

Skills audits: tools to identify talent

Final report

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July 2018



EUROPEAN COMMISSION

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Directorate-General for Employment, Social Affairs and Inclusion

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Luxembourg: Publications Office of the European Union, 2018

ISBN 978-92-79-98771-7

doi: 10.2767/993047

KE-01-19-014-EN-N

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Executive summary: Boosting self-awareness, improving career choices and supporting labour market transition through skills audits

Study on skills audit practices in selected EU Member States

Different EU documents, including the 2012 Council Recommendation on validation of non-formal and informal learning and the 2016 Council Recommendation on Upskilling Pathways, promote skills audits as one means to support individuals in their transition periods. In these documents skills audits are suggested as a practice to identify and document knowledge, skills and competence of individuals with a view to further inform decisions about career orientation, education or training. However, there is limited evidence about the extent to which skills audits are used and what they entail in practice. The purpose of this study was to improve the knowledge base about skills audits, to identify main types of skills audits, the methods and approaches used for skills audits as well as to assess the extent to which standards are used as part of the process. Considerations about effectiveness of skills audits were also analysed.

Summary of study approach

The data for this study was collected in the period June 2017 – January 2018. The study covered 16 EU countries¹ which were selected because in each of them there was a breadth of skills audits practices identified through initial research and because processes for validation of non-formal and informal learning in place had some links with skills audits. The unit of analysis for this assignment was a skills audit practice not a country. In other words, the study did not aim to make a comprehensive mapping of skills audits in each of the selected countries. Instead the study looked at a selection of skills audits which represent a diversity of target groups and approaches. This means that also some relatively small scale, and in country context possibly marginal, practices were included in the analysis next to large scale and established ones.

The data for the assignment was collected through a combination of methods as shown in the figure below.

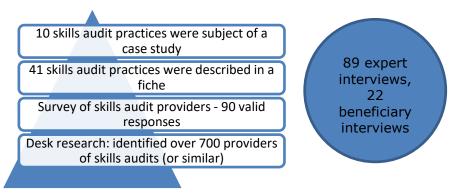


Figure 1. Overview of data collection methodology

Source: ICF

Is there a common understanding of skills audit?

The research shows that while there is a high number of practices that fall under the definition of skills audits as presented in the 2012 Council Recommendation on validation, the term skills audit itself and its translation is not used in practice. None of the 41 practices analysed is actually called a skills audit or equivalent translation. When the term skills audit is used, it can actually refer to a different type of practice than what the Council Recommendation on validation suggests. For example, the term skills audit is

¹ Austria, Belgium (Belgium-nl, Belgium-fr), Croatia, Czech Republic, France, Finland, Denmark, Germany, Italy, Ireland, Luxemburg, Malta, the Netherlands, Poland, Sweden and the UK

used to refer to large scale surveys in a country, region or a company in an Englishspeaking context. The terminology used more frequently is:

- Skills profiling;
- Skills diagnostics;
- Skills assessment;
- Skills portfolio;
- The term 'bilan de competences' in French is broadly used and sometimes also translated into other languages;
- Some countries prefer to use the term competence instead of the term skills ('competence check, competence assessment');
- Sometimes a skills audit is part and parcel of a larger validation process but designated with a specific term (other than validation).

Overall the vocabulary in this field is not yet stabilised and shared among the stakeholders (with the exception of the above mentioned term 'bilan de competences'). This was a challenge for this research assignment as explaining the scope of the assignment to country researchers as well as stakeholders interviewed, and created some confusion about what is and what is not covered by the study. As a result of this terminological challenge, the study covered a broad and somewhat heterogeneous group of practices. In the eyes of some countries and stakeholders, some of these practices may not fall into the category of what they understand as a skills audit (or its equivalent).

This report continues using the expressions skills audit to align with the EU Recommendations mentioned above. However, it also notes that beyond the heterogeneity of terminology used there are related challenges with the term 'skills audit':

- It does not translate well into other languages;
- The word 'audit' has a negative connotation as it suggests verification of compliance; and
- The negative connotation is further exacerbated by the fact that while many skills audits rely on the voluntary nature of participation, the term is not appealing to the target group. As one interviewee put it, '*no one wants to be audited*'.

Are there common features to a skills audit practice?

Most skills audits have a common thread which consists of the following principles:

- In most cases, the process is owned by the individual. This individual ownership results in one of the main effects of a skills audit: better awareness of ones' capabilities. This is often combined with the voluntary participation of individuals in the process. Some target groups are recommended or obliged to take part in a skills audit (for example, certain categories of unemployed or certain profiles of employees if it is a company-level initiative). In these cases, the skills audits may be owned by employers and PES rather than the individual;
- Forms of assessment which combine narratives of past experience, interviews, and self-assessment are frequently used. There is typically some form of self-assessment which can be done on an individual basis or in a guided context. However, for some target groups, for example, people facing issues with literacy or with the language of the host country, support through trained counsellors is needed to help extract evidence from a persons' narrative.

The use of these approaches is typically sufficient if the aim of the process is to improve self-awareness, inform future choice, or better present one's capabilities to an employer.

These forms of assessment can be combined with more rigorous and 'authentic' approaches, such as observations and demonstrations under real-life conditions, tests, and work trials. This is especially the case when the individual receives a certification for his/her knowledge, skills and competence from prior learning.

- The output from the process is often a portfolio, in particular, in cases of more complex and in depth skills audit practices. When the output is not a fully-fledged portfolio, there is still some form of profile documentation, such as a skills card or skills map. In some cases, skills audits lead to the certification of skills and the award of a qualification.
- Where the skills audit is carried out together with a counsellor, this is typically
 accompanied by advice on next steps. This may simply be advice on how the
 outcomes of the skills audits can be used, or, in the context of Public Employment
 Services, the skills audit can be used as a basis to develop an individualised action
 plan. In the case of online assessment tools, skills audits typically lead to more
 general career suggestions.

This 'common thread' points to a number of key features of skills audits, which are shown in the figure below.

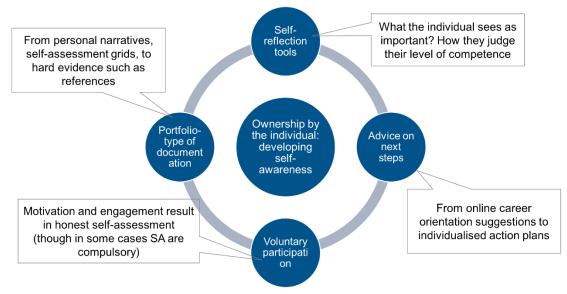
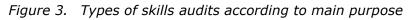
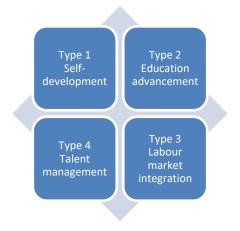


Figure 2. Key features of skills audits

Main types of skills audits

The research considered various ways in which practices reviewed could be grouped into a typology. The most informative clustering of initiatives differentiates between four types according to the main purpose of a skills audit (see Figure 3). Depending on the objective of the skills audit, the use and role of standards or the choice of assessment methods will vary.





Source: ICF

A summary of these types is presented below (Figure 4).

