Background paper [1]

Peer learning conference Thessaloniki 9-10 November 2017

Do national qualifications frameworks make a difference? Measuring and evaluating NQF impact

1. Introduction

As qualifications frameworks (QF) are introduced all over the world, the question of their impact and added value is increasingly being asked. Do these frameworks, operating at sectoral, national and regional level, make a difference to policies and practices and to the learners and citizens they are supposed to benefit? This question is closely related to the challenge of measuring the impact of qualifications frameworks: what methods and reference point(s) can be used for measuring impact and how are we to isolate the effects of QFs from the numerous other initiatives in a broader policy context?

The pioneering national qualifications frameworks (NQF) established during the 1980s and 1990s have increasingly been confronted with these questions. NQFs in Australia, New Zealand, the UK and South Africa have all been challenged over their relevance for and impact on policies, practices and learners. Similar questions are being asked of the new qualifications frameworks set up during the past decade. These new NQFs, vastly outnumbering the 'early starters', are now expected to demonstrate their added value. In Europe, the European qualifications framework (EQF) has been the main catalyst for the development of NQFs. While, in principle, countries can link their national qualifications levels to the EQF without an NQF, all countries participating in EQF implementation see national frameworks as necessary for relating national qualifications levels to the EQF in a transparent and trustful manner. EQF is a common reference framework that links NQFs together.

This background paper first provides an overview of national qualifications framework developments in Europe. The subsequent sections examine two central conditions fundamental to understanding and assessing the impact of NQFs in Europe: the institutional robustness and end-user visibility. Areas where NQFs are making a difference are highlighted, as are areas where impact has been less apparent to date. Findings about the

([1]) Prepared by Slava Pevec Grm and Jens Bjørnåvold, (Cedefop). The paper builds on an article published in the 2017 Global Inventory of regional and national qualifications frameworks, published by Cedefop, ETF and UNESCO. Valuable comments were provided by Koen Nomden (EC), John O'Connor (QQI) and Anastasia Pouliou (Cedefop).

impact of European NQFs are emerging from the systematic monitoring of European NQFs carried out by Cedefop since 2009 and also from various comparative research projects covering different aspects of framework development. The paper also reports on impact studies from countries in Europe and beyond and identifies several challenges involved in studying the impact of NQF. The final section identifies some indicators that could be used to evaluate the impact of NQFs.

2. National qualification framework developments in Europe

Developments in national qualifications frameworks in Europe have been rapid. Before 2005, frameworks were in place in 3 European countries: Ireland, France and the UK. By 2017, and directly triggered by the 2008 adoption of the European qualifications framework (EQF), NQFs have been introduced by all 39 countries ([2]) taking part in the EQF implementation ([3]).

Most European countries have completed the (initial) conceptual and technical development of their frameworks. A total of 33 out of 39 countries that form part of the EQF process formally adopted their NQFs, most recently in Austria, Finland, Luxembourg, Poland and Slovenia. Of the EU countries, only Italy and Spain have yet to finalise developments and/or adoption ([4]). The Former Yugoslav Republic of Macedonia (FYROM), Kosovo ([5]), Montenegro and Turkey, candidate or potential candidates for EU membership, also participate in the EQF, having already been referenced to the European framework. Albania, Bosnia and Herzegovina and Serbia, which joined the EQF process in autumn 2015, have legally adopted their NQFs in various ways, establishing social dialogue platforms, and have achieved some technical progress such as producing outcomes descriptors. A growing number of countries has reached what we may term as an early operational stage. This is illustrated by frameworks in Croatia, Cyprus, FYROM, Greece, Hungary, Iceland, Kosovo, Montenegro, Poland and Turkey. While still working on putting in place implementation structures and adopting relevant tools and measures, these frameworks are now gradually starting to make a difference at national level. 20 European NQFs have reached a more mature operational stage: Austria, Belgium (Flanders), Czech Republic (a partial framework for vocational qualifications - NSK), Denmark, Estonia, France, Germany, Ireland, Latvia, Lithuania, Liechtenstein, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland and the frameworks in United Kingdom. Despite having put all major

([2]) The EQF covers the 28 EU Member States as well as Albania, Bosnia-Herzegovina, FYROM, Iceland, Kosovo, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey.

([3]) By October 2017, the following 33 countries had formally linked ('referenced') their national qualifications frameworks to the EQF: Austria, Belgium (Flanders and Wallonia), Bulgaria, Cyprus, Croatia, the Czech Republic, Denmark, Estonia, the Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lichtenstein, Lithuania, Luxembourg, Kosovo Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Sweden, Switzerland, Turkey and the United Kingdom (England, Scotland and Wales). The remaining countries are expected to follow in 2018, which means that the first stage of EQF referencing is nearly finished. The completion of the first stage of referencing will be followed by regular updates in the event of major changes by the countries, which shows that EQF implementation is a continuing and ongoing process. Estonia and Malta presented updates in 2015, starting this phase (for Malta, this was the fourth update since 2009).

([4]) Italy has established the national repertoire of education, training and professional qualifications that consists of different sections, including a QF for HE and national framework of regional qualifications. Development of a comprehensive framework is work in progress. Spain is developing the Spanish qualifications framework for lifelong learning (Marco Español de Cualificaciones – MECU).

