ethical competence involving the possession of certain personal and professional values.

The level descriptors include two domains:

- Knowledge and skills
- Application and Responsibility.

The specifications of the AQRF define quality assurance as a component of quality management and is 'focused on providing confidence that quality requirements will be fulfilled'. To promote quality assurance of education and training across the region, the ASEAN Qualifications Reference Framework is to be underpinned by a set of agreed quality assurance principles and broad standards related to:

- The functions of the registering and accrediting agencies;
- Systems for the assessment of learning and the issuing of qualifications;
- Regulation of the issuance of certificates.

The following quality assurance systems are available to member states, although it is possible for member states to develop other systems:

- The East Asia Summit Vocational Education and Training Quality Assurance Framework (includes the quality principles, agency quality standards and quality indicators);
- The International Network for Quality Assurance Agencies in Higher Education (INQAAHE) Guidelines of Good Practice for Quality Assurance;
- ASEAN Quality Assurance Network (AQAN) - ASEAN Quality Assurance Framework for Higher Education.

Case study in Belgium

In Francophone Belgium, anyone aged over 18, who has acquired professional experience but does not hold a corresponding diploma or certificate, has the right to get his/her skills recognized based on a validation test. The test involves a professional jury at an accredited validation centre.

Candidates are placed in a professional situation typical for a given occupation. All centres use standardized assessment procedures. If successful, the candidate is awarded a Skills Certificate – an official document recognised by the three francophone governments, certifying the mastery of skills that are part of a specific occupation.

Candidates who obtain a Skills Certificate may also undertake further training pathways without repeating part of the training corresponding the skills validated, in the five public training providers. Moreover, the Skills Certificate can be used to obtain a qualification in the adult education sector (if the candidate successfully passes a final test). An important characteristic of the validation scheme is that Skills Certificates are not equivalent to formal VET qualifications.

Case study in Russia

Example of assessment methods: Gas industry (GAZPROM)

The aim of the assessment process is to determine to what extent the student has acquired required occupational competences, level of mastery of operational technologies, efficient and safe work techniques and methods in their respective occupation, achievement of the required productivity, compliance with time limits, and technical specifications, etc. That is why the development of methodological support for conducting qualifying trials starts simultaneously with the beginning of modular vocational training programme development.

The list of qualifying trials corresponding to the training programme modules and the work places to perform them are prepared jointly with the qualified teachers and trainers of the training centres who deliver respective training modules, and such employees of GAZPROM and its subsidiaries who deal with vocational training of workers, also operations managers and other company representatives responsible for personnel development.

Example of assessment methods: Metallurgy

The assessment and certification system in the metallurgical industry is based on:

A. the Occupational Standard as the regulatory framework basis. It was developed on the basis of the draft occupational standard for the Specialist in Metallurgical Production for the ferrous metals industry prepared by the Industry and Energy Expert Club at the request of the Russia Industry and Trade Ministry in 2008.
B. the Competence Model as the methodological basis for aligning the respective occupational and educational standards. It is the same for both the Higher and Secondary VET learning programs and the qualification assessment and certification system.

The candidate's/student's compliance with the required level of qualification is established by benchmarking the results of tests and trials against reference values in the standard measurement materials for testing and certification:

- marks given for tests;
- marks given for performing situational/systemic assignments, including those involving the use of ICT;
- marks given for trials using test benches;
- marks given for trials using simulators.

Case study in Italy

Example: International Labour Mobility Programme

The program focused on:

- Facilitating the skills matching through a) the identification of local private or public agencies that would be able to select the most qualified candidates for the Italian labour market; and b) act as a liaison between such agencies and the Italian employers;
- Facilitating the recruitment of migrant workers, through the delivery of the visa-related documentation, the drafting of contracts and the fulfilment of other administrative requirements;
- Facilitating pre-departure trainings of migrant workers, through the identification and liaison with training agencies, that would be able to deliver high quality vocational training and cultural orientation in order to respond to the Italian labour market needs and assist migrant workers' integration in Italy.

Training those potential migrants who are going to migrate on a temporary basis to Italy from their country of origin is very important. The mechanism for the application allows the employers to make a selection among those who are already prepared for the Italian labour market.

Training of migrant workers abroad

Section 13 of Legislative Decree No.286/98 (Consolidated Immigration Act) provides for the organization of training courses in the countries of origin of potential migrants. The courses include Italian language, information on the Italian labour market and, possibly, specific vocational training on skills for which migrants might be hired in Italy.

The main promoters are: employers' organizations, public and international institutions, and NGOs who have operating for at least three years in the area of migrant protection. The training proposals are assessed and approved by an inter-ministerial committee chaired by the Ministry of Labour and Social Policy. In the annual Decree on immigration, provision is usually made for a number of migrants who have already attended training abroad organized.

Training of migrant workers in Italy

There is another option for increasing the number of migrant workers to align with the labour market requirements of the receiving country. Foreign citizens, who have initiated training in their countries, may participate in specific training initiatives in Italy within an enterprise, thereby gaining practical experience. The visa for study reasons will, in this case, provide the migrant with the opportunity of being employed during the period of practical training.

The promoters are Regions and Provinces, which have to provide a detailed training plan for each individual and establish controls and guarantees for the correct implementation of this plan, which has to be linked to the vocational training already undertaken by the participants in their country of origin. The apprenticeship has to last a minimum of three months - and no more than 12 months - and has to be activated within 15 days after the request of the residence permit.

Case study in South Africa

Quality assurance in the assessment system

The assessment system is made up of the following processes and procedures:

STAGE ONE: Approval of Assessment Quality Partners

STAGE TWO: Accreditation of Assessment Centres

STAGE THREE: Monitoring of Assessment Quality Partners (AQPs)

STAGE FOUR: Quality assurance of external integrated summative assessment through:

- Moderation of examination question papers
- Moderation of internal assessment
- Monitoring the conduct of assessments
- Moderation of external assessment

The assessment process itself

An external nationally standardised assessment is conducted for the issuing of occupational awards as a prerequisite to certification. This ensures that learners who have achieved the required levels of competence in each curriculum component are required to integrate their learning and display applied occupational competence across a range of variable contexts.

In order to qualify for external assessment, the candidate must first pass the knowledge, practical and workplace components of the qualification. A minimum of 20 per cent credits are required for each of the three components (knowledge, practical skills, and work experience). This means that the remainder of 40 per cent of the credits can be added to any component to support the purpose of the qualification.

Table 1.: Models for assessment

Written assessment	**Evaluation of practical tasks**
• Invigilators download examination papers or computer-based tests. • The papers are marked off site or computer scored. • Suitable for qualifications with huge knowledge base and large number of learners. • Decentralised approved sites are required.	• Registered assessors evaluate performance of practical tasks in a simulated work environment and probe actions with questions. • Suitable for qualifications with huge practical skills base and large number of learners. • Decentralised accredited centres are required.

Evaluation of a project and/or assignment	**Evaluation of on the job performance**
• Panel of assessors and additional expert practitioners evaluate a report on a project or an assignment and probe with questions. • Suitable for qualifications with equal amount of practical skills and work experience or knowledge and smaller number of learners. • Decentralised approved sites are required.	• Registered workplace assessors evaluate on the job performance through observation and/or questioning, using specified assessment criteria requirements. • Suitable for qualifications with huge work experience component in specialised environments and variable number of learners. • Approved workplace sites are required.

The QCTO will issue two types of certificates:

- Occupational Certificates: for learners who have proven competence against occupational qualifications (120+ credits) or part qualifications (25 - 119).
- Trade Certificates: for trades recorded on the National Learner Record Database but without associated occupational qualifications.

Case study in nursing sector

The Assessment

The methodology employed in the assessment of the comparability of the nursing skills consists of a thorough assessment of the comparability of the nursing curriculum and in a thorough assessment of the comparability of the nursing education outcomes. Both assessments used quantitative and qualitative data.

It also required continuous and meaningful involvement of an array of nursing stakeholders to attain success and sustainability of the system.