Figure 4. Overview of main types of skills audits







• Aims: Reintegration into education and training, shortening of education/training, individualised training plan

- Typical providers: Education and training providers
- •Use of standards : yes education or qualification standards depending on the system
- Methods used: broad range of methods but often includes demosntrations, observations



Skills audits for labour market integration

- •Aims: Find and secure a position, match candidates to job requirements, provide evidence to employers of past achievements
- Typical providers: Public employment services
- •Use of standards: Occuptional standards or qualification standards if also combined with validation of NFIL and related certification
- •Methods used: combination of soft-methods with demonstrations, sometimes includes observation during a traineeship



Skills audits for talent managment in companies

Aims: Manage workforce and support professional development within a company or a profession

Typical providers: Companies or public services

Use of standards: Occuptional standards or company specific job-descriptions

Methods used: self-assessment, feedback from line managers, feedback from peers, observations, past performance

Source: ICF

What is the demand and supply of skills audits?

The study observed that there has been a mushrooming of skills audit practices in the past decade. In most countries analysed, there is a variety of practices that fall under the definition of skills audit as outlined in the Council Recommendation on validation. Some are large scale and well established, sometimes targeting a very broad target group or not distinguishing between profiles of persons. Others are more focused, targeted specifically at certain profiles and sometimes local or small scale. In particular, practices targeting refugees and asylum seekers appear to have seen important growth recently. Many skills audits have more than one target group, but some specialised practices that focus on a single target group have also been identified. For example, practices that target refugees/asylum seekers who require special adaptations, due to challenges concerning the level of their host country language, as well as lack of documentation of past achievements. Another group of specialised practices can be found in the group of

talent management strategies, where skills audits are used to target a specific group of employees /professionals.

Public employment services are a significant provider of skills audits, particularly to individuals falling under the third type of skills audit (labour market integration). Many public employment services use skills audits as a means to profile job seekers, help them shape their professional project and provide advice on future orientation, as well as to do specific job matching. Public employment services use a variety of practices, ranging from deep and relatively substantial processes, such as those that are typically grouped under the name of 'bilan de competences' (or equivalent translation), to self-assessment using online tools, which are much less resource intensive.

In terms of scale of supply and demand, it is difficult to make clear cut observations based on a study which did not aim to make a comprehensive mapping of all possible types of skills audits in the countries covered. However, it can be said that in many of the countries analysed, large scale and well established practices have been found (AT, BE, DE, DK, FI, FR, HR, IT, NL, UK) next to more small scale provision. Practices that fall into the categories of skills audit for self-development and skills audit for labour market integration are more frequently strongly established and are larger scale, while practices that concern talent management are typically smaller scale, as they focus on specific companies. Overall, skills audits are on offer for a range of target groups in the countries covered under the scope of this study. Yet, the research method does not allow to assess whether all target groups are sufficiently served.

There seem to be low thresholds regarding the financial accessibility of skills audits. Most practices that address target groups that may not have the means (financial or motivational) to pay for skills audits are either fully publicly funded or offered at a reasonable cost. It is not uncommon that the same practice would be available free of charge as part of active labour market policies to job seekers, but can also be made available for a fee to those who wish to use the service as part of guiding their decisions for career transition. Yet, some beneficiaries report financial issues as a reason not to take up skills audits, especially where this entails a long process with several steps leading to a qualification. In those cases, costs can occur related to ensuing training and certification.

The demand for skills audits is in many cases ensured or stimulated by the fact that the practices are integrated into another policy; be it active labour market policy, refugee integration policy, or policy for youth guidance and orientation. In many cases, there is a referral process through which individuals are recommended for a skills audit. However, for practices that are aimed at self-development, outreach strategies are also put in place directly by skills audit providers, to make sure to reach individuals that may not come forward independently to access services available to them.

What is the relationship between skills audits and validation?

The relationship between validation and skills audits is not always clear to stakeholders. In addition, the level of integration between validation (which encompasses identification, documentation, assessment and certification) and skills audits varies, depending on the type of audit. In some countries, the process for validation relies on strictly prescribed approaches whereby none of its component steps can be skipped or adjusted, even if there is evidence available from other sources that the individual has achieved a given skill or competence.

The analysed skills audits that focus on self-development and talent management often do not include assessment nor certification. Those that focus on labour market integration, and to a lesser extent, those related to educational advancement, often do not include certification. Our survey of providers suggests that less than 10% of the skills audits initiatives analysed lead to some kind of qualification. Some, although by no means all, skills audits include formal learning in addition to non-formal and informal learning. In addition, most audit procedures do not include follow-up plans.

This raises important issues regarding the articulation between skills audits and validation initiatives, in order to ensure that those who undertake skills audits have

routes available that enable them to progress into or within the labour market and education.

Identification and documentation can produce significant positive outcomes, for example. in terms of empowerment and motivation. They are integral to the definition of skills audit provided in the Council Recommendation on validation, because of their potential to help individuals analyse their career background self-assess their position and plan career pathways. There is evidence that skills audits are effective in that regard.

Some skills audits also cover assessment and certification. While this may not be the main aim of other skills audit procedures, or even appropriate for some target groups, it is nevertheless good practice that skills audits have these options open, should their users want to make use of them. This may be in the context of the skills audit itself, or by establishing connections between those audits and validation procedures that have those options in place, or lead to relevant educational offers which would enable an individual to take the next steps upon completing this training. Effective referral procedures are key in this regard.

Effectiveness of skills audits and related preconditions

Only some of the practices analysed have been evaluated. As such, evidence of their effectiveness is limited. In absence of evaluated practices, the study relied on more subjective judgements of the interviewees on the success of measures analysed.

The evaluations reviewed and the interviews carried out systematically highlighted the positive effect of skills audits on the activation and motivation of beneficiaries. Skills audit are reported as an important instrument through which individuals gain an insight into their own skills and capabilities, thus increasing awareness of individuals' potential and triggering activation mechanisms. This is an important precondition for all other effects of this type of practices. It is through this positive effect on one's own self-image and the explicit articulation of their skills that people can formulate more mature career choices and decide on related education or training trajectories. It is also through this realisation that they can better present themselves in a job-interview, thus enhancing their opportunities for securing a position. The evaluations that looked at the effects of skills audits on labour market transitions found a positive relationship (e.g. in FR, NL, BE fr or FI). They also support the validity of the process – beneficiaries rate themselves in the same manner or worse than assessors/counsellors would rate them. However, it also needs to be noted that:

- Most of the practices reviewed do not have strong evaluations and some do not even have basic data on the number or profile of users;
- Some examples have been found to work better for certain groups than others. Practices that rely strongly on a self-reflection process, and where the individual leads the process of articulation of his/her skills and competences - work better for those who already have a certain level of self-efficacy. Such self-efficacy is often associated with having achieved prior qualifications and/or having prior experience from the labour market. People with low levels of basic skills or insufficient language skills need processes/procedures that rely less on themselves driving the process. Similarly, tools that rely on IT tend to be more successful with people who already have the basic qualifications and skills levels to be comfortable in using them;
- Some skills audits are owned by employers and PES rather than the individual. Their effect on the individual may be indirect as the organisations are the immediate users of the results (to improve their processes and services).
- A few examples have also been identified where the skills audit has been found to have little association with increased chances of finding a job (e.g. in SE). However, this was the case for practices that have since been revised and which also targeted groups with important challenges to enter employment (migrants and refugees).