([5]) This designation is without prejudice to position on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

features of their framework into practice, the challenge is to strengthen involvement, acceptance and ownership by key stakeholders and visibility towards end-users. While different in focus and objectives, some key common characteristics of European NQFs can be identified:

a) 35 countries ([6]) are working towards comprehensive frameworks, addressing all levels and types of qualifications from formal education and training (vocational education and training (VET), higher education (HE), general education) ([7]) and, in some cases ([8]), opening up to qualifications awarded outside formal education and training. The comprehensive frameworks dominating in Europe can be understood as 'loose' in the sense that they integrate sub-frameworks (and their specific legislation) but refrain from introducing uniform rules for the design and award of qualifications. They have been designed to embrace a multiplicity of education and training institutions and provisions, reflecting a broad range of values, traditions and interests. Whether a framework is tight ([9]) or loose depends on the stringency of conditions a qualification must meet to be included (Tuck, 2007, p. 22). Loose frameworks introduce a set of comprehensive level descriptors to be applied across subsystems but allow, at the same time, substantial 'differentiation' within and between sub-frameworks ([10]). This is illustrated by the Polish qualifications framework where generic, national descriptors are supplemented by more detailed and targeted descriptors addressing general, vocational and higher education. In many countries, this institutional diversity and the need to address a wide range of interests and concerns has put stakeholder mobilisation and commitment at the forefront of developments;

b) while technical and conceptual design is important, creating commitment and ownership of the process, stakeholder buy-in, consensus building and overcoming resistance to change have been identified as critical conditions for effective NQF development and implementation in Europe. This contrasts with some 'first generation national frameworks'. Examples of early versions of NQFs in South Africa or New Zealand illustrate how attempts to create tight NQFs with 'one-size-fits-all' approaches

([6]) Three countries have introduced partial NQFs covering a limited range of qualification types and levels or consisting of individual frameworks operating separately from each other. This is exemplified by the Czech Republic and Switzerland, where separate frameworks for vocational and higher education qualifications have been developed; by France where vocationally and professionally oriented qualifications are included in the framework; In England and Northern Ireland, the new regulated framework (RQF) is broader in scope compared to the previous (QCF). It covers all academic and vocational qualifications regulated by the Office of Qualifications and Examinations Regulation (Ofqual) and by the Council for Curriculum Examinations and Assessment Regulation (CCEA). Levels 5 to 8 are consistent with the levels of the framework of higher education qualifications (FHEQ) in England, Wales and Northern Ireland.

([7]) While having agreed, on a longer term basis, to develop a comprehensive framework, Austria illustrates how NQFs are developed through a step-by-step approach. In Germany, while initially only including vocational and higher education qualifications, the agreement was reached in 2017 to include general education qualifications in the framework (DQR), including Abitur, Baccalaureate (Allgemeine Hochschulreife), professionally oriented Abitur (Fachgebundene Hochschulreife) as well as the Fachhochschulreife to the level 4 of the DQR and EQF. The same step-by-step approach can be observed in Italy where important progress has been made towards a comprehensive framework.

([8]) Examples included France, Ireland, the Netherlands, Poland, Slovenia, Sweden and UK.

([9]) Tight frameworks are normally regulatory and define uniform specifications for qualifications to be applied within and across sectors.

([10]) A sub-framework is a framework, which covers only one subsystem (e.g. HE, VET) and is part of an overarching comprehensive framework.

for designing and regulating qualifications can generate resistance and risks undermining the national consensus required for an effective framework. Such experiences have led to a general reassessment of the role of these particular frameworks, pointing to the need to protect diversity (Allais, 2011c, Strathdee, 2011);

c) the main objective of the new European frameworks, reflecting their 'loose' character, is to improve transparency of the national qualifications systems; they aim to make it easier for citizens to assess and make better use of national level qualifications, notably by clarifying how qualifications from different institutions and subsystems can be combined to support individual learning careers. This turns NQFs into key instruments for lifelong learning. Many countries have stated, when developing NQFs, that their purpose is not to reform their qualifications systems, but to make national qualification systems more accessible and easier to understand. As European NQFs have developed and moved towards operational status, however, countries increasingly tend to see NQFs as contributing to incremental reform, leading to an expectation that NQFs can and should shape policies and practices in the field of qualifications and skills. European NQFs also prioritise the need for international comparability of qualifications, thereby supporting cross-border mobility of students and workers. This orientation towards enhanced mobility aligns European NQF developments with objective for broader human and social development, including lifelong learning and reducing inequalities, rather than within the neo-liberal agenda that qualifications frameworks have traditionally been associated with (Allais, 2011a, 2014; Lassnigg, 2012).

3. Sustainability and visibility of European NQFs: conditions for impact

Evidence about the impact of European NQFs is still scarce and has only to a limited extent been assessed, reflecting their short history. NQFs in Europe are still novel and collecting evidence about NQF impact is methodologically complex. Developed during the last decade influenced by the EQF, most frameworks have only now reached a stage where indirect and partial impact can be examined. Based on a survey carried out by Cedefop in 2015/16, the institutional robustness and end-user visibility of the frameworks can, however, be analysed and judged. These two factors can be considered as necessary conditions for impact and are thus of key-importance.