Detailed steps of the assessment included:

1. Development of country profiles on the basis of desk reviews and validation of these profiles by team of nursing sector consultants
2. Validating field missions in Norway and in Philippines, including face-to-face interviews and focus groups with stakeholders
3. Analysis of comparability of qualification frameworks
4. Curriculum mapping using a "Education comparability tool" (ECT)

Figure 7: Education comparability tool (ETC)

5. Validation of the gap analysis
6. Report on the assessment
7. Dissemination of results

(Anticipated) Implementation

Ideally the relevant stakeholders involved in the design of the comparability scheme should also be the same involved in the eventual implementation and monitoring of the same. For every stakeholder, a mapping has been done to assess its relation to and interest in the scheme, type of involvement in the implementation and possible issues or constraints. Example of this assessment (see study for full list):

Table 2.: Example of stakeholder assessment

Stakeholders	Relation to the scheme	Interest with regard to the scheme	Type of involvement in the development and eventual involvement in the implementation of the scheme	Issues with regard to the development and eventual implementation of the scheme
Commission on Higher Education	Ensure that the Philippines nursing curriculum is adequately reflected in the comparability scheme and continuously updated as needed. Key resource with regard to the policies, design and implementation of the nursing curriculum.	Recognition of academic preparation of Filipino nurses. Promotion of the reputation of the Philippines nursing education system. Promotion of a fair treatment for Philippines nursing graduates.	***Development*** Data provider on the nursing curriculum. Validation of country profile. Validation of Comparative Study of Nursing Education and Learning Outcomes. Participant in the international stakeholders in Manila and Oslo. ***Anticipated implementation*** On-going monitoring of the ILO-DWAB and CGFNS International process,. Should be involved in the future monitoring of the implementation of the scheme.	Expertise and technical skills in developing and implementing the scheme, Resource constraints such as human resources to undertake the skills assessment, Degree of collaboration or resistance among and across relevant government agencies in Philippines and Norway. Levelling-off of need for such system in both countries

Conditions required to secure technical soundness of the nursing skill assessment

1. Credibility of the authors of the skills recognition system. Given the sensitivity and complexity associated with the comparative assessment of nursing education and practice between countries, the choice of the technical partner to undertake the research matters a great deal. The credibility of the organization to undertake the assessment must be established at the on-start of the process.
2. Transparency of the system. The methodology used in the assessment of the comparability of the nursing education must be made available for all stakeholders in order to ensure buy-in.
3. Capacity building of the stakeholders. Establishing the comparability of a two nursing education system is a complex affair which further more requires an independent and transparent approach. Given the anticipated need to continuously update the nursing skills recognition system as changes are made at the country level, relevant stakeholders in the source and destination countries may want to build their capacity to keep the system up to date. With the caveat that it may not deter eventual bias, these internal capacity building efforts have the benefit to avoid creating a dependency relationship with the initial author of the comparative assessment.
4. Design of a bridging programme for migrants. Based on the results of the comparative assessment, stakeholders should agree on the eventually needed bridging programme to fill identified gaps. This bridging programme should then be known to all relevant stakeholders and migrant workers. It was opined that even bridging programmes should be part of a broader skills recognition system.
5. Presence or absence of National Qualification Frameworks. The Philippines and Norway nursing skills comparative study benefitted from the fact that both countries have national qualification frameworks which guided the assessment made by CGFNS International. According to CGFNS International the presence of qualifications frameworks was helpful as these primarily define the educational system within individual countries and/or regions and illuminate the comparability of educational systems across borders. They are designed to improve transparency and facilitate the portability of credentials.

Case study in China

The system

OSTA – The Occupational Skills Testing Authority - is responsible for compiling and revising the National Occupation Classification Code. OSTA organizes the formulation of National Occupational Skill Standards, and promotes the setup of such system. OSTA is responsible for developing and monitoring item pool, maintaining the test resources.

It also organizes the formulation of the standards for public occupation skill testing stations, undertakes qualifications accreditation; organizes the exemplary training of evaluators, supervisors and managers. It also provides technical guidance to the whole proves management of vocational skill assessments, and promotes the information service. OSTA is doing research on measures of evaluating vocational skill in enterprises, technical schools and specific fields, and pushes forward the establishment of multivariate skill recognition systems for skilled talents.

Vocational Skill Assessment is an activity for assessing a worker's vocational skills based on national occupational standards and conducted by assessment organizations approved by the government. These assessment organizations are set up by industries, associations and local governments.

There were more than 9,000 public occupation skill testing stations in China in 2014.Under the guidance of OSTA, these testing stations manage occupational skill assessments and provides testing fields, equipment and detection means for testing activities that meet the quality standard. Specific work tasks include:

- Accepting the occupational skill assessment application.
- Organizing applicants to go through assessment and evaluation according to the required time, place and methods.
- Collecting testing scores and submitting to OSTA.
- Providing testing reports to OSTA and giving assessment opinions to the assessment team's work.
- Assisting OSTA to issue vocational skill/qualification certificates to successful applicants.
- Being responsible for the testing advisory services and information statistics, etc.

Quality assurance

The quality control system consists of three major systems: assurance system for the quality of assessment, supervising system for the quality of assessment, and management system for the quality of assessment organizations.

- The assurance system for the quality of assessment refers to the establishment of a mechanism that includes testing station management, management of the assessors, test questions, procedure, certificates, with all these aspects supporting each other and under a unified management.
- The supervising system for the quality of assessment refers to the mechanism of appraising and supervising, and providing guidance to skill assessment organizations and their performance in providing assessment. Administrative supervision, technical inspection, public monitoring are the three key methods.
- The quality management system for skill assessment organizations refers to a long-term quality control mechanism for self-inspection and self-improvement set up within various levels and types of assessment organizations according to some unified and standard requirements.

✓ Accessibility: Financing of skills recognition

Case study in Ghana

The National Vocational Training Institute (NVTI), which is responsible for system aiming at recognition of skills of informal apprentices, receives funding from the government for staff salaries and other running cost of NVTI staff to execute their mandate. However, beneficiaries of skills recognition systems pay fees to NVTI which constitute part of their internally generated fund to support skills recognition activities.

The Ministry of Finance and Economic Planning provides funding, logistical and technical support for the training and certification of MCs apprentices.

Apart from initiatives by NVTI, there are also other initiatives under COTVET through the National Apprenticeship Programme, the Ghana Skills and Development Programme (GSDP) and the Skills Development Fund (SDF) that are also being supported by Government of Ghana (GOG) and Development Partners (DP) to reform the traditional apprenticeship system where needs assessments are done. Besides these initiatives, there are also other agencies involved in reforming the apprenticeship training where needs assessments are considered.

Other sources of funding of skills recognition activities include specific projects financed by International Fund for Agricultural Development (IFAD), African Development Bank (AfDB) and The Social Investment Fund (SIF).

Case study in India

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the Prime Minister's flagship, outcome-based training scheme, which provides monetary reward to trainees who are successfully trained, assessed and certified in skill courses run by affiliated training providers. The scheme is being implemented through MSDE / NSDC with total reward budget of INR 15 billion for 2.4 million trainees (1.4 million fresh trainings and 1 million Recognition of Prior Learning).

The training will be done against standards i.e. Qualification Packs (QP) and National Occupational Standards (NOS) for specific job roles formulated by the industry-led SSCs. Another feature of PMKVY RPL is trainees with prior experience or skills and competencies will also be given monetary rewards for undergoing assessments. This will be an important step towards recognising the skills possessed by workers working in the informal sector and their inclusion.

Case study in Germany

The development of the system is financed by the Federal Ministry of Education and Research. The recognition procedure itself is usually subject to a fee. The amount is based on the fee schedules established by the Federal States or chambers and will vary depending on the cost and effort involved in completing the respective recognition procedure.

Based on the experience the Federal States have gathered so far, the fee for the procedure usually ranges between EUR 100 and 600. However, this can vary for the same profession between different competent authorities. As a rule, the applicant seeking recognition has to bear the costs (for example, fees, translations and authentications). The cost of documentation that is required in submitting an application depends on its scope.

The unemployed and job seekers may get financial support from the Public Employment Service. It applies for both skills recognition (especially in the case of recognition of foreign qualifications) and for subsequent training if it is recommended.

Case study in the Netherlands

Training Funds often finance agreements on VPL. Both employees and employers pay a small amount of their incomes to these sector funds, which were originally set up to support educational initiatives for employees. In addition, private sector institutions may just like public institutions offer VPL if they are registered as a VPL provider with the Knowledge Centre and adhere to the quality code.

Case study in Brazil

The ways of financing of skills recognition in Brazil also varies, depending on type and purpose of recognition. Those initiatives with public driven needs – like safety, security, environmental issues etc. – are fully public funded.