Overall, it can be noted that to be effective, skills audit practices need to well reflect the realities and constraints of the target groups:

- The practices that tend to rely more strongly on a self-driven process (possibly guided by a tool rather than by a professional) are more likely to be successful with people who already have a good level of basic skills, and in particular, selfefficacy.
- Practices that are targeted at groups that have challenges with basic skills, host country language or who have low levels of self-awareness, confidence or motivation require stronger inputs from the side of a counsellor. Successful practices targeting these groups put in place a process that is guided by a professional, requires more contact hours and is longer in duration.

Future trends and innovations

The analysis of skills audits also identified several trends that could be gaining importance in the future. These are:

- The future of work is expected to entail lower job security, and more changes throughout a career. Skills management will be needed to anticipate and prepare for change and career development. Skills audits are useful in that regard.
- Many of the examples analysed, particularly when they concern people who already have at least some level of qualification, are based on the assumption that the underpinning need of individuals (and their employers) is to make skills and competences visible; not necessarily to certify them. For many individuals and many situations of job search, such visibility is sufficient enough to empower them to take the next steps, and there is no need for a more formalised process of validation and certification. Moreover, not all qualifications are part of the regular education & training system. This is especially the case in highly specialised and fast-paced industries (e.g. IT and aviation).
- Recently, technology is increasingly being used as an intermediary solution. The use of technology to develop online portfolios which are easily storable (i.e. online), can have several layers of depth of information, and can have a process of external validation as well. Several initiatives using electronic badges have been identified by the study as potentially interesting solutions. Badges make skills and competences visible in a very user-friendly format. They are motivating for the individuals, as there is a gamification element to collecting them. Badges enable individuals to show their skills in a rapid manner to potential employers (the function of the badge) but if needed, more information is stored in the badge about the actual skills, competences, and what one needs to demonstrate to receive the badge. Information on 'assessment', or on who observed the demonstration of given skills/competences is also embedded in the badge. Interconnectivity between these tools and other portals for job search is another feature which means that more and more such tools are likely to be used in the future.

Conclusions

Based on the findings of the study, conclusions are drawn for five thematic areas related to the development, implementation and review of skills audits:

- Concept and terminology of skills audits;
- Types of skills audits and their relationship with validation;
- Skills audits process and methods;
- Scaling up; and
- The effects of skills audits.

Concept and terminology

• **Conclusion 1:** The term 'skills audit' is rarely used; when it is used, its meaning varies. It is recommended that an alternative formulation to the term 'skills audit' should be sought, and the concept should be clarified, including quality criteria.

Types of skills audits and their relationship with validation

- **Conclusion 2:** Skills audits can be classified in a variety of types based on their objectives; connections between these different types would need strengthening. It is therefore recommended that links and connections between different types of skills audits and other related initiatives should be enhanced to ensure possible trajectories are clear for the beneficiaries.
- **Conclusion 3:** The articulation between skills audits and validation is currently unclear and needs to be further developed. This may entail a review of the purpose of skills audits currently embedded in the Council Recommendation on VNFIL, which could be broadened.

The skills audit process and methodologies

- **Conclusion 4:** In order to be effective, the skills audit process needs to be tailored to target groups. It is recommended that the production of practical guidelines on how to design and implement skills audits for specific target groups should be supported.
- **Conclusion 5:** Work collaboratively to ensure the use of standards with currency in education and/or the labour market. It would be beneficial to bring education and labour market organisations closer together with those organisations designing and implementing skills audits, to discuss the further development of skills audits.
- **Conclusion 6:** Methodological innovations and the use of technology for skills audits are on the rise. There is scope to intensify exchange and mutual learning on good practices and on the use of innovative methodologies in skills audit initiatives.

Scaling up

- Conclusion 7: There are different legal frameworks regulating access to skills audits. While movement towards a uniform regulation of access to skills audits may not be desirable, it will be important to ensure that where skills audits are not a right, sufficient opportunities for access are provided within the context of skills and employment policies, particularly at the lower skills levels and for disadvantaged groups.
- **Conclusion 8:** Skills audits seek different aims and target groups; a differentiated approach would recognise this and provide different types of support from the public sector, establishing clear priorities in order to facilitate scaling up. Specific actions on EU level to support to the scaling-up of initiatives should follow a similar approach.
- **Conclusion 9:** Financial and time restrictions can affect both providers and beneficiaries' extent of using skills audits. While this varies across the examples and target groups, ways to improve the sustainability of skills audit procedures should be explored.

The effects of skills audits

• **Conclusion 10:** Skills audits can have positive effects; however, evidence is still weak. To get a better and more differentiated view on the effects of skills audits, efforts to monitor and evaluate the outcomes of skills audits should be enhanced.

1 Introduction and research approach

Skills audits are emphasised as a highly useful instrument in several key policy documents at EU level. They feature in EU policies concerning employment, migration as well as education and training as discussed in greater detail in section 2.

Yet, there is evidence² that skills audits are understood rather differently across Member States and stakeholders, but a detailed comparative overview on what a skills audit comprises is missing. Moreover, there is still a significant gap in the knowledge about how common skills audits are, what steps they entail, who uses them, what their results are, and how they are linked to other pathways to qualifications or employment.

In May 2017, the European Commission (DG EMPL) commissioned this study on 'Mapping Skills Audits in and across the EU', to carry out research in EU Member States on their current practice in relation to Skills Audits. The objective of the study was to create a better knowledge base about the availability of skills audits to different target groups, the variations in how skills audits are carried out, what they entail, who is involved, and which identification and assessment methods are being used. It was also aimed at collecting evidence on the demand and supply of skills audits in selected EU countries and the effectiveness of different types of practices.

More specifically the study aimed to:

- Present an overview (mapping) of skills audits in 16 selected EU Member States;
- Provide an analysis of the stages to carrying out skills audits and based on this develop a typology of skills audits which can be used as a basis to inform policy developments in this area.
- Mapping of the demand and supply of skills audits in terms of types of providers and types of users but also the existence of policy mechanisms to stimulate demand for skills audits;
- Identify and analyse the specific methods used and the organisations of skills audit delivery;
- Review the ways in which standards are used as part of skills audits and what is the balance between open approaches and those driven by specific standards;
- Provide an assessment of the effectiveness of skills audits in selected countries.
- Identify the linkages between skills audits and other pathways for validation of non-formal and informal learning, looking at the extent to which the results of skills audits can be used further to shorten education/training pathways or as part of certification.

The results of the study are expected to feed into further discussions at national and EU level on how to design and implement skills audits, and their link with related policies (validation of non-formal and informal learning, and Upskilling Pathways).

The research was carried out between June 2017 and January 2018.

1.1 Scope of the study

1.1.1 Country coverage

The study covers 16 EU Member States. These countries were selected on the basis of a review of the 2016 European Inventory country reports that included a section on skills audits and a review of broader literature on the topic. The countries were selected on the basis that:

² Inventory of validation of non-formal and informal learning 2014, Cedefop 2016.

- One or several examples of broadly accessible large scale skills audit practices existed in the country; and
- At least one of these practices was connected to the process of validation of nonformal and informal learning, thus allowing those who complete a skills audit to go beyond the stage of identification and documentation of skills previously acquired.