Sustainability and institutional 'robustness'

Most European countries now consider NQFs to be integral parts of their national qualification system. ([11]) They acknowledge that a strong legal basis with clear policy objectives is essential to secure and clarify the future role of the frameworks. Active and committed involvement of stakeholders, within and outside the education and training system, is also seen as a precondition for, and guarantee of, sustainability. Few countries explicitly express doubts about the future role of their frameworks. While some emphasise

([11]) Cedefop (2015/16). Survey on the sustainability and visibility of NQFs.

the need to clarify and/or strengthen the political mandate, others point out that changing national political priorities risks influencing future NQF implementation. While most countries are confident that their frameworks will remain in place, some point out that the frameworks' ultimate impact will depend on integration into mainstream policy processes. Even frameworks with a long tradition, such as that in UK-Wales, still found it necessary to modify and re-calibrate their frameworks in order to link them more efficiently with education, training and skills strategies (Welsh Government, 2014). Politically and institutionally isolated frameworks will be less able to meet expectations.

Around one-third of countries ([12]) see NQFs as reform tools and expect them to support the restructuring, strengthening and/or regulation of their national qualifications systems. This contrasts the position of countries at the start of implementation when frameworks were seen as instruments for describing qualifications, not for changing them. The potential of the frameworks to support reform have become apparent during initial development and implementation stages, differing slightly between sub-framework ([13]). Some countries, as illustrated by Ireland, have strengthened the link between the national frameworks and quality assurance bodies. Most flag the need for financial and human resources to be stepped up when NQFs reach the fully operational stage.

Visibility

To be of value to individual citizens, frameworks need to become visible. Many countries now systematically indicate NQF and EQF levels on the qualifications documents they award (certificates and diplomas and Europass certificate and diploma supplements). It is also important that national (and European) qualifications databases contain this information and ideally structure information on qualifications in line with their framework. This visibility lies at the heart of the frameworks as tools for increased qualifications transparency. Countries are making progress in this area. Denmark and Lithuania were the first to include references to EQF/NQF levels in their VET certificates in 2012. By September 2017, 24 countries had introduced level references in national qualifications documents and/or databases: Austria, Belgium (fl) Czech Republic, Denmark, Estonia, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Latvia, Luxembourg, Malta, Montenegro, Norway, the Netherlands, Portugal, Poland, Slovenia, Switzerland and the UK. Several countries have indicated their intention to do so in 2018, including Belgium (fr), Bulgaria and Croatia. The visibility of frameworks to stakeholders outside education and training, particularly to employers, is still limited. Countries such as Ireland, the Netherlands, Sweden and UK-Scotland have made explicit efforts to demonstrate the relevance of frameworks to companies and sectors. In most countries this is still an area to be explored.

(12) Belgium (Flanders), Bulgaria, Croatia, Estonia, FYROM, Greece, Hungary, Iceland, Latvia, Lithuania, Malta, Montenegro, Portugal, Slovakia and Turkey.

(13) Examples are the Croatia, Iceland, Netherlands, Poland and Slovakia.

4. Early impact of European national qualifications frameworks

The monitoring of European NQFs carried out by Cedefop since 2009, which is also supported by a variety of comparative studies ([14]), points to several areas where NQFs are starting to make a difference.

Improved transparency of national qualification systems

The introduction of national qualifications frameworks with explicit learning-outcomes-based levels have helped to make national education and qualification systems more readable and easier to understand within and across European countries (Cedefop, 2016; 2017). In a few cases where multiple qualifications frameworks have been operating in parallel and partly in competition, as in UK-England, the impact on transparency is less clear. Introducing a common learning-outcomes-based language for describing qualifications across education and training subsystems, the national frameworks provide a comprehensive map of national qualifications and relationships between them. Although practice varies between countries, important progress has been achieved in the past nine years ([15]). In some countries the increased transparency supports further systemic reforms, as exemplified by Estonia where a lack of initial qualification at NQF level 5 was identified through development of an overarching framework. The main discussion centred on the fact that there were no initial education and training qualifications identified at this level. Steps have now been taken to fill this gap. Following consultation with stakeholders, a new VET Act came into force mid-2013, introducing qualifications at level 5 (both in initial and continuing VET).

Such examples demonstrate how the introduction of learning-outcomes-based levels, and the resultant placing of qualifications, makes it possible to identify gaps in existing qualifications provision. Cedefop's study (2014) shows that EQF level 5 (and the relevant NQF levels) has been used as a platform in developing new qualifications. This is exemplified by Estonia, Malta and the UK. In other countries (such as Portugal or Slovakia) NQF level descriptors are used to review the content and outcomes of qualifications. Comprehensive and integrated qualification registers increasingly underpin the NQFs and make information on qualifications accessible for students, employers and guidance staff ([16]). Portugal exemplifies how NQF level descriptors are used to support the review and renewal of qualifications.