Private providers of skills recognition naturally count on private financing, but are often subsidized by public incentives and funds for innovation and modernization. Their recognition systems benefit almost exclusively actual or potential employees sent by the enterprises.

When it comes to skills recognition certificates as a "quality labels", these are still supplied in a very small scale, since they are almost exclusively demanded (and financed) by enterprises that send employees or candidates to be recognized. Costs, complex tests and lack of time are seen as main obstacles for expanding individual demand.

Case study in Belgium

The scheme is funded through subsidies granted by the three francophone governments. Public funding has been maintained at a stable level since the inception of the scheme.

However, while the number of candidates seeking to have their skills validated has steadily increased over time (on average, an annual 10 per cent), this has not been matched by a corresponding increase in the funds available.

Case study in Russia

Examples of skills recognition in technical fields driven by major employers such as Gazprom are usually financed directly by employers, although the support of the government may play role here, too. Government also finances recognition initiatives that address labour market challenges related to unemployed.

The comprehensive system of assessing and recognizing competences and qualifications under the National Qualifications Development Council made up sector sub-systems that is self-financed from the costs covered by candidates who want to have their competences and qualifications validated.

Case study in South Africa

Funding remains a challenge for the system. There is a shortfall in the QCTO funding resulting in inability to implement its programmes and develop its staff component to be fully operational; need to use the DHET infrastructure, policies and systems under a Memorandum of Agreement (MOA) and delegating some of its functions to the SETAs, the National Artisan Moderation Body (NAMB), and other bodies; and in insufficient budget to pay for all qualification and standard- generating processes.

Case study in China

Usually, individual pays for the assessment by him/herself, the employer and government may offer subsidies or other benefits according to their requirements in different situation.

Summary of approaches in private-driven recognition systems

Both recognition and training are often provided by bodies/organizations that operate on a commercial basis, with main value added being the competitive edge that the skills certification provides its holders on the labour market.

The cost of skills certification and training is therefore substantial. As it is supposed to give them advantage, individuals are usually expected to bear the cost of training and certification. This would, however, limit the target group of potential users too much and the model may not work from a business point of view. Therefore a strong involvement of employers takes place here, too. They can cover substantial – or even full – cost of recognition/training, but they must believe in the positive impact of the service on their organization.

➢ Reaching out: The awareness challenge

Case study in Ghana

Presently there is no effective Labour Market Information system in place to ensure that skill recognition reach out to users and labour market actors. Individuals, employers and stakeholders complained that the Labour Department under the Ministry of Employment and Labour Relations which has the mandate to provide vocational guidance, counselling and labour market information, appear understaffed to carry out its mandate effectively.

In the absence of information to facilitate transition into the labour market, employers indicated difficulties in finding qualified and experienced artisans while artisans have to visit work-sites in search of jobs.

The result is that with respect to the publication of results and outcomes from skill recognition, employers and stakeholders are generally not aware. Key stakeholders identified Exhibitions and Trade Fairs as more effective mechanisms of creating awareness of skill recognition. An emerging trend in the labour market is organisation of Job Fairs and Career Events which give opportunity to employers to share corporate information about existing vacancies to job seekers and possibly offer recruitment. The evolution in ICT has also made it possible for the free listing of jobs online with database on available vacancies and skills required.

Graduation Ceremonies which are well patronised and publicised have become an important feature in skills recognition promotion. Trade Associations require members to display certificates issued to them in workshops and offices. District Assemblies and other revenue agencies also require that clients display licenses and permits issued to them in their workshops and offices. Some of these recognition certificates, permits and licenses are embossed with passport size pictures of beneficiaries. It is therefore not uncommon to find an array of certificates, permits and licenses lined up on display of walls in workshops and offices of users of skill recognition.

Case study in Australia

Awareness of the QPIB is ensured by the very status of the NIBA, which covers over 90 per cent of the medium and smaller insurance brokers in the country.

The demand for QPIB certification has grown rapidly. For example in 2014 there were 4,659 individual NIBA members (NIBA 2015), while a year before this number stood at 4,286 (NIBA 2014). It is now operating in New Zealand and Singapore and has been used as a model for setting up similar professional practice and recognition schemes among a number of other broking associations internationally. NIBA is a member of a number of international broker groups which have annual conferences and the QPIB system has been a source of interest to others for some years. It hosts delegations visiting the system from time to time.

From a labour market perspective there is a constant growth in the number of individuals that want the designation – it is higher than the Australian Securities & Investment Commission (ASIC) compliance requirements. Most employers recognise that their staff should become QPIBs if they going to progress in the sector. The QPIB system is therefore very well established in the industry and it provides a professional edge which helps members to position themselves positively with the media, government regulators, consumer bodies and the insurance industry. For example, QPIB status also becomes a selling tool for individual members. It allows them to promote their expertise to existing and potential clients. Brokers can also use the QPIB insignia for point of sale display and on business correspondence.

Case study in Germany

A new website "Recognition in Germany" has been developed in order to provide a one-stop shop information centre, focusing mainly on individual users, but also on employers and stakeholders that have influence on the system. For individual users, it provides information that can help them to understand the recognition process and to orientate themselves.

As the main target group are foreign nationals, the website is constantly improving its availability in other languages – another proof that use of labour market data (in this case information relating to which countries migrant workers are mainly coming from) represent important source that shapes the skills recognition system and thus increases the probability of its positive impact. Currently the website is available in nine languages and also in simpler German language for those who have some – but limited – knowledge of it.

Again from an individual point of view, the website provides information on success stories of people going through the recognition process and how it improved their chances to find better jobs, guidance related to working in Germany, signposts to counselling providers, information on legal basis and on recognition procedure itself and most importantly – information on occupations covered and on authorities that may

provide the skills assessment. The website has recently produced a new app for Android, iOS and Windows devices. It is available in German and English as well as in the five major languages spoken by refugees (Arabic, Dari, Farsi, Tigrinya and Pashto).

Case study in the Netherlands

The information and guidance practitioners in the Netherlands are raising awareness of the potential of VPL for users and stakeholders. They are well informed about validation initiatives and practices since they are working on all levels of stakeholdership and in every domain of the learning and working systems to which they need to link people (their customers).

They focus on the main motivation for interest in VPL, which are based on a diversity of motivators, mainly employability- and qualification-oriented.

Also, thanks to the successful introduction of the VPL Quality Code there is now a better overview of the quality procedures applied to vocational competence-standards in VET and higher education.

Case study in Brazil

Building awareness of skills recognition is done in several ways in Brazil, once again depending on the type and focus of the service. Skills recognition focusing on health and occupational safety – one of strongest drivers in Brazil – is promoted by organizations dealing with working conditions, labour inspections and related regulation.

When there is a public need for skills recognition as a tool for securing of higher quality service and products (such as in the health care) or as a tool for combating unemployment and informality, government, recognition providers and employers promote it together.

Skills recognition towards improving of work efficiency and productivity in private sector is then promoted mostly by providers in close cooperation with employers.

There is also a strong promotion to encourage people from preferring of certified services and products to those uncertified – thus supporting labour market impact of professional skills recognition. But consumers' decisions are still mostly driven by lower prices and personal references and this makes demand for skills recognition and its perceived value for individuals and entrepreneurs less appealing.

Case study in ASEAN

The ILO has also been collaborating with the ASEAN Secretariat to support advocacy and awareness raising activities concerning the AQRF. The ILO has provided support to AQRF meetings and capacity building workshops and has undertaken to support socialisation of the AQRF with the private sector, particularly with the federations in selected key industries.

The ILO is also working with employers in ASEAN countries to take stock of the current linkages among national employers' organisations and with the ASEAN regional employers' organisations such as the ASEAN Constructors' Federation. The stock taking will also be utilised as a tool to raise employers' organisation awareness of skills standards and competency-based approaches to TVET.

However, it is still clear that the impact of the ASEAN Economic Community is yet to be widely understood in the region. A 2012 ILO survey found that 76 per cent of the general public lacked a basic understanding of ASEAN. A separate survey of Thai professionals, conducted in 2012 by the University of the Thai Chamber of Commerce found that only 30 per cent of engineers and 20 per cent of nurses know about the AEC and understood its implications. It is doubtful that many workers with modest skill sets will be aware that ASEAN-wide skills recognition may be possible in the future. Another ILO survey of ASEAN employers on skills competitiveness carried out in 2013 showed that only 34 per cent of local and regional enterprises were aware of the AEC; and that many enterprises neither understood nor knew what to think about the AEC. There is much to be done.