However, this does not mean that other countries have not developed skills audit practices. The decision to focus on 16 countries rather than all the EU-28 was to allow the research team to cover a variety of practices within each country and to enable more in-depth research in the selected countries.

The 16 European Member States covered are: Austria, Belgium (Belgium-nl, Belgium-fr), Croatia, Czech Republic, France, Finland, Denmark, Germany, Italy, Ireland, Luxemburg, Malta, the Netherlands, Poland, Sweden and the UK (for more detail, see section 3).

1.1.2 Skills audits included in this research

There is a variety of practices that could fall under the broad definition of a skills audit (see section 2). In fact, the term 'skills audit' is not broadly used and it can be understood as meaning many different types of practices. One of the aims of this study was to gain a better understanding of the different types of practices that could fit with the way skills audits are described in the Council Recommendation on the validation of non-formal and informal learning. The coverage of this study is therefore intentionally broad and covers a wide range of practices. This means, however, that the sample of practices reviewed can be seen as heterogeneous, and one may argue that some of the practices covered do not fall under what they perceive to be a skills audit. This is in line with the study exploratory objective of identifying different types of skills audits.

Box 1. Unit of analysis: Skills Audit initiatives

In this assignment the main unit of analysis is a skills audit initiative. In other words, a specific practice that has a defined approach and methodology. The initiative is embedded in a country context which was also described and analysed but this should be understood as background.

The country is not the main unit of analysis in this assignment. In other words, the study does not discuss the extent to which skills audits are more or less developed in one country or another. Nor does it make absolute statements about the use of skills audits in a country. In all countries covered under this assignment only examples of skills audits were included. We aimed to ensure that the most important initiatives and the ones that reach out to the largest audience in the country are covered. Yet, we also made sure we included a broad variety of practices. This means that choices had to be made about which examples to retain in which country.

As a result, the choice of initiatives covered in this study in each country is not meant to be fully representative of what is happening in terms of skills audits in the country

1.2 Methodological approach

Research and data collection related to this study were carried out in three main stages:

- Stage 1: Identify Skills Audit initiatives
- **Stage 2:** Describe Skills Audit initiatives
- Stage 3: Analyse Skills Audit initiatives

The results from all three stages were used to prepare this report. As shown in the figure below (Figure 5), each stage entailed specific steps.

Figure 5. Main stages and steps of data collection



Box 12 below provides an overview on the pool of data collected and the numbers of interviews carried out.

Box 2. Pool of data collected and numbers of interviews

In total, the following data were collected for this study

- 90 valid responses to our survey among skills audit providers each response covering a distinct skills audit initiative;
- 16 country context fiches describing the background to skills audits at country level, in particular, identifying the main initiatives and the legal frameworks (if relevant), or rights to skills audits if existent;
- 42 skills audit initiative fiches whereby each initiative fiche describe a skills audit practice, its main features and processes entailed;
- 10 case studies which described in greater detail the perspective of practitioners and individuals.

Following initial desk research, 89 interviews with representatives of the skills audit initiatives, stakeholders, and 22 interviews with beneficiaries were carried out to prepare the fiches and case studies. In 4 cases, site visits were carried out.

In addition, over 100 written sources analysing skills audits (studies, academic articles, evaluations, monitoring reports etc.) were screened for evidence on the outcomes and impact of skills audits³.

A more detailed description of the methodology followed is provided in Annex 1.

In summary the different sources of data were used to collect information about the following aspects of skills audits:

- The purpose of the skills audit what is the skills audit expected to provide to the individual beneficiaries or to companies;
- The extent to which a skills audit covers the stages of identification, documentation, assessment and certification that are a feature of validation;
- The target groups and channels through which people access the practice;
- Overview of who does what and who are the stakeholders concerned;
- The methods of skills assessment used;
- The skills concerned by the audit;
- The guidance and support provided to beneficiaries;

³ See Annex 8: Summary of evaluation findings

- The results of a skills audit process for the individual and any linkages with next steps' in learners' progression; and
- Data and evidence of effectiveness of skills audits.

The methodology combined the collection of descriptive information about the ways in which skills audits are being implemented as well as more analytical insights about the rationale for these initiatives and evidence of their success.

The main challenges for the assignment were experienced both during the data collection and the analysis:

- The term skills audit is rarely used in the national languages or even in English. Instead a variety of terms are used which meant that most of the practices covered are not actually called skills audits and their stakeholders would not understand the term skills audit as something relevant to their activities;
- Companies and private providers of skills audits were in several cases reluctant to share insights on their approaches to skills audits, as these are often part of their service offer and/or internal human resource processes, and thus are company confidential;
- The degree of standardisation of skills audits assessment practices differs very much from one example to another. In several cases there is a great degree of autonomy for providers to decide on how they actually carry out the actual process of identification and assessment of skills;
- The diversity of examples of skills audits practices included in the sample meant that it was not straightforward to identify clear trends regarding skills audits processes. This challenge was partly overcome when the typology of skills audits was introduced but nevertheless most of the trends observed are not clear cut and practices which contradict a given observation were also identified; and
- Initially the study approach intended to compare existing skills audits to an idealtype process. However, this proved to be challenging because the characteristics developed for an ideal-type (e.g. guidance, funding) were relevant for some of the categories of skills audits but not for others. The fact that some features of the ideal-type were not present in some of the practices was not necessarily a weakness of the practice but could be explained by its purpose. Therefore, the comparisons with an ideal model were much less categorical as initially intended and could not be used to provide statements about the quality of a skills audit.

As the study was exploratory in nature, the study findings may occasionally offer a rather patchwork description and analysis of skills audits. However, this is due to the fact that the practices analysed are highly heterogeneous. More work is needed to clarify the concept of skills audits and to ensure this concept is better understood by the expert audience.

This report is accompanied by the following annexes which provide more detailed information about the skills audit examples which were covered in this study:

- Annex 1 gives an overview on the study methodology;
- Annex 2 presents the 16 country fiches that were prepared under this study (submitted as a separate file);
- Annex 3 presents a brief overview of the 90 skills audits which were covered in the survey of skills audit providers (submitted as a separate file);
- Annex 4 presents an overview on the 41 skills audits that were covered by country researchers and for which more detailed fiches were produced, in the form of a table;

- Annex 5 presents a more detailed summary of each of the 41 initiatives, with one additional example that was added after the data collection was finalised. Annex 5 has the form of a separate 'Compendium' which can be used for dissemination to readers who are interested to get a more detailed overview on the variety of skills audit initiatives on offer;
- Annex 6 provides a table with a summary of the findings of evaluations of skills audits that have been carried out in the 16 countries covered. Focus was on challenges and success factors for skills audits that were identified.

2 Policy context and key concepts

Box 3. Summary of main findings

- This study feeds into the context of several EU-level policy initiatives, including Validation of non-formal and informal learning and Upskilling Pathways, that are based on the idea of recognition of prior learning from different learning contexts to bring people closer to the labour market. Skills Audits are expected to be instrumental for validation of non-formal and informal learning, and are the first step of an upskilling pathway for low-skilled/low-qualified groups.
- The terminology of 'skills audits' is not used in the vast majority of practices examined. While the study identified many examples that cover all or some aspects of the process that is defined as 'skills audit' in EU documentation, none of these are actually called a 'skills audit'. The terms skills assessment, skills profiling/diagnostics, or the French term 'bilan de competences' are more commonly used.