More consistent implementation of learning outcomes approaches

European NQFs share a common conceptual basis - inspired by the EQF - with a focus on learning outcomes. Recent research on the shift to learning outcomes (Cedefop, 2016) shows that the outcomes principle has been broadly accepted among national policy-makers and that national qualifications frameworks have contributed significantly to strengthening this

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(14) See Cedefop publications in the further reading section. NQF/EQF-relevant Cedefop studies since the initiation of the EQF process in 2005 also include: Annual NQF monitoring reports (2009, 2010, 2011, 2012 and 2014) analysing national developments, including country chapters (for 2012 and 2014): http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-framework-nqf Briefing notes addressing specific aspects of NQFs (2011 to 2016): http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-framework-nqf

(15) See EQF referencing reports: https://ec.europa.eu/ploteus/sl/documentation

(16) See for example the German qualifications database: https://www.dqr.de/content/2316.php or the Slov enian qualification database:http://www.nok.si/en/

dimension. While the approach was previously taken forward in a fragmented way in separate institutions and subsystems, the emergence of comprehensive frameworks has made it possible to implement learning outcomes in a more system-wide and – to some extent – more consistent way. In countries such as Belgium, Croatia, Greece, Iceland, Lithuania, Norway and Poland the introduction of frameworks has led to identification of areas where learning outcomes have not been previously applied or where these have been used in an inconsistent way.

The level descriptors of the frameworks are increasingly used as reference points for describing writing and levelling of qualification and assessment standards, as well as curricula. This is an important use of frameworks as it can strengthen the consistency of programmes and allows qualifications to be delivered according to similar requirements.

Comprehensive NQFs in Europe can be categorised as outcomes referenced ([17]) (Raffe, 2011b, Cedefop, 2015) where the learning-outcomes approach – considered essential for levelling and increasing transparency of national qualifications – is linked to national curricula or programmes and accredited providers, accepting that mode and volume of learning matters. However, many frameworks have elements of the outcomes-driven model where learning outcomes are specified independently from curriculum and provider (Raffe, 2011b). This is most visible in some sub-frameworks as is the case in occupational/professional qualifications in Belgium-Flanders, Estonia, Slovenia or Slovakia. For instance, in the Slovenian sub-framework of national vocational qualifications (NVQs) only qualifications and assessment standards are regulated at national level. There are no formally accredited programmes leading to these qualifications.

It follows that the objectives and impact of the NQF will differ across sub-frameworks while a comprehensive framework will increase consistency of use of learning outcomes across sub-frameworks.

Linking qualifications frameworks and validation of non-formal and informal learning

The 2012 Recommendation on validation of non-formal and informal learning ([18]) sees the link to national qualification frameworks as important for the further implementation of validation arrangements across Europe. The 2016 update of the European inventory on validation ([19]) confirms that countries ([20]) now give high priority to linking frameworks and validation arrangements. EQF and NQFs, through their focus on learning outcomes, act as a reference point for identifying, documenting, assessing and recognising learning acquired in non-formal and informal settings. The introduction of NQFs can allow countries to move

([17]) Raffe (2011b) explores different types of NQFs and examines the role of learning outcomes within them. He elaborates on two contrasting types of NQFs: outcomes-led and outcomes- referenced; he suggests that these are associated with different roles for learning outcomes in pursuing the objectives of NQFs. A communication framework is typically outcomes-referenced. Learning outcomes-based level descriptors provide common reference point for diverse qualifications from different sectors and institution and help coordinate education and training provision and improve coherences and integration of the system.

([18]) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:398:0001:0005:EN:PDF

([19]) Cedefop; European Commission, ICF (2017). *Update to the European inventory on validation of non-formal and informal learning – 2016 update. Synthesis report.* Luxembourg: Publications Office. http://www.cedefop.europa.eu/en/events-and-projects/projects/validation-non-formal-and-informal-learning/european-inventory

([20]) EU-28, EEA EFTA countries, Switzerland and Turkey are included in the inventory.

from fragmented use of validation to a more coordinated national approach. According to the European inventory, there is a link between validation arrangements and formal education qualifications in the NQF in at least one part of education in 28 countries; this offers a possibility to acquire a full qualification or parts of a qualification included in the NQF. Links between validation and an NQF are more common in initial vocational education and training (IVET) and continuing vocational education and training (CVET) and higher education (HE) and less apparent in general education. Validation of non-formally and informally acquired competences and skills is possible in 17 countries included in the report. Around 75% of countries use the same standards in formal education and validation in at least one sector.