Case study in Belgium

PES are the primary channel to reaching individual users. Job seekers have been the main target group of the scheme since its inception. Validation centres also provide information to anyone interested in the scheme. Prior to registering for a test, guidance is provided to candidates to assess their chances of success.

Other ways to reach potential users include the Consortium website, the diffusion of information material, targeted emails to job seekers, and media campaigns. As part of the Year of Competences in 2013 (2013,

Année des compétences), a number of initiatives promoted the various ways in which citizens can get their competences recognized. One of the outcomes was the creation of an online portal providing information about all types of validation procedures in Francophone Belgium.

Case study in Russia

Involvement of real economy sector representatives to develop assessment methods and to conduct assessment of candidates' qualifications is viewed as a significant positive factor of quality assurance, fairness and objectiveness of assessment procedures and therefore enhancement of employers' awareness and trust to certificates/diplomas awarded by qualification assessment centres.

Case study in South Africa

The system is a relatively new innovation. A number of marketing and communication activities are being undertaken to keep stakeholders informed about occupational qualifications development and assessment processes:

(i) national road shows are held in all nine provinces;

(ii) a website has been developed providing vital information;

(iii) a management information system has been installed;

(iv) a marketing and communication strategy has been developed;

(v) QCTO participates in major exhibitions and produces a range of printed materials.

Case study in nursing sector

Across these stakeholders and beneficiaries, respondents suggested that generally information about the anticipated skills recognition scheme can be done through formal structures for policy consultation and representation. Consultative bodies and the conduct of tripartite dialogues as well as traditional means of disseminating information thru information drives, tri media campaigns (advertising via television, radio and print media) and social media.

As the migration of health professionals and nurse in particular, is susceptible to hamper the ability of any source country to deliver essential health services, the ILO-DWAB project did not design a specific outreach strategy targeting possible nurse migrants to Norway. Migration in the Philippines has reach proportion such that little information is needed to entice young professionals to an international career. It was estimated by the ILO-DWAB project that no additional promotion of the existence of a skills recognition scheme was needed. In other circumstances, promoter may have to design outreach strategy to ensure that the skills recognition scheme reach its output and targets.

➢ Measuring the outputs and impact of skills recognition systems

✓ Measuring outputs

Case study in Ghana

The skills recognition system in Ghana monitors regularly its outputs through various means, like household surveys, employer surveys and screening of recognition participants.

Case study in India

The sectors and number of candidates to be covered under the evaluation program was pre-determined in consultation with NSDA. In order to evaluate the impact of the RPL assessment, tracer calls were scheduled to the candidates who qualified in the assessments.

The call center was tasked with making three attempts to reach the candidate at different time-of-day, if the first attempt failed. Calls were to be made in regional language as required by the candidate profile. Audio files of all call records were to be maintained for audit purposes.

First round of calls were finished and they will be followed by a second tracer round after 10 weeks. This case report is based on initial findings and implementation experiences gathered so far from the ongoing first round of calls.

In all, there were 3,300 attempts to reach candidates, of which there were 1,020 responses.

Table 3: Sectors and number of candidate for RPL evaluation services

Sector	Sub-sector	Candidates being attempted to be covered in the study	Candidates covered (till 19th October 2015) in ongoing first tracer study round
Agriculture	Banana growers	400	209 (through calls)
	Dairy farmers	400	
	Poultry farm workers	200	
	Coffee plantation workers	400	200 (through field visits)
Domestic workers		700	123 (through calls)
Gems-Jewelry workers (two job roles)		800	366 (through calls)
Health sector workers (two job roles)		100	37 (through calls)
Construction sector workers		300	85 (through field visits)
Total		**3,300**	**1,020**

Case study in Australia

The NIBA monitors its activities through screening of members, interest in and participants of their training courses, levels of renewals of QPIB memberships as well as from employer surveys.

Case study in Germany

The monitoring of the migrant skills recognition system in Germany is currently based on surveys, which are carried out on a yearly basis by the Federal Institute for Vocational Education and Training (BIBB). In 2014, surveys were carried out by the Chambers of Industry and Commerce and Chambers of Crafts and Trades. In addition, studies were undertaken in four selected healthcare occupations to gauge implementation at federal state level. Labour administration institutions and bodies offering guidance services for adult migrants were also interviewed. Further to this, there was a telephone survey of just under 5,300 companies on the topic of recognition of foreign vocational qualifications.

The success rate of individuals going through the recognition process: The figure now stands at 96 per cent. The year before it has been just 76 per cent - this is a tremendous improvement. Given perceived difficulties for migrants (related to understanding and orientation in the recognition scheme), this indicator is quite important for measuring of impact of recognition arrangements.

List of occupations and number of successful recognition procedures for them: This can be used for assessment whether the recognition system really helps in areas in which it was intended to help – skills mismatch, labour shortages etc. Again, the case of Germany shows high relevance of the recognition outcomes and labour shortages: around 60 per cent of successful recognitions were in occupations with most significant bottlenecks like health care occupations or other high skilled specialists.

Reasons for which individuals opt for recognition procedure: 40 per cent claim this is because they want to have their chances for better jobs increased and 33 per cent because for their occupation it is mandatory.

The most frequent answer may also indicate confidence of individuals in quality of recognition process and its value on the labour market.

Case study in the Netherlands

There is a regular monitoring of activities under the Quality Code, concerning the quality of the accredited VPL-providers.

There is incidental research into the quantity, impact and quality-aspects of VPL. Research is also carried out into the success and failure factors of the VPL-market and its effects for the individual and the organisation. The main outcomes of this research were:

- There are in principal no barriers to the provision of exemptions for examinations and/or tests.
- There are no barriers to the provision of exemptions for educational components.
- The quality of EVC providers and the Ervaringscertificaat deserves continued attention.
- The quality of the evaluating organisations must be secured.
- Professionalisation of members of examination boards is very important.
- There should be more opportunities for further development after the issuing of an Ervaringscertificaat.
- The interplay between VPL-providers and examination boards can be improved by better information.

Case study in Brazil

Given the wide array of recognition types and providers, there is no overarching monitoring system of skills recognition in Brazil and significant part of it cannot be tracked. Monitoring and evaluation practices are restricted to a few institutions and programs. However, many providers keep a positive image among individuals or enterprises.

For example, SENAI records 11,000 of certifications (2011-2015), Profae in the nursing sector 225,000 and has plans to certify 700,000 technicians for health services until 2018, Prominp – serving the oil and gas value chain in Brazil – certified (with SENAI) 99,000 people until 2014.

Case study in ASEAN

As this skills recognition framework is still in development, no monitoring and evaluation system is currently in place. Once the features of the AQRF and its operating systems and structures are settled, it will be desirable for monitoring and evaluation systems to be established by the ASEAN Secretariat to measure and report on the labour market outcomes of the skills recognition system. It will be important to measure outcomes and to have data on issues and pressure points so that remedial action may be taken by ASEAN Ministers.

Case study in the Belgium

In 2014, 2,696 candidates took part in validation tests in the 48 accredited validation centres providing validation in 39 occupations. The overall target for the number of validation tests had been set at 2,073. In total, 72 per cent of those tested were successful in obtaining their Skills Certificate.

Almost half of the tests correspond to the occupations of housekeeper and administrative employee. In total, more than 2,400 certificates have been issued validating skills in these two occupations since the launch of the scheme. Other occupations corresponding to a large number of certificates include computer technicians and accounting assistants.

The candidates' profile is as follows:

- The average age is 36 with a gender breakdown almost equally split (47 per cent women to 53 per cent men).
- Two thirds are unemployed, 26 per cent are in employment (independent, or employed). This breakdown has remained fairly stable over the past years.
- 40 per cent of candidates have an education level below or equal to a CESI (certificate of lower secondary education).

Since the launch of the scheme, more than 15,000 certificates have been issued in total, covering 13 sectors. The consortium has produced validation standards covering 54 occupations. The success rate of candidates has remained stable over time. Most importantly, statistics produced by the Consortium show that candidates' chances of success are not influenced by their existing level of education.

Overall, perceptions of participants were positive: 93 per cent were satisfied with the scheme. The strong points highlighted by respondents were the support provided (e.g. guidance), the quality of the procedure and, to a lesser extent, the positive impact on labour market integration.