2.1 Policy context

In 2016, 63 million Europeans did not have an upper secondary qualification (EQF level 3 or 4)⁴ leaving these individuals at high risk of unemployment, poverty and social exclusion. The political response at EU level to these shared challenges aimed to go beyond fragmented project level measures and included joint European initiatives in several policy areas. In the field of education and training, a range of policy initiatives and implementation tools were developed both at European and national levels. This includes frameworks for transparency among different education and training subsystems and economic sectors, through a European Qualification Framework (EQF) and corresponding National Qualification Frameworks (NQF), educational and occupational standards, competence-based and learning outcomes approaches for education and training.

These frameworks are an important pre-condition to make skills acquired in different learning contexts visible and to facilitate pathways to the validation of skills from prior learning. This includes skills from formal learning as well as from non-formal and informal learning. Skills Audits can play an important role to increase the visibility and value of the knowledge, skills, and competences that people gain beyond formal education and through life and work experience, including from volunteer work. Ideally, the results of Skills Audits can be mapped against qualification standards and the National Qualification Framework and validated, to give a better idea of where an individual stands, and what needs of further training there are. Thus, the results of Skills Audits can increase opportunities and motivation for lifelong learning and upskilling pathways; which improves employability. This is particularly relevant for low-skilled, low-qualified adults and disadvantaged groups on the labour market, including migrants and refugees.

⁴ Eurostat, Population by sex, age and educational attainment level (1 000) (lfsa_pgaed)

Skills audits are promoted in EU policy documents as a means to support individuals identify and document their knowledge, skills and competence with a view to further inform decisions about career orientation, education or training. Policy documents include:

- The 2011 recast Qualifications Directive and other initiatives in the field of third country migration;
- The 2012 Council Recommendation on the validation of non-formal and informal learning;
- The 2016 Council Recommendation on Upskilling pathways; and
- The 2016 Council Recommendation on the integration of the long-term unemployed in the labour market.

The overall aim of these initiatives is to:

- Improve access to learning and the flexibility of learning pathways leading to qualifications;
- Underline the importance of basic skills and transversal skills;
- Improve the validation and recognition of learning outcomes and skills acquired in different learning contexts; and
- Establish lifelong learning strategies and upskilling pathways.⁵

The initiatives share a common understanding that promoting upskilling and/or re-skilling has significant social and economic benefits. Furthermore, there is an increasing recognition that people learn and develop skills in a wide variety of settings beyond the formal education and training system. While the terminology used and the processes suggested differ, a common feature of these initiatives is that they aim at identifying hidden talents and skills and make them visible. This can support and empower individuals, especially low-skilled, disadvantaged groups, to access learning opportunities and develop further knowledge skills and competences, which will improve their employability throughout a lifelong learning pathway. Moreover, it may encourage active citizenship and enhance individuals' general contribution to society.

2.2 The role of skills audits

To support the implementation of skills audit, the intention of the Council Recommendation on validation and more recently, Upskilling Pathways is that Member States should build on existing structures and arrangements for validation. Skills audits can be an important part of Member States' strategies to strengthen or adapt validation systems, or to put in place upskilling pathways. The 2012 Council Recommendation on validation provides some considerations for skills audits:

- Skills Audits are seen as instruments to support the validation of skills. Depending on the needs of the individual and design of the skills audit, it will include at least one element related to the process of validation as outlined in the Council Recommendation on validation (identification, documentation, assessment and certification of skills from prior learning).
- Any individual who undergoes a process related to the identification and recognition of their skills should have access to quality information, advice and guidance (IAG). This applies to individuals taking part in a skills audit, a validation procedure or upskilling pathway. The extent to which this provision is tailored to the intended target group is a key consideration. Moreover, as the provision of IAG can be an external element of the identification step (and other steps), efforts to strengthen partnerships between stakeholders the links between outreach, IAG

⁵ Cf. Strategic Framework Education & Training 2020

and counselling is required. Third sector organisations will have a key role to play in this respect.

- The extent to which methods to identify, document and assess skills is tailored to the individuals is a key consideration. These will vary according to the needs of the individual who can range from those currently in employment (who are highly skilled and qualified) to those who are furthest away from standard services available to them. The latter are likely to require tailored interventions to support them through the process of skills identification and recognition and along a learning pathway.
- Coordination between key stakeholders to support the implementation of process related to the identification and validation of skills. To ensure an individual can build on the outcomes of a Skills Audit, stakeholders should work together to provide further guidance, tailored training or validation. This is also a key suggestion of the 2016 Upskilling Pathways Recommendation.

Hence, skills audits are expected to support individuals in a range of situations to progress along a learning pathway. This may lead to further training, resulting in upskilling and the validation of skills from prior learning.

2.3 Understanding of skills audits and other key terms

A skills audit, as defined in the Council Recommendation on validation, is 'a process aimed at identifying and analysing the knowledge, skills and competences of an individual, including his or her aptitudes and motivations in order to define a career project and /or plan a professional reorientation or training project; the aim of a skills audit is to help the individual analyse his/her career background, to self-assess his/her position in the labour environment and to plan a career pathway, or in some cases to prepare for the validation of non-formal or informal learning outcomes'.

A broad range of practices and initiatives that respond to this definition have been identified in the 16 countries analysed under the scope of this study. Yet, the terminology of 'skills audits' is not established in any of these countries.

Countries that have a *Bilan de compétences* measure in place (e.g. Belgium-Wallonia, France, Luxembourg), have a strong tradition of using dedicated measures for the purpose of skills audits. The *Bilan de compétences* (and its adaptations in other countries) permits the identification and valorisation of professional and personal competencies, abilities and potential, interests and motivations, with the objective to draw up a career strategy, support an external or internal 'mobility', develop competencies within a profession, design a training path, or prepare for a validation of experience (VAE). Following an analysis of the expectations of the candidate and their skills and abilities, the *Bilan de compétences* results in a synthesis document drawn up by the professional counsellor employed by the accredited centre. This document summarises the rationale for the assessment, the competencies and aptitudes uncovered and how these relate to the objectives of the candidate.

In other countries, these tools and process can be called anything from a skills assessment, skills diagnostic and/or skills profiling – all containing one or more element of a skills audit – where validation of non-formal and informal learning may or not be an integral element of the process. As these terms are used interchangeably within countries and across Member States this makes it difficult to differentiate between such approaches though primarily they share the common aim to identify existing skills and up-skilling needs.

A further issue is that there is no clear understanding of what is understood as 'skills'. Skills are usually understood as work-related, hence expertise or talent to undertake a certain job or carry out a specific task. However, skills can also include personal skills or life skills (transversal skills). The word 'competences' is often used interchangeably with skills, but tends to refer to transversal skills, or even general personal abilities or characteristics. In some countries (e.g. FR and DE), the term 'skills' is not used, as it is seen as too one-dimensional, so 'competences' is used instead as an overarching concept⁶.