Greater stakeholder engagement and coordination

Stakeholder involvement is crucial for developing and implementing a national qualifications framework. To become operational, NQFs need to put in place institutional arrangements allowing relevant stakeholders to come together on a regular and predictable basis to address qualifications and skills issues and policies. Comprehensive frameworks require the involvement of a broad group of stakeholders from both education and training and the labour market, in effect creating a new meeting place and potentially a new dialogue. This is seen as contributing to system transparency and coherence and improving relevance of qualifications. (Raffe, 2013). In some countries comprehensive NQF development has brought together stakeholders from different parts of education and training for the first time. Evidence shows that this cooperation has increasingly being formalised and institutionalised (Cedefop, 2017). This is important to support the coherent implementation and maintenance of the NQF across sectors and institutions. Cross-sectoral bodies such as national qualification councils have been established for instance in Albania, Croatia, Cyprus, Estonia, Montenegro, Poland and Turkey. In Austria, the NQF advisory board of seven experts assists the NQF coordinating body in allocating qualifications to levels; the NQF steering group (NQR-*Steuerungsgruppe)*, has 30 representatives of all the main stakeholders (all federal ministries, social partners, stakeholders from the different fields of education and *Länder)*. A coordination point for the German qualifications framework was set up in a joint initiative of the Federal Government and the *Länder* in 2013. It has six members, including representatives from the Federal Ministry of Education and Research and Federal Ministry of Economics and Technology, the standing conference of the ministers for education and cultural affairs of the *Länder*, and the conference of ministers for economics of the *Länder*. Its main role is to monitor the allocation of qualifications according to levels descriptors, to ensure consistency of the overall structure of the framework. The impact of strengthened cooperation on progression routes across subsystems still needs to be seen.

NQFs have opened up to qualifications awarded outside formal education and training

Most European NQFs apply to qualifications offered within formal education and training (VET, HE, general education). These qualifications are regulated and awarded by national authorities. However, there is a growing trend among countries to open up their frameworks to include qualifications awarded in continuing and further education and training, often awarded outside the formal national qualification system. Austria, Germany, Slovenia,

Norway and Sweden have started working on procedures for including non-formal and private sector qualifications and certificates and the Netherlands has already included an important number of those qualifications. The Swedish national qualifications framework has, from the start (in 2009), been seen as a tool for opening up to qualifications awarded outside the public system, particularly in adult education and in the labour market. Linking this 'non-formal' sector to the NQF is perceived as crucial for increasing overall qualifications transparency and relevance in Sweden. Several other countries (e.g. Denmark, Finland and Latvia) have indicated that this opening up towards the non-formal sector will be addressed in a second stage of their framework developments. Some established frameworks, for example in France, Ireland and the UK, have put in place procedures allowing 'non-traditional' qualifications to be included in the frameworks. The Scottish framework now contains qualifications awarded by international companies (for example in the ICT sector) and other private providers. This is understood as a precondition for supporting lifelong learning and allowing learners to combine initial qualifications with those for continuing training and for specialisation. The French framework is also open to qualifications awarded by non-public bodies and institutions.

NQFs and higher vocational education and training

In many countries, vocationally oriented education and training at higher levels have been operating in 'the shadows' of universities. This lack of visibility partly reflects high esteem attributed to academic education and less to the vocationally oriented, practice and research-based education and training ('academic drift'). The learning-outcomes-based levels of the NQFs have played a role by making visible the existence and importance of vocationally oriented education and training at levels 5 to 8 of the EQF. There is now an intensive debate on the future of vocational education and training at EQF levels 5 to 8 ([21]). The increased visibility of higher vocational education and training (HVET) can be illustrated by placing of the German master craftsman qualification at level 6 of the German qualifications framework, firmly underlining that vocationally oriented education and training can take place at all levels ([22]). The Swiss national qualifications framework is explicitly designed to support this principle, showing how vocational and professional qualifications operate from level 2 to level 8 of the framework. The rapid development of HVET policies in many countries can partly be seen as directly influenced by the outcomes-based perspective provided by the NQFs and their learning-outcomes-based levels. This example shows that NQFs can make vocational qualifications at these levels more visible and contribute to increased diversity of qualifications designed for different purposes.

([21]) Several research and development projects are currently exploring this area. A good example is the *Beehives* project: https://www.eurashe.eu/projects/beehives/

([22]) Supplemented by policies and projects: http://ankom.his.de/pdf_archiv/2009_03_06-Hochschulzugang-erful-qualifizierte-Bewerber.pdf

5. Areas where less impact can be observed

Visibility and labour market use limited

Several evaluation studies have pointed to the limited visibility and use of NQFs by labour market actors (Allais, 2017; NQAI, 2009). The most successful example of good framework visibility on the labour market is the French NQF (known as national register of vocational qualifications, *Repertoire national des certifications professionnelles),* where qualifications levels are linked to levels of occupation, work and pay (Allais, 2017).

In less regulated labour markets, the visibility and use by employers is more challenging. For instance, the evaluation of the UK-Wales framework concluded that too few employers engage in or are aware of the framework. While this reflects a general lack of visibility of the credit and qualifications framework for Wales (CQFW), some stakeholders point to the fact that the UK (England and Northern Ireland) qualifications and credit framework (QCF) ([23]) is the dominant framework in the UK and that some employers may prefer to relate to this and not limit themselves to UK-Wales (Welsh Government, 2014, p. 45).

The impact study of the Irish QF has demonstrated that it has considerable potential to be used in recruitment, in developing career pathways, in planning work-based learning and training and in recognising transferable skills (NQAI, 2009). However, its use by employers is limited, reflecting low awareness and visibility.

A recent study carried out in Germany on the potential use of the German qualifications framework (Bundesministerium für Bildung and Forschung, 2017) identifies several areas where the German qualifications framework *(*DQR) can add value. The framework as stated can, for example, be used to support human resource development (recruitment and development of employees); this applies especially to small and medium-sized enterprises with limited human resource capacity, but will require capacity building and awareness raising.