Case study in the Russia

The results of monitoring conducted by the National Agency for Qualifications Development in 2014 as part of the project on Development of a System of Monitoring Formation and Functioning of Qualification Certification Centres in which organisations from 26 constituent members of the Russian Federation took part suggest that, for the time being, employers are more interested in skills assessment than individuals.

Analysis of qualitative and quantitative composition of initiators (those who come up with an initiative to assess and certify the skills of individual candidates) and candidates (those who go through the assessment and certification procedure) shows that generally it is employers who act as initiators (92 per cent), and employees who act as candidates for assessment (87 per cent).

Among assessment and certification initiators, there seem to be a few clearly distinguished groups. Apart from employers, they are educational institutions (2 per cent), and individual candidates themselves (6 per cent). Among those who go through the assessment and certification procedure, apart from employees, there are unemployed Russian citizens (2 per cent), graduates from VET institutions (5 per cent), students of VET institutions (6 per cent) and citizens of other countries (under 1 per cent).

Case study in the Italy

Experiences with skills recognition projects in Italy show, that when piloting skills matching initiatives, there must be a sustainable approach - otherwise there is no impact. Attention should focus on building on existing project results rather than on starting new initiatives from scratch. There has already been considerable investment in both human and financial resources, and even though some of it might have been lost - due to high turnover in the public sector in the countries of origin for instance - the effort should concentrate on reinforcing existing initiatives. It is necessary to strengthen the implementation of lessons learned and good practices at a systemic level in order to avoid an ad-hoc approach.

Case study in the South Africa

Monitoring and evaluation of the occupational recognition system entails the following:

- a five-year strategic plan and annual performance plan (APP) for the QCTO is developed;
- a system for the ongoing monitoring, evaluation, quarterly and annual reporting of the development of occupational qualifications is developed and implemented; and
- monitoring and evaluation of Quality Assurance Partners through the establishment of a monitoring and evaluation team.

A system for the ongoing monitoring, evaluation, quarterly and annual reporting of the development of occupational qualifications is developed and implemented:

In terms of completions, the QCTO has targeted that at least a 5per cent annual increase in the number of learners registered on and successfully completing new occupational qualifications, once these qualifications are registered on the NQF.

The following have been achieved by the QCTO at the end of the 2014/15 financial year.

- 28 Assessment Quality Partners were approved.
- 44 qualifications were registered and available to be utilised.
- 5 037 had completed apprenticeships and received QCTO certificates.

Case study in the China

During the National "Twelfth five-year" period (2011-2015), the main task of vocational skill assessment is:

- develop the policies and regulations,
- innovate and deepen foundation for the work,
- promote the scientific and standardized development of vocational assessment system,
- to provide strong support of technical talents for promoting employment and economic and social development.

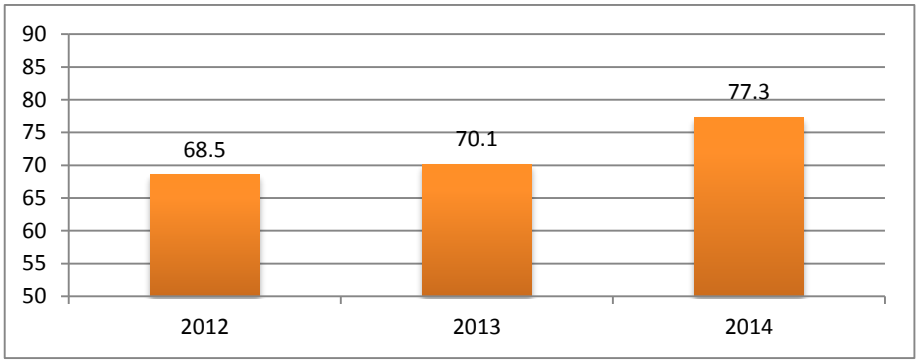
By 2015, it is estimated that there will be 90 million people accept vocational skill assessment services, 70 million skill workers obtain the vocational skill certificate, more than 34 million skilled personnel above

advanced level, including 1.4 million senior technicians, 6.3 million technicians and 26.3 million senior workers.

Spotlight on monitoring system: Workforce Skills Qualifications system in Singapore

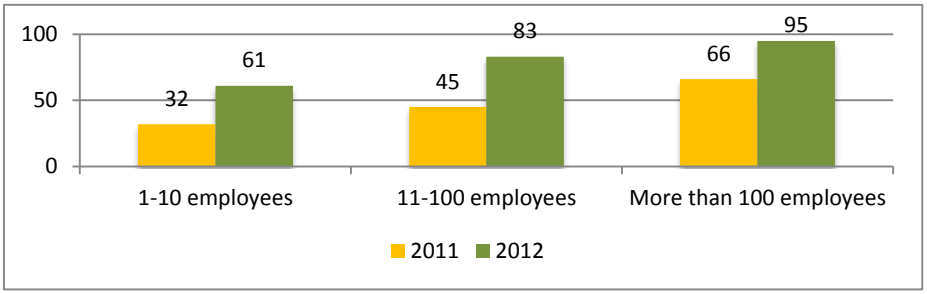
Singapore's Workforce Skills Qualifications (WSQ) system measures awareness levels by the Awareness and Adoption Survey. In 2014 among 10.5 thousand employers found that the awareness rate is climbing steadily, reaching 77.3 per cent in 2014:

Figure 8. WSQ awareness rates 2012-2014



The awareness rate of the recognition system decreases with establishment size. As the Singapore's well promoted and established skills development system WSQ (of which skills recognition is one part) shows, especially small establishments may not simply know there is such service in place.

Figure 9. WSQ awareness rates 2011-2012 by company size (in per cent)



Source: Workforce Development Agency (WDA). 2015. Factsheet on WSQ Surveys 2014: Awareness and Adoption Survey and Outcomes Evaluation Survey (Singapore).

✓ Measuring impact

Case study in Ghana

Use of skills recognition

Key stakeholders in Ghana skills recognition system use it for following purposes:

- Government through its designated regulatory bodies such as Food and Drugs Authority and the Ghana Standards Authority uses skill recognition to monitor the quality of goods and services that are produced by graduated apprentices.
- Public sector institutions that are mandated to provide assessment and certification for skills training such as NVTI, COTVET and NABPTEX use skill recognition to ensure that skills that are acquired from the various training providers are relevant for the labour market and those they recognised are used by employers.
- Government also uses skill recognition to employ tailors, carpenters, masons, electricians and welders particularly in the security services.
- Other public sector institutions like the Ghana Water Company and the Electricity Company of Ghana use skill recognition to find suitable qualified plumbers and electricians to provide quality utility services.
- Officials from District Assemblies indicated that they need skill recognition to register certified skill artisans to issue them with permits and licences to operate.

- Private employers indicated that they use skill recognition to find suitable qualified workers and to select talents. They also indicated that they need skill recognition to pay competitive wages and attractive working conditions depending upon the skill competencies and levels.
- Another major group of users of skill recognition are Trade Associations who require skills recognition for their membership drive. Beyond that Key Artisans and MCs need skilled artisans as certified to work in their workshops, support them in the execution of tasks and in meeting clients and customers' needs.

Further evidence of impact

There is also numerous evidence among positive labour market impact of skills recognition for individuals:

- Nearly all individuals interviewed indicated that graduated apprentices whose skills are recognised formally through written exams by NVTI with the National Proficiency Certificate and the National Craftsman Certificate are able to find jobs that match their skills in Public sector institutions.
- Apart from wage employment in the public or private sectors graduated apprentices set up their own enterprises in trades that match their skills immediately after graduation while others are employed by their MCs immediately after their graduation.
- About 38 per cent of graduated apprentices continued working for the firm in which they did their apprenticeship, while 29 per cent went into self-employment, while 15 per cent were working for a different firm, but in the same industry.
- The study found out that about a third of graduated apprentices are able to find jobs easier mostly in the private sector almost immediately after their graduation while another one out of every three to four graduated apprentices claiming that they gained employment within a year of graduation.
- About two out of every five graduated apprentices in wage employment in the private sector find jobs easier with NVTI certificates. In the transport sector it is easier for almost all licensed drivers by DVLA.

Case study in India

Assessment of labour market impact of skills recognition is provided for each of selected sectors:

Agriculture

The major expectations of candidates enrolling in RPL assessment programs were found to be higher wages and acquiring new techniques, rather than getting certified, per se. About 60 per cent of assessed candidates reported better job knowledge leading to better workplace condition and 19 per cent reported higher confidence in their work.