Through our research we have observed key difference related to the terminology and processes associated with a skills audit, skills assessment, skills profiling and diagnostics. Here we provide a snapshot of our understanding of each of the terms used:

• **Skills audit:** The term 'skills audit' is often used to describe large scale audits (in the form of screenings or surveys) to measure and record the skills available within a certain organisation, group or sector. The main purpose of an audit is taken to be the identification of skills and knowledge currently available within a population, to gather data for comparison with the actual skills requirements on the labour market. The term 'skills audits' seems to be used most often in the context of company-based practices to ascertain the stock of skills within an organisation, and to plan training and recruitment in response.

We have also observed that the term 'skills audit' is rarely used when describing measures offered to individuals – the terms 'skills assessment', 'skills profiling' or 'competence assessment' seem to be more frequent.

 Skills assessment: Forms of self-assessments are increasingly available online for self-administration by users⁷. They are generally used at the instigation of individuals and can include the review, identification, assessment, and diagnosis of skills. Users may employ the tools to test and assess their skills, knowledge, and understanding in a specific thematic area or related their current occupational area; reflect on their current competences in order to determine the type of jobs they could do immediately or in the future.

Most of these types of tests are open and accessible by anyone, and do not use common standards. Yet, there are also more specific forms that address certain target groups (e.g. volunteers), and do indeed use common competence standards. Skills assessments would typically be offered by commercial providers, but also by and public career guidance organisations and websites. Moreover, such tests can be used by employers for recruiting purposes or in the context of employee appraisals.

• **Skills profiling:** In the context of skills audits performed by professionals (PES counsellors, social workers, refugee reception centre staff, others) the word 'skills profiling' is often used. The aim of skills profiling is usually to bring together a persons' achievements and learning from different fields, such as education, training, employment, home, community and leisure.

In public employment services (PES), skills profiling is used to identify skills that need further development; secure a new job; undertake particular learning actions; or/and formulate a personal development plan based on an individual client's 'needs'. PES counsellors can use the outcomes of the profiling to assess the relative 'fit' of a person to opportunities within the current labour market in order to provide a basis for allocating or targeting employment services, and for matching to appropriate/relevant vacancies⁸. Skills profiling is also offered outside the context of PES and other public organisations, e.g. by commercial providers or employers.

• **Diagnostics:** 'Diagnostics' tend to start at a different point than skills profiling, and are often used for persons with little professional experience (e.g. early school leavers), or in cases where the professional experience cannot easily be linked to

⁶ In Germany, VET qualifications are expected to lead to 'professional capability to act' which is seen as a broader concept than e.g. the term 'learning outcomes' used in the European context, as 'professional capability to act' also includes intentional and motivational aspects

⁷ Blázquez (2014), Skills-based profiling and matching in PES, Analytical Paper, PES to PES Dialogue, DG Employment, Social Affairs and Inclusion

⁸ Blázquez (2014), Skills-based profiling and matching in PES, Analytical Paper, PES to PES Dialogue, DG Employment, Social Affairs and Inclusion

the national/regional labour market (migrants and refugees). Diagnostic approaches aim to extract information about an individual's talents and abilities, possibly in view of developing certain skills, including prior level of knowledge on a subject and relevant personal characteristics⁹. A diagnostic test has a formative character in so far as it should enable feedback indicating areas of greater and lesser ability of the beneficiary, and typically occurs before, or at the start of, a programme of learning and enables learners to be directed towards appropriate support.

The use of diagnostic or assessment tools involves the application of some form of instrument to determine an individual's situation or need. Their use represents an intermediate position between allowing adviser autonomy (open approaches) and rather normative standard-based approaches.

Table 1 below provides an overview on the main characteristics of approaches using the four types described above.

Characteristic	Skills Audit	Skills Assessment	Skills Profiling	Diagnostics
Aims to identify skills of individuals/aims to identify skills of larger groups?	identify skills of larger	Aims to identify skills of individuals	Aims to identify skills of individuals	Aims to identify skills of individuals
Open/standard based?	Open	Open	Standard based	Both
Professional-led /auto- administered?	Both (sometimes a mix)	Auto- administered	Professional-led	Both
Results in documentation of skills?	No	In some cases	Yes	Yes, in form of feedback
Results in identification of learning needs?	Yes	In some cases	Yes	Yes
Results in assessment?	No	Yes	Yes	Yes, in form of feedback
Results in validation/certifi cation?	No	No	Yes (if context allows)	No
Results in recommendatio ns about the next steps (e.g. training)?	In some cases	In some cases (e.g. where used by employers)	Yes	Yes
Results in policy/strategy development?	Yes	No	No	No

Table 1Characteristics of main types of approaches

⁹ Bimrose, J., Barnes, S., Brown, A., Hasluck, C., and Behle, H. (2007), Skills diagnostics and screening tools: A literature review, UK Department for Work and Pensions, Research Report No 459.

In summary: distinctions in terminology and in the relationship between the elements contained within the different processes exist.

Yet, although the terms discussed serve to highlight obvious difficulties in trying to understand what constitutes a skills audit – it is clear that they share the common aim to identify and valorise existing skills of an individual or a group in view of matching those to labour market demands, and needs of further training or up-skilling.

3 Overview of skills audits analysed

Box 4. Summary of main findings

The study collected data on 90 initiatives of which 41 were analysed in greater depth through more detailed fiches. The main findings include the following observations:

• **Target Groups:** The reviewed initiatives tend to address several rather than one specific target group. Nearly all the initiatives reviewed

specifically target vulnerable or multiple-disadvantage groups (e.g. young people, NEETs, migrants and refugees etc.), but not exclusively in most cases. Due to the PES being the main provider of skills audits in the public sector, unemployed people are also one of the biggest target groups.

- Legal frameworks: Certain countries have a legal framework which establishes skills audits as a universal right whereby participation is voluntary and open to all: Belgium, France, Luxembourg, and Italy. In other countries, skills audits are established as a legal right (voluntary participation) or legal obligation (compulsory participation) for specific categories of workers or learners (migrants in the Czech Republic, IVET adult learners in Demark, lower secondary education students in Germany)
- The remaining countries do not have an overarching legal framework for skills audits, but have employment or education & training policy strategies covering skills audits with no legal rights or obligations attached. For instance, the promotion of skills audit is firmly rooted in policy frameworks relating to the validation of non-formal and informal learning (e.g. Austria, Czech Republic, Finland, Sweden)
- **Prevalent providers offering skills audits:** The main provider of skills audits in the **public sector** are PES. Objective here is to identify and document the skills and knowledge of different target groups that access their services. Other public sector entities include vocational schools and higher education institutes (e.g. Austria, Croatia, Ireland, Netherlands, and Poland) or adult education centres (e.g. Austria and Finland).

In the **private sector**, there is a relative diversity of skills audits providers: private education providers, freelance counselling practitioners, private companies. In Belgium, Sweden and the United Kingdom, social partners are involved in the provision of skills audits.

Fewer examples of the use of skills audits in the **third sector** (e.g. youth organisations, social work, NGOs) were collected. This is, however, due to the fact that this was not the key focus of the assignment. Third sector organisations generally target their skills audits to specific groups of socially disadvantaged people that are 'hard to reach', or to their own volunteers or staff. Many of them are local practices with no common framework. However, in the Youth sector, the EU tool 'Youthpass' is widely used, which is rooted in the European Key Competences Framework.