UK-Scotland stands out as an exception in this area, having developed and promoted a range of tools that support employers in using the Scottish credit and qualifications framework (SCQF) guides to support recruitment and staff selection, identify and plan skills development for staff or gain recognition of in-house training programmes ([24]). There are examples of employer-led sub-frameworks of vocational/occupational qualifications, for instance in Estonia, Slovenia and Turkey, with good use and visibility on the labour market, including access to regulated occupations, certification of the skills acquired at the workplace, recruitment, workforce development, and guidance.

Articulation between institutions and education and training subsystems

Several countries see their NQFs as tools for strengthening the links between education and training subsystems. This is considered essential for reducing barriers to progression in

([23]) In October 2015 a new regulated qualifications framework (RQF) was introduced for England and Northern Ireland, replacing the QCF and the NQF. The RQF covers all academic and vocational qualifications regulated by the Office of Qualifications and Examinations Regulation (Ofqual) and by the Council for Curriculum Examinations and Assessment Regulation (CCEA). The most significant change introduced by the RQF is the lifting of standardised requirements for the design of qualifications.

([24]) http://scqf.org.uk/employers/what-are-the-benefits

education, training and learning and for strengthening overall permeability of education and training systems. The new generation of European NQFs overwhelmingly consists of comprehensive frameworks, addressing all types of qualifications at all levels of formal education and training. This means that they – through their descriptors – must be relevant to diverse institutions pursuing a wide variety of tasks according to different traditions and cultures. According to Young and Allais (2009; 2011), one of the fundamental challenges comprehensive frameworks face is to take account of epistemological differences in knowledge and learning that exist in different parts of education. It is generally too early to say whether the NQFs are making a difference in this area: any future impact study needs to address this 'bridging function' of the frameworks and assess whether individual learners are becoming more able to move horizontally and vertically and combine education and training from different institutions and subsystems to benefit their lifelong learning careers.

Institutional reform: work in progress

The logic and objectives of NQFs to achieve more integrated qualification systems, have contributed to institutional reform in a limited number of cases. Ireland, Greece, Malta, Portugal and Romania exemplify this through their decisions to merge multiple qualification bodies into single entities covering all types and levels of qualifications. The synergies gained in bringing together related functions under one roof can speed up implementation. Other countries have indicated future institutional reforms in this area, either in the form of mergers of existing institutions or in the form of new bodies, as in Croatia. This shows that comprehensive NQFs, even in cases where their main or initial role is perceived as promoting transparency, can trigger institutional reform.

NQF support to recognition of qualifications across countries: at an early stage

At the moment the effect of the qualifications frameworks on mobility of learners and workers is still uncertain and there is very little evidence. There are great expectations of qualifications frameworks to support recognition of qualifications. NQFs give important information about the level of qualification and its link to other qualifications, as well as what the holder of a qualification is expected to know, understand and able to do. The information on learning outcomes, workload, type of a qualification and quality assurance are important elements in formal recognition of qualifications. The subsidiarity text to the Lisbon recognition convention (UNESCO and Council of Europe, 2013) underlines that frameworks should be used systematically as a source of information supporting recognition decisions. Recent studies of the European Commission explore obstacles to recognition of skills and qualifications ([25]) and reflect on the potential role of the EQF in supporting recognition of international sectoral qualifications and related initiatives. ([26])

([25]) https://publications.europa.eu/en/publication-detail/-/publication/156689fd-e922-11e6-ad7c-01aa75ed71a1/language-en

([26]) http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7937&furtherPubs=yes

6. Lessons learnt from selected NQF impact studies

Few of the new qualifications frameworks established after 2005/6 have been subject to systematic evaluation, apart from Cedefop's regular (bi)-annual monitoring since 2009. There have been isolated academic studies carried out in a limited number of countries, as in Denmark and currently on the use of the German framework and the Dutch qualifications framework. In other countries priority has been given to initial development, pushing impact issues into the future. In the past two years, however, some countries (such as Latvia and Norway) have signalled interest in developing a more systematic approach to the measurement of impact of NQFs.

The research literature identifies several challenges involved in studying NQF impacts. These challenges include, for example, the complexity of the field (Pilcher et al, 2015; Lassnigg, 2012; Lester, 2011) and the problems involved in gathering reliable evidence on success and reliability (Allais, 2011a, 2014; Raffe, 2009b, 2011a, 2011b, 2012, 2013; Coles et al, 2014). Several contributors have pointed to the particular problem of causality, stating that it is difficult to identify a direct link between the causes and effects of frameworks (Higgs and Keevy, 2007; Bolton and Reddy, 2011; Pilcher et al, 2015). Other literature suggests that NQFs are social constructs based on deeply rooted relationships and partly conflicting interests (Raffe, 2012, 2013; Higgs and Keevy, 2007). This means that a study of impact needs to transcend restricted technical analysis and consider the social dimension of NQF implementation and impact.