Healthcare

Two job-roles were considered for RPL assessment pilot: phlebotomy technician and ophthalmology technician. About 24 per cent reported improvement in workplace recognition after RPL certification and 19 per cent reported that there has been change in their attitude towards health and safety. The key factors which led to the improvement of their attitude were reported as: better understanding of safety practices, and knowledge of hygiene.

While only 5 per cent of the candidates reported any change in income post RPL assessment, almost 73 per cent were willing to undergo further skill training. For such aspiring candidates, the major motivators are expectation of increase benefits and bonus (52 per cent), and higher wages (36 per cent).

Gems and Jewellery

Two job-roles were considered for the RPL assessment program: hand-made gold jewellery component maker and frame maker.

In the tracer study, about 48 per cent reported improvement in job knowledge leading to better workplace conditions. 30 per cent reported positive changes in their attitude to Occupational Health and Safety through better understanding of how to be secured in instances of workplace fire occurrences, better methods of handling hazardous materials, like acid and glass. A significant majority (78 per cent) reported expectation of higher wages (29 per cent) and better benefits/ bonus (49 per cent) as the two key motivators for undertaking RPL certification.

Domestic Workers

Most workers lacked awareness about skill training and the utility of any RPL certification would bring to them on income increase and benefits.

The tracer findings post RPL assessment show 48 per cent reporting better job knowledge leading to an improved attitude to work. Within the relatively short time interval between assessment completion and the first round of tracer study, 12 per cent of the candidates reported increase (small sums) in their wages. However, this needs to be further explored in the second round of tracer calls. About 70 per cent of the workers are willing to undergo further skill training in the hope of earning higher wages, benefits/ bonus.

Construction

Almost all workers reported increased wages as motivators for undergoing RPL. The organized construction sector in India has preference for skilled workers over unskilled and semi-skilled workers. This is a key motivator for construction workers to undertake RPL certification. About 92 per cent of the workers interviewed at the study site reported having improved attitude towards health and safety, increased recognition in their workplace, and increased confidence in their work. All the workers are willing to undergo further skill training.

Initial Findings Across Sectors

- Expectation of higher incomes and benefits emerge as key motivators for workers to pursue RPL certification. However, as of now, the tracer study is yet to be establish any incremental economic value of RPL certification for the workers and employers.
- The study (so far) has found some instances of increased workplace recognition for RPL certified candidates.
- The mobility benefits between formal and vocational educational streams which a RPL program could offer does not seem to emerge as a major motivator for the candidates getting enrolled under the program.
- Considering that a large, unorganized and informal sector needs a calibrated approach towards formalization, the RPL methodology of pre-assessments, followed by bridge training programs to cover skill gaps, and thereafter assessments are expected to deliver better outcomes than rolling out a RPL certification program by administering assessments based on challenge test methodology only.
- At the same time, institutionalizing a system of partial credits may bring in its own set of administrative challenges and is unlikely to be major success at this nascent stage.
- For a large diverse developing country, such as India, there is a need to concurrently and independently monitor multi-sector RPL assessment programs through tracer studies. This could expeditiously remove possible deficiencies and improve delivery efficiency while rolling out at a national scale.

Case study in Australia

The distinctive attributes of the QPIB system are strong focus on quality of the certification delivered and on its high labour market outcomes (value both for employers and for individuals). There is also a strong link to training; the certification requires proof of ongoing skills development. Aside from QPIB, NIBA responses to sector needs also by activities of its NIBA College, which is its certified education provider, audited and accredited by the Australian Skills Quality Authority, the national regulator for Australia's vocational education and training sector.

In addition to that, QPIB as well as other insurance sector specific certifications delivered by the NIBA are developed and provided in accordance with national standards and qualifications for recognizing skills in financial sector. The Financial Services training package is a basis for NIBA College courses.

To sum it up, the labour market impact of this skills recognition approach is ensured by several means.

- Firstly, the very status of the NIBA – pivotal professional association in the insurance broker sector in Australia, representing majority of employers – ensures that employers' voice concerning skills and standards for broking professionals are reflected in the certification.
- Secondly, the NIBA undertakes extensive research within the broking industry to identify and update essential standards for broking professionals.
- Thirdly, NIBA also responds to needs of individual members – for example a survey has been conducted among brokers in 2011 to review their expectations in relation to programs available, delivery options and demand for training.

Case study in Germany

Germany prepares system for impact assessment of the recognition system. However, some indication on impact can be derived from the well-functioning monitoring system and its surveys.

From the employer point of view, the very important finding of the surveys is that employers are interested in recognition and actively search for relevant tools and information when it concerns new employees. Also, two-thirds of companies surveyed would be willing to support employees when they go through the recognition procedure.

Moreover, **79 per cent of employers stated that recognition improved the ability of workers to perform more responsible tasks; 54 per cent stated it also led to higher salary**.

Other outcomes from the recognition procedure that can be measured: According to surveys, for employees the recognition leads to improved working conditions, better and more secured job contracts and so on.

Case study in the Netherlands

Involvement of private sector and strong focus on actual use of certificates on labour market in VPL implementation are strong signs of impact. Following examples illustrate this statement:

Building construction

The building sector has taken full control of the VPL-process and VPL is an integral part of the sectoral career policy. Each employee, covered by the collective labour agreement for the sector, is entitled to a career-guided trajectory once every five years.

Besides that right, the employee also is allowed to use preferred suppliers of VPL-procedures at six VET-schools. Both the employee and the employer can take the initiative for implementing this offer.

Employees are supported in the VPL-process and to follow their tailor-made skills development action plans in their own region. However, learning services are only allowed from schools and institutes that accept the Ervaringscertificaat. The teachers from the VET-schools act as assessors in the VPL-procedure. With that, there is actually built a community of practice in which the professionals from VPL providers and the teachers/trainer know and trust each other.

The Welfare Sector

The Welfare sector provides a good example of VPL embedded in HRM-policies of welfare-institutions. In 2011-2012 a pilot project on VPL and tailor-made learning was initiated. The project focuses on the mobility/promotion from group leader to senior group leader in the Welfare sector. Prior work experience and learning outcomes are assessed and recognised in an VPL procedure, using both sector standards as well as higher education qualifications.

An examination committee of the university evaluates the VPL-report of the candidate that he/she obtained in the VPL-procedure as part of the intake for a qualification-programme (incl. portfolio and assessment). The aim of this evaluation is to either obtain directly the qualification that is linked to the sector-standard for senior group leader or obtain a tailor-made learning programme, taking into account prior learning outcomes and filling in the remaining learning targets in the programme.

All stakeholders acknowledged the relevance and value of both standards (sector and national) and the steps in the VPL-process.

This project is interesting because it offers recognition in higher professional education qualifications for experienced youth workers. Furthermore, because of the use of VPL in a multiple targeted policy for employability and qualification. This multiple-targeted VPL is used at the welfare-institute for linking two purposes:

(i) the purpose of addressing an employee's learning needs (knowing how to invest best in yourself),
(ii) for creating horizontal and/or vertical employability chances (knowing where to come to your best).

Case study in Brazil

Being a matter of compliance with laws and regulations, recognition in Brazil is strongly dependent on inspecting services. Within context of occupational health and safety, skills recognition value is substantial and undisputed.

Recognition is also assumed as a quality label valued for competitiveness and employability, not to mention marketing purposes. However, this assumption is not systematically evaluated, since recognition is primarily

driven by modern and more competitive enterprises that pay higher wages, mainly to scarce skilled workers. In fact, accountability is not a common practice in public policies in Brazil. VET is barely monitored and evaluated. Only a few VTIs carry on systematic monitoring and evaluation, but even these institutions do not present specific results for recognition programs. Leading companies' practices point that training and certification have positive effects in terms of quality and safety – but there is neither sound cost-benefits indicators nor other statistical evidence of this correlation.

Recognition may be valuable but it is an expensive label, considering Brazilian standards. Modern and bigger corporations include this item their operational costs and may count on public funding, such as subsidies, loans and other incentives for productive expansion and modernization. For autonomous workers and small business, it may represent a non-working time and additional costs to training, implying registration fees and expensive PPE (Personal Protective Equipment), tools and materials – all supposed to be certified. The main benefit would be the "job license" itself, but informal market still opens a large space for unlicensed products and services.