As presented in the section on methodology, the research was carried out in evolving stages whereby the study started reviewing an initial sample of 87 country-specific practices in a generic way and narrowing down the research progressively.

Skills audit initiatives from 16 EU Member States have been reviewed for this study, namely: Austria, Belgium (FR and NL), Croatia, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Netherlands, Poland, Sweden and the United Kingdom.

Table 2 lists the number of initiatives reported in the survey of skills audit providers in each of the 16 Member States. It shows that the initial review identified particularly high numbers of initiatives in Germany and Austria.

Tuble 2				
Country	Number			
Germany	13			
Austria	10			

Table 2Number of skills audit initiatives reported in the survey in the 16 countries

Country	Number
Belgium	7
Netherlands	7
United Kingdom	7
France	6
Italy	6
Finland	6
Denmark	4
Ireland	4
Croatia	3
Luxembourg	3
Poland	3
Sweden	3
Luxembourg	3
Czech Republic	2

Source: ICF survey of skills audit providers (n=87); 3 of the reported initiatives did not cover any of the 16 countries

A total of 90 initiatives have been reviewed on the basis of the results of a survey which targeted organisations across the 16 countries responsible for designing or carrying out initiatives and processes to identify and assess skills and qualifications of persons. Complementary desk research was also conducted to cross-check and expand on the information provided by the survey respondents. Diverse organisations have contributed to the survey (large and small; operating in the public, private or third sector; etc.). The review is not meant to map all existing skills audits in the countries under review, but rather aims to show the diversity of auditing tools and approaches within and across the 16 countries.

3.1 Country context

For each of the 16 countries covered in the study, initiatives that are comparable in one way or another to a skills audit as defined in the 2012 Council Recommendation have been identified. While the term 'skills audit' is not systematically used in most of the countries reviewed (see discussion in section 2.3), there are a range of initiatives linked to the Council Recommendation definition, i.e. to identify and document the skills an individual possesses and/or to collect information on previous experience and qualifications.

3.1.1 Overview of availability of skills audits in the 16 countries

In all the 16 countries, skills audits are offered across a number of areas and services. These can be categorised as:

- Public employment service (PES) initiatives;
- Initiatives provided in an education and training setting;
- Initiatives provided by the 3rd sector (e.g. youth organisations); and
- Initiatives provided by the private sector often with a sectoral element.

The review of initiatives shows that skills audits are by far most prevalent in the public sector through PES and education and training institutions. In Denmark, Italy, the

Netherlands and Sweden, it was found that skills audits are available across all the areas listed above.

Overall, skills audits are mainly targeted towards three main groups:

- The unemployed, job seekers, low-qualified individuals;
- Young people in education and training; and
- Employees.

Nearly all of the initiatives reviewed for this study specifically target vulnerable or multiple-disadvantage groups (e.g. young people, NEETs, migrants and refugees etc.), but not exclusively in most cases (Table 3).

Table 3Availability of skills audits for specific target groups in the 16 countriesbased on the initiatives reported in the survey (non-exhaustive)

Note that where empty cells are displayed this does not mean that no such initiatives exist in the country in absolute terms. It means that no initiative that explicitly targets a given target group was identified and analysed as part of this study.

	Workers and employe es	All unemploy ed	LTU	Young people (under 25)	NEET Youth	Disabled	Migrants /Refuge es
Austria	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
Belgium	$\checkmark\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
Croatia	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$		
Czech Rep.	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$		$\checkmark \checkmark \checkmark$
Denmark	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$		$\checkmark \checkmark \checkmark$			$\checkmark \checkmark \checkmark$
Finland			$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$		$\checkmark\checkmark$
France	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$					$\checkmark \checkmark \checkmark$
Germany	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
Ireland	$\checkmark \checkmark \checkmark$		$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$
Italy		$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
Luxembourg	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
Malta	\checkmark	✓	✓	✓	✓	✓	✓
Netherlands	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$		$\checkmark\checkmark\checkmark$	$\checkmark\checkmark$
Poland	$\checkmark\checkmark$						$\checkmark \checkmark \checkmark$
Sweden	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark \checkmark \checkmark$
UK	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark \checkmark \checkmark$	$\checkmark\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$

Source: ICF survey of skills audit providers

VVV Large scale national initiative targeting this group has been identified

 $\checkmark\checkmark$ Several sub-national/smaller scale initiatives targeting this group have been identified

✓ One smaller scale/sub-national initiative targeting this group has been identified
 N/A no initiative targeting this group has been analysed

The reviewed initiatives rather tend to address several rather than one specific target group. Skills audit initiatives aimed primarily at the unemployed will typically have relevance to the needs of the long-term unemployed and of people in and out of employment with gaps in skills or educational attainment. Initiatives with a clear focus on the long-term unemployed usually have higher relevance to individuals with low or no skills and qualifications, including NEETs.

Judging from the countries under review, skills audits are gradually becoming more common across Europe. It is worth pointing out that with the development of online technologies, self-assessment tools publicly available on the Internet have been introduced in several countries (particularly in Denmark, Germany, and the United Kingdom).

The review of the situation in the 16 countries suggests that there is increased awareness of the importance of skills audits and validation across Europe. In many countries (e.g. Austria, Luxembourg), this is evidenced by the introduction of a range of initiatives and tools at different levels (institutional, local, region) to simplify, personalise and enlarge access to skills audits. This is also driven by the need for a skilled labour market and framework for lifelong learning that enables individuals to upgrade their skills, as evidenced in certain countries (Belgium, Italy, Malta).

- In Belgium (Wallonia), the Plan Marshall 4.0 adopted in 2015 expands the skills validation procedure to the *métiers d'avenir* (i.e. jobs in sectors with industrial growth potential) thus encouraging the provision of skills audits. Part of the rationale is to encourage young people to train for high-skilled occupations.
- In Italy, several measures have been implemented in recent years to facilitate the certification and validation of non-formal skills as part of wider labour market reforms. The processes aim to identify and bring transparency to the competences acquired by individuals¹⁰.
- In Malta, skills audits were first promoted in the 2008-2010 National Reform Programme. Since that time, successive reform programmes have promoted and facilitated the provision of skills audit – the priority is to foster lifelong learning among all workers and enhance the employability of young people.

An increase in immigration across Europe in recent years has also triggered the use of skills audit and influenced the need to support the integration of people into society and the labour market.

- In Germany, there has been considerable policy development in the design of skills audits targeting refugees and asylum seekers, as a consequence of the 2015 migration crisis. Yet, skills assessment has remained on a pilot or regional level. Between 2015 and 2017, regional governments in Germany have introduced several pilot projects specifically targeted at asylum seekers with high chances to obtain refugee status, and a relatively high level of education¹¹. In absence of formal documentation of qualifications or work experience, these measures usually combine early skills assessment with other integration measures, such as language learning or upskilling measures.¹²
- The high number of refugees that came to Austria in 2015 brought about an urgent need to understand their qualifications and competences, in order to support their integration into the labour market as well as into society. To this end, the Austrian Public Employment Service (PES) Vienna, for example, carried

¹⁰ Article 5 Legislative Decree n. 13/2013 defining the general rules and basic level of performance for the identification and validation of non-formal and informal learning, and minimum service standards of the national system of competences certification

¹¹ Not further specified in the source: "Finding their Way. LABOUR MARKET INTEGRATION OF REFUGEES IN GERMANY "OECD, International Migration Division, Directorate for Employment, Labour and Social Affairs, 2017. ¹² OECD, ibid

out a pilot project for people admitted as asylum seekers between August and December 2015, called 'competence checks' which included elements of validation of informally acquired competences.