The purposes and objectives of an NQF can change over time as exemplified by some first-generation frameworks. New Zealand and South Africa attempted to introduce unified qualifications frameworks aiming to harmonise the way education and training systems were organised and managed. Based on a radical learning outcomes approach, these frameworks were transformational in their character (Allais, 2011c, Strathdee, 2011), signalling high ambition. It may be that this initial ambition, potentially exaggerating and 'overselling' the role of frameworks, has influenced the debate on NQF-impact in a negative way. While most policy-makers and researchers agree that initial transformational objectives were unrealistic, this does not mean that other objectives cannot be addressed and achieved. Understanding the impact of NQFs requires a realistic baseline, reflecting the way the framework is positioned in the national political and institutional landscape. Both the South African and the New Zealand NQFs illustrate how policy developments and impact assessments can be closely interrelated.

The South African qualifications framework is the most researched (Allais, 2011a, b, c; Keevy and Blom, 2007; Taylor, 2010; SAQA, 2003, 2005, 2014, 2017). Studying and assessing impact was perceived as technically complex (Bolton and Reddy, 2015) as well as politically controversial (Coles et al., 2014, p. 28). Carried out in several stages from 2002 onwards, priority was given to developing an evaluation framework sufficiently complex to capture the impact of the framework on the multitude of stakeholders and sectors involved. The most recent evaluation, initiated in 2014, approaches the NQF as an 'activity system', whose main purpose is to link different stakeholders and sub-systems of the education and training system, thus improving overall communication and coordination. The main focus of the study was to review the design and implementation of the NQF functions, to collect and

analyse data on access and progression ([27]). Priority was given to establishing limited number of evaluation criteria making it possible to observe change over time. The South African research demonstrates the importance of reflecting on the 'outcomes' of NQFs. An approach exclusively looking for quantifiable and short term gains may overlook the longer term effects on stakeholder interaction and involvement.

The New Zealand national qualifications framework was designed with an ambitious aim of transforming education and training and adopting 'a common system of measuring and recording learning'. Intended as a unifying and transformative framework that should serve multiple groups and stakeholders, it faced difficulties from the beginning (Strathdee, 2011). In the course of implementation many changes were made to accommodate the interests of different stakeholders. By acknowledging the specific qualities and needs of the different subsystems, the NQF has (according to Strathdee, 2011) gained wider acceptance.

In contrast to New Zealand, the Australian qualifications framework (AQF) was designed as a 'loose' framework with no legal base and no direct power in accrediting qualifications or quality assurance (Wheelahan, 2011b). In 2009-10, the Australian Qualifications Framework Council (AQFC) initiated a major review of the framework with extensive consultation across sectors. This was an *ex-ante* evaluation on how the strengthened AQF was likely to impact on, and be affected by, education and training and labour market structures and processes. It focused on how qualifications are constructed, how they are measured against each other and how they are used and valued (Buchanan et al, 2010). In 2011, a revised and strengthened AQF was published with explicit learning-outcomes-based levels, detailed qualification type descriptors and supporting policies on pathways and credit transfer. The knowledge dimension in qualifications became stronger and more explicit with important consequences for VET qualifications that must now include an educational purpose besides the vocational one (Wheelahan, 2011b; Coles et al, 2014).

The Scottish qualifications framework (SQF) was evaluated in 2003 (Gallacher et al., 2005) to understand its expectations and its impact on policies and practices, as well as study factors that led to particular responses from institutions. The impact study in 2013 (SCQF partnership, 2013) looked at levels of awareness, the perception and understanding of SCQF among learners, parents, teaching staff and management. This evaluation, based on a combination of focus groups, online questionnaires, face-to-face interviews and in-depth interviews gave valuable insight into the level of implementation of the framework. The findings demonstrate that the SCQF is widely recognised by learners, parents and educational professionals in UK-Scotland. The evaluation is important also outside UK-Scotland as it provides research-based documentation on the impact of the framework at the level of end-users.

In Ireland, an impact evaluation of the national framework of qualifications (NFQ) was carried out in 2009, researching the degree of implementation and the impact of the framework on education and training; it was a five-year investigation, including background paper prepared by the National Qualifications Authority of Ireland (NQAI), reports from key

([27]) A broad theoretical framework was also developed to understand change. It comes from activity theory through elaboration of Engeström's cultural historical activity theory (CHAT) (Engeström 1987, 2001, cited in Bolton and Reddy, 2015) aiming to map and study complex interactions between institutions and individuals and change processes.

stakeholders, engagement with stakeholders, case studies and a public consultation. Findings referred to different areas: implementation of the framework, impact on learners, learning outcomes and cultural change, and framework visibility and currency. A new policy impact assessment of the NFQ was under way (2016-17): a survey was being carried out that seeks views on policy impact of the NFQ on transparency of qualifications, quality of qualifications, lifelong learning, recognition and mobility, employability and curriculum design. Stakeholder views on the governance of the NFQ and on future policy priorities of the NQF were collected and analysed. The findings of the policy impact assessment of the NFQ will inform ongoing development and evaluation of the NFQ and will contribute to the evidence base for any future EQF referencing.