Case study in ASEAN

As this skills recognition framework is still in development, no monitoring and evaluation system is currently in place. Once the features of the AQRF and its operating systems and structures are settled, it will be desirable for monitoring and evaluation systems to be established by the ASEAN Secretariat to measure and report on the labour market outcomes of the skills recognition system.

As for involvement and expectations of users and stakeholders towards the AQRF, employer and worker representatives have assumed leadership roles, along with government officials, for the drafting of the action plans and for follow-up activities in their own member states.

Employers have been central to the selection of the priority skill areas. Employers participating in the AQRF workshops have been supportive of the aims of the system, while remaining cautious about some potential perverse impacts. Large employers see potential business opportunities in other member states. Smaller employers have some concerns about increased competition from well-resourced industry players from throughout ASEAN.

Workers see greater migrant work opportunities; yet are anxious about the impact on economies with fewer skilled workers (such as Myanmar) which may be swamped by skilled ASEAN labour from other member states. Regional employer groups such as the Singapore-based ASEAN Constructors' Federation are actively promoting the establishment of common skill standards throughout the region so they can plan to assemble ASEAN-wide workforces and bid for mega construction projects requiring many thousands of skilled workers.

Case study in Belgium

Skills certificate holders were more likely to be in employment, with 58 per cent having a job at the time of the survey (compared to only 41 per cent being in employment for those failing to have obtained at least one certificate). The situation of candidates who failed to obtain a certificate deteriorated strongly after 12 months, compared with certificate holders. This suggests possible longer-term positive impacts of Skills Certificate in terms of job security.

Overall, 35 per cent of candidates experienced positive developments in their professional pathways (e.g. greater recognition by colleagues, promotion, or impact on salary). For about 80 per cent of Certificate holders, the first job after obtaining the first certificate was related to the occupation targeted by the certificate. Another positive indicator is that **38 per cent of certificate holders have taken on new tasks since obtaining the certificate, and 83 per cent of those surveyed believe that these tasks were partly or fully related to their validated skills**. Slightly over 20 per cent of candidates were promoted to a new position after obtaining their certificate. However, the impact on salary levels have been very limited (positive impact reported by only 5 per cent of respondents).

A disturbing finding is that among successful candidates, 81 per cent reported that they were never asked about their certificate. According to the consortium, the fact that only 20 per cent of candidates were asked whether they held a certificate during a job interview or during a meeting with the PES indicates that the scheme was not well publicised at the time of the survey in 2012. More than 40 per cent of candidates never use their certificate or show it on their own initiative.

Looking at self-confidence, **60 per cent of users felt more confident after obtaining the certificate**: candidates had a better awareness of the value of their skills on the labour market, and were more confident

to accept a new position or pursue further training. Almost half of candidates felt that they belonged to an occupational group after their experience, **and 52 per cent felt more motivated to find a job**.

Regarding employers, **poor knowledge of the scheme emerged as the main problem (only 12 per cent of employers declared that they were aware of scheme**), a serious obstacle to the recognition of certificates on the labour market.

After receiving a short explanation of the functioning of the scheme, **more than 70 per cent of employers believed that certificates had the same value as a formal qualification**. Another positive indicator is that there is potential for development as 76 per cent of employers said they were relatively interested (40 per cent) or very interested (36 per cent) in the scheme; 44 per cent would be ready to use the mechanism for their own employees, and 69 per cent would use it for recruiting new staff.

Case study in Russia

Information about impact of skills recognition system in Russia is scarce. Some indirect evidence may be derived from the monitoring (see previous chapter). There is no doubt in skills recognition value in case of occupations which fall under some kind of regulation. But in case of skills mismatch, value of skills recognition is much more difficult to assess.

Reasons for hard-to-fill vacancies are not so much in problems in matching individual skills and job requirements but rather in jobs being unattractive, in lack of vocational training programmes and educational and training institutions, insufficiency of financial support from regional and federal authorities, and reasons on the side of employers – related to general situation in the economy and on the labour market.

Case study in South Africa

A coherent and widely understood Monitoring & Evaluation system with a focus on impact (not simply quantitative information) is still lacking and needs to be developed.

Case study in nursing sector

Based on the experience of the project, skills recognition between countries is an exercise calling upon political as well as technical variables.

The political nature of the endeavour needs to be assessed carefully. Ideally, the endorsement of the highest relevant authorities should be considered at the start of the process and political commitment between the two countries should be centered on the publicly disclosed and agreed upon need for the migration of foreign trained nurses.

Ex-post interviews with Norwegian stakeholder revealed that, a broad consensus on the need for foreign trained nurses in the Norwegian health care system did not exist, albeit such need was clearly stated by the health authorities. In a later interview however, progress was noted as public announcement was made that the country would need, in the years to come, to recruit internationally trained health professionals and nurses to respond to the needs of its population. Such a realization, among the Norwegian stakeholders, may not have existed at the beginning of the initiative. It is however essential in guiding these stakeholders toward the commonly defined objectives embedded in a skills recognition scheme.

At the technical level, given the sensitivity issues and the complexity associated with a nursing skills recognition scheme, it appeared essential to cooperate with an internationally and highly reputable and experienced partner to ensure the expertise and provide high credibility to the methodology, results and conclusion of the study.

Establishing a fair, transparent comparative analysis of the nursing curriculum and education systems of two different countries is a substantially complex exercise requiring extensive knowledge of the nursing sector, as well as an established network of nurse leaders and practitioners in each country acting as validating sources.

Case study in China

Example: The skills recognition on rural workforce transfer and employment in Gansu Province

Skills upgrading of labour force is an important measure of Gansu. In recent years, a project aimed to reduce skills mismatch and boost skills development through targeted vocational training and skill recognition.

The skill recognition carried out in Gansu effectively promoted the skills upgrading of workers and strongly supported the developments of machinery processing, construction, transportation, electronics, catering services, planting and breeding, and many other industries in the area.

Furthermore, the skill recognition also contributes to expanding and stabilizing employment so as to effectively increase the wages income of rural migrant workers. For example, by attending trainings and skill recognition, the monthly salary of a construction worker could be raised by RMB¥ 500-1000.

Example: Improve the skills of new staff recruitment through inner recognition in CRRC

Headquartered in Beijing, the CRRC has 46 wholly-owned and majority-owned subsidiaries and more than 170,000 employees. The CRRC is the world's largest supplier of rail transit equipment with the most complete product lines and leading technologies.

The key difficulties for CRRC in terms of skill needs were skills gaps of new recruits, lack of practical skills of graduates and inability of the public assessment organizations to offer tailored recognition system.

Addressing these difficulties, the CRRC carry out vocational skill assessment. By the end of 2014, China CRRC had about 95,000 technical workers, with more than 100 occupations for technical workers. There were a total of 250,000 people (times) who participated in vocational skill assessments since the start of assessment, the high-skilled talents account for 60 per cent. The key occupations include: welding, maintenance electrician crane drive, fitter, etc.

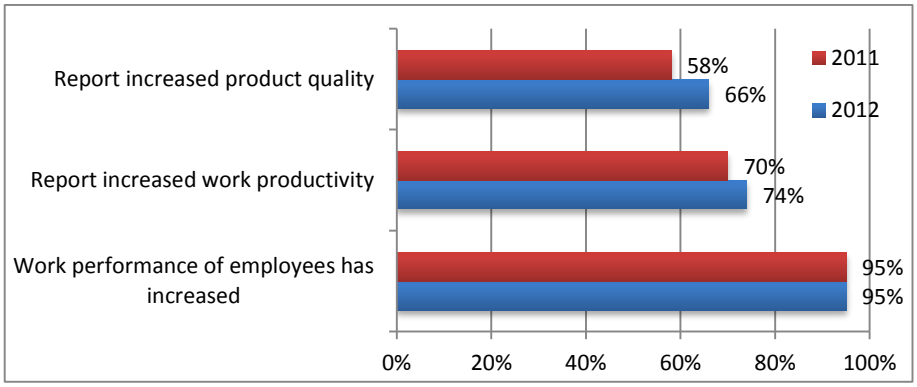
The enterprise is satisfied with the outcome. The greatest three contributions to the enterprise from our interview are:

- Enhance the skill levels of the new recruits, and promote the ability of the on-the-job personnel to ensure the product quality.
- The inner recognition brings in a more effective system and lower cost to enterprise.
- Condense the staff through inner recognition and the staffs love their job and would like to devote to it. It's also beneficial to their career development.