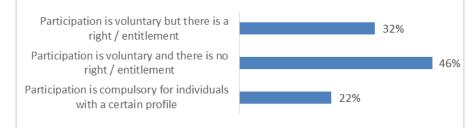
3.1.2 Overview of legal frameworks in the 16 countries

There is a certain degree of diversity regarding legal frameworks or legislation of relevance to skills audits across the 16 countries under review.

- Certain countries have a legal framework which establishes skills audits as a universal right whereby participation is voluntary and open to all.
- In certain other countries, skills audits are established as a legal right (voluntary participation) or legal obligation (compulsory participation) for specific categories of workers or learners.
- About half of the countries under review do not have an overarching legal framework for skills audits, but instead employment or education & training policy strategies which cover the provision of skills audits with no legal rights or obligations attached.

The above findings are reflected in Figure 6 which provides an overview of participation/entitlement types among the initiatives reported in the survey

Figure 6. Types of participation and entitlement



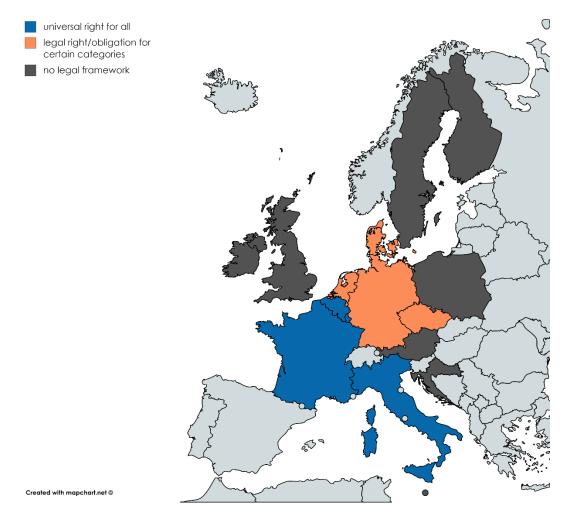
Source: ICF survey of skills audit providers (n=90)

The map below provides an overview of the different legal frameworks in the analysed Member States.

It shows three categories of Member States:

- Those with universal rights for all citizens (BE, FR, LU, IT);
- Those with rights/obligations for certain categories (DE, DK, NL, CZ); and
- Those with no legal framework, but with policy frameworks (e.g. validation arrangements) supporting the use of skills audits (AT, FI, HR, PL, SE, UK, IE, MT).

Figure 7. Legal frameworks across the analysed Member States



Source: ICF

The respective legislation of Belgium, France, and Luxembourg establishes skills audits as a legal right for all citizens. These three countries offer a *Bilan de compétences* – a model closely aligned with the 'skills audit' definition enshrined in the 2012 Council Recommendation. The *Bilan de compétences* serves to identify the skills and motivations of individuals to help them plan their professional careers going forward or to assist them in validating skills the various skills they might have acquired from past work experience. The *Bilan* can be seen as one of the best-known practices, with a high potential for transferability. Besides the French-speaking countries, the *Bilan* model is currently also spreading to further Central European countries that are not covered by this study.¹³

Since 2005, Italian legislation also establishes skills audits as a right for all citizens following the introduction of the *Libretto Formativo del Cittadino*. The *Libretto* is defined as a portfolio allowing the documentation of learning experiences and competences acquired in formal, non-formal and informal contexts by any citizen. It enables citizens to initiate a validation or certification process for the skills they have acquired throughout their working life. The Libretto, however, has only been implemented in a few regions so far.

Activities to identify or assess individual skills are considered as a legal right for all IVET adult learners in Denmark and for lower secondary education students in Germany. There is otherwise no general legal right for citizens to undertake a skills audit in either Denmark or Germany, but there are several easily accessible auditing services and instruments. In the Czech Republic, applicants for long-term and permanent residency

¹³ Cf: Inventory of validation of non-formal and informal learning, Cedefop 2016.

(i.e. migrants) are required by law to undergo skills assessment that includes basic language, social/cultural knowledge and skills.

There is no overarching legal framework for skills audit in the remaining countries under review, and thus, there are no legal rights or obligations in this area. Instead, the promotion of skills audit is firmly rooted in policy frameworks relating to the validation of non-formal and informal learning (e.g. Austria, Czech Republic, Finland, Sweden¹⁴) or as part of wider guidance and/or vocational counselling policy (e.g. Croatia, Poland).

- In Austria, the national validation strategy closely connected to the EU's Lifelong Learning 2020 Strategy, adopted in 2011.
- The Czech National Register of Qualifications provides documentation, assessment and validation of non-formal and informal skills leading to awarding partial VET qualifications.
- In Finland, a well-developed legislative framework for the validation of non-formal and informal learning at all levels of education is in place. Although there is no single comprehensive legislation covering the entire education and training sectors each educational sector (higher education, general upper-secondary education, non-formal education, VET, and CVET) is regulated by different laws with regards to validation.
- In Sweden, skills auditing activities are decentralised nature and characterised by several independent and uncoordinated initiatives. However, in 2017, a group of experts and stakeholders set up by the Government of Sweden formulated a proposal for a national strategy for validation, which also comprises skills audits in so far as these are used in a learning context.
- In Croatia, the 2016-2020 Lifelong Professional Guidance and Career Development Strategy encompass several activities, some of which can be classified as skills audits.
- In Poland, skills audits are most commonly understood as identification and analysis of competences, interests and professional aptitudes. They are provided to unemployed people as part of vocational counselling, in line with the Act on the Promotion of Employment and Labour Market Institutions

Skills audits are informally recognised as a right in the Netherlands in the sense that all Dutch residents are entitled to obtain a relevant starting qualification on EQF-levels 2 or 3. Based on this informal right, residents can access a skills-recognition system with which they can get a transparent overview of their main skills, related to certain sectors on the labour market and link themselves with occupations and certification opportunities¹⁵. Accredited providers are listed on the website of the 'National Knowledge Center EVC'. Applicants discuss with a counsellor from one of the accredited providers which type of skills are important to improve their chances on the job market, and their professional development. Subsequently they collect data and evidence on their knowledge and experience and submit those to the supervisor for assessment. A Certificate of Experience ('Ervaringsbewijs') is issued.

In most of the 16 countries, regulations pertaining to the activities of PES provide a form of legal framework that regulates skills audit related activity across the PES. One example can be highlighted from the United Kingdom. Whilst there is no legal right to a skills audits, claimants under the Department for Work and Pension's 'Work Programme' are required to attend an assessment interview with PES and develop a plan in order to find employment. As part of this process a skills assessment may be carried out.

¹⁴ In development

¹⁵ https://www.werk.nl/werk_nl/werknemer/solliciteren/ontwikkel-uzelf/certificaat-ervaring