Evaluation of the Welsh framework with regards to the strengths, challenges and weakness of the framework implementation was carried out in 2013-14 (Welsh Government, 2014). Several recommendations were made in 2015, based on the findings of the evaluation: to support the CQFW as a meta-framework that underpins future qualification strategies; to revise the aims and objectives so that it evolves into a 'functional' national qualifications framework which acts as a vehicle for describing the qualifications system in UK-Wales; to simplify and raise the levels of understanding and profile of the CQFW; and to move ownership of the quality-assured lifelong learning (QALL) pillar from government back to the sector with a view to making formal and non-formal learning less bureaucratic and more accessible.

In the UK (England and Northern Ireland), evaluation of the qualification and credit framework (QCF) was carried out based on the background paper looking into practical experiences in implementing the QCF between 2008 and 2014. After extensive consultation throughout 2014 and 2015, and following a review of the QCF ([28]), Ofqual – the qualifications regulator – withdrew the regulatory arrangements for the QCF and introduced the regulated qualifications framework (RQF). The RQF is a simple, descriptive framework which requires all regulated qualifications to have a level and size. It is supported by Ofqual's General conditions of recognition ([29]) and statutory guidance ([30]).

7. Findings and implications

Several lessons may be drawn from the above experiences, potentially informing the way we assess and measure the impact of qualifications frameworks.

First, it is important to acknowledge the particular character and role of national qualifications frameworks: as multilevel, dynamic and evolving tools, their objectives might change over time. This is clearly demonstrated by some first generation frameworks as it is

([28]) Ofqual (2014). A consultation on withdrawing the regulatory arrangements for the qualifications and credit framework. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/381547/2014-07-24-a-consultation-on-withdrawing-the-regulatory-arrangements-for-the-qualifications-and-credit-framework.pdf

([29]) Ofqual (2016). General conditions of recognition. (Ofqual/16/6023). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/529394/general-conditions-of-recognition-june-2016.pdf

([30] Ofqual (2016). Guidance to the general conditions of recognition. (Ofqual/16/6068). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/538339/guidance-to-the-general-conditions-of-recognition-July_2016.pdf

by frameworks developments in some European countries where focus and ambition have evolved. It is illustrated by shifting the functions from mere communication and transparency to strengthening functions such as quality assurance, progression or opening up to qualifications awarded outside formal system. The relative complexity of comprehensive frameworks in Europe is illustrated by that fact that they are based on sub-frameworks referring to sectoral legislation, sectoral institutions and stakeholders. Sub-frameworks may differ in ambitions, objectives and degree of regulation. Comprehensive frameworks firmly aim at strengthening lifelong learning policies and practices and seek to integrate and coordinate education and training subsystems. They are tools that relate different parts of education and training and only rarely used to directly regulate the design and management of qualifications.

Second, NQFs should not be understood as a single-purpose focused intervention. Comprehensive frameworks, such as those now developing in Europe, address multiple stakeholders and objectives. Assessing the impact of NQFs requires clarification of the objectives of a comprehensive/overarching framework, and its sub-frameworks, and of how these interact in a specific political, institutional and social context. Clarifying these objectives and how they complement or contradict each other, makes it possible to establish a baseline for assessing the effectiveness and efficiency of the framework. It is also important to note that NQF objectives may differ in different sub-frameworks, for example in vocational education and training, general education and in higher education. When discussing the impact of NQFs, the different types of NQFs, and the way they link to and integrate subsystems and policy areas, matter (Raffe, 2011a, 2013; Pilcher et al., 2015). Focus on functions of NQFs over time can help capture changing policy priorities. The described complexity must be taken into account when assessing and measuring the impact of frameworks. The following points may be considered:

- The impact of NQFs needs to be understood in relation to the social, political and institutional context in which they operate. All evaluation and impact studies emphasise the importance of contextualisation of the NQF to provide narrative within which the outcomes of an evaluation can be interpreted. Without contextual links, there may be the danger of adopting a ‘technicist’ approach. It is also important to look at the mechanisms and success factors.
- The time dimension is an important factor influencing the focus of an evaluation or impact study from two perspectives: NQFs change over time, and some authors, such as Taylor (2010) emphasise that timing of measurement is important. He suggests that in the first two years of NQF implementation, evaluation of the architecture is possible; two to five years of implementation are needed before effectiveness of implementation can be examined; and 5 to 10 years before the impact can be assessed.
- Assessing the impact of NQFs requires baseline(s) and a limited number of indicators that can monitor the implementation and (possible) evolution of an NQF over time. This baseline has to be designed in such a way that it captures the interests of a multitude of stakeholders and dynamics of different sub-frameworks and cross-system developments.

- An impact study must, given the multitude of stakeholders involved, be based on agreed criteria. Given the political character of frameworks the criteria used for impact assessments must be based on a shared understanding of what is to be measured. This illustrates the close interaction between policy developments and impact assessments in this area.
- Assessing the impact of an NQF must take into account limitations regarding causality. Given the complexity of the context in which frameworks operate a clear-cut determination of causes and effects can be elusive. A possible approach is to emphasise the 'relational role' of the framework, pointing to its ability to involve and commit stakeholders and to promote cooperation and communication. This qualitative approach, complementing and partly contrasting a measurement of quantifiable facts, makes it possible to capture the complexity of the framework and its functions.

The future relevance of NQFs depends on our ability to continuously assess and review their implementation and impact. The points listed above give some direction to the future work which is needed in this area.

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