Spotlight on impact measurement: Workforce Skills Qualifications system in Singapore

The **Outcomes Evaluation Survey** targets both employers and WSQ participants. The sample size was around 1400 companies and 8400 individuals. Evaluation of WSQ benefits for employers was overwhelmingly positive and had also improved in comparison with the previous year.

Figure 10. Impact of WSQ among employers: Share of employers that:



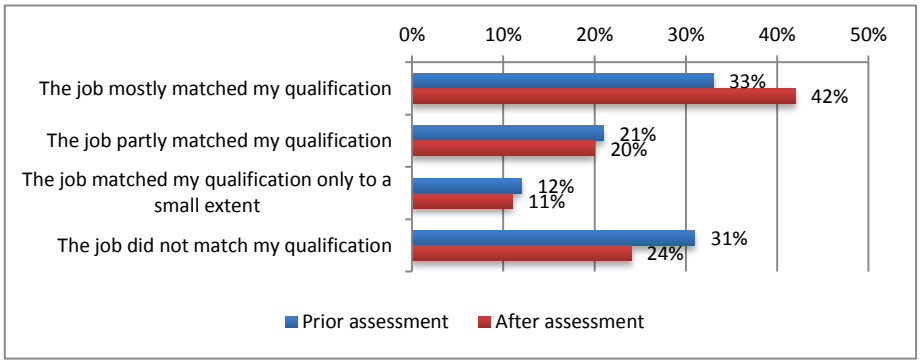
Source: WDA, 2015.

Spotlight on impact measurement: Skills recognition system for migrant workers in Denmark

The survey gathered data on the questionnaire basis among those having received this recognition (assessment) and it was supported by interviews with persons from each target group. Major findings:

- Around 80 per cent of qualification holders were satisfied with the process, including quality of the support, information provided and time frame. The guidance professionals and employers expressed a similar degree of satisfaction.
- 76 per cent of respondents stated they actually used the assessment. About half of them used it when applying for a new job to prove their skills. A quarter of them use it to get an admission to a degree study programme. Just around 5 per cent of respondents found the assessment not useful at all.
- The assessments seem to have a positive effect on the qualification holder's chances of finding relevant employment or continuing studies. Although other factors may be involved, it is clear that the situation of qualification holders has significantly improved in the period after receiving the assessment, and at the same time, the qualification holders themselves find that the assessment has played a positive role.
- The best example is the summary of answers to a question: If you worked in Denmark prior the assessment, how was your job matching to the qualification you gained in your home country before, and after the assessment? As seen in the chart below, the assessment contributed to increased skills matching, although it is not clear whether possible impact of other factors on the improvement of skills utilization was also taken into account.

Figure 11. Impact of skills recognition on participants in the Danish User Survey 2008

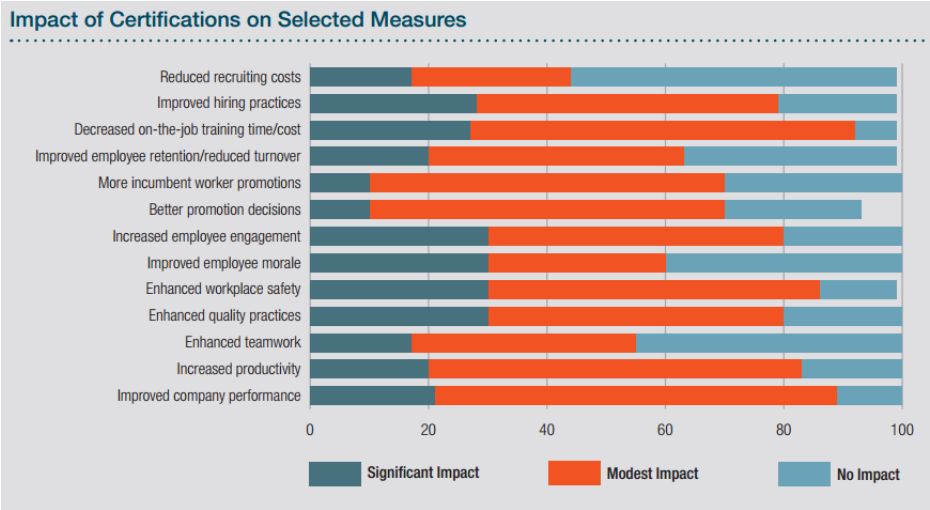


Source:

Spotlight on impact measurement: Skills recognition system for migrant workers in Denmark

The example from the US manufacturing sector shows that skills recognition approaches were largely following analyses on skills mismatch and employers' HR priorities. The employers saw the recognition as a way to "*gain confidence that their employees are able to perform at a given level of skill* … (and) … *employees gain confidence in their own abilities as they acquire new skills certifications."* They also believed that "*employees place a high level of value on achievement-based recognition, and this enhances employee morale, productivity and retention for companies that offer these opportunities*".

Figure 12. Perceived value of skills certification by employers



Source:

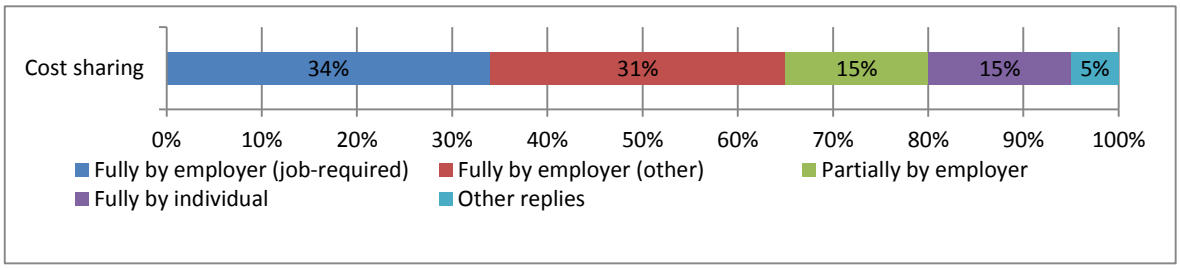
Spotlight on impact measurement: Skills certification in the IT sector

In March 2015, **a report on IT certification outcomes** by CIO.com and CompTIA (based on establishment survey) revealed that:

- 65 per cent of employers use IT certifications to differentiate between equally qualified candidates
- 72 per cent of employers use IT certifications as a requirement for certain job roles
- 60 per cent of organizations often use IT certifications to confirm a candidate's subject matter knowledge or expertise

The value of the certification for employers can be measured by willingness of employers to cover the costs of it. One survey in the cyber-security sector revealed that 4 of 5 employers fully or partially covered the cost of the certification for their employees and every third employer is doing so even if the certification is not totally job-required.

Figure 13. Employer contribution to payment for certification-related costs in cyber-security



Source: John Pescatore, Barb Filkins, Tracy Lenzner and SANS GIAC, 2014.

A Global Information Security Workforce Study by the company Frost & Sullivan also looked in detait into the value of certification by the views of employers in this specific sector. According to the study, "*…private sector overwhelmingly views certification as an indicator of competency*". Major reasons for requiring information security certifications by employers were that they were considered as an indication of:

(i) Employee competence (68 per cent)
(ii) Quality of work (53 per cent)
(iii) Regulatory requirements – governance (48 per cent)
(iv) Company image or reputation (43 per cent)
(v) Company policy (40 per cent)
(vi) Customer requirement (40 per cent).

Spotlight on impact measurement: Skills certification in the accounting sector

The ACCA – the Association of Chartered Certified Accountants - is a professional body that offers the Chartered Certified Accountant qualification. While the skills recognition – the ACCA qualification – is the key outcome by which impact is measured on the labour market, it must be stressed that it is based on a demanding training programme. This training develops a range of transversal, finance and management skills that are in demand by employers in industry, banking, auditing, consulting as well as other professions like taxation and law.

This qualification has now more than 500,000 members and students in 170 countries and is often treated as being equivalent to their local qualification. **The impact and market recognition** of the ACCA qualification is measured regularly by an employer survey (on a yearly basis). In its annual report 2012-2013, the ACCA stated that according to this survey**, its qualification is respected by 93 per cent of employers and 79 per cent of them believe that ACCA Qualification helps them expand their business**.

Source: http://www.accaglobal.com/crsh/en/discover/report-accounts/annual-report-2014-15.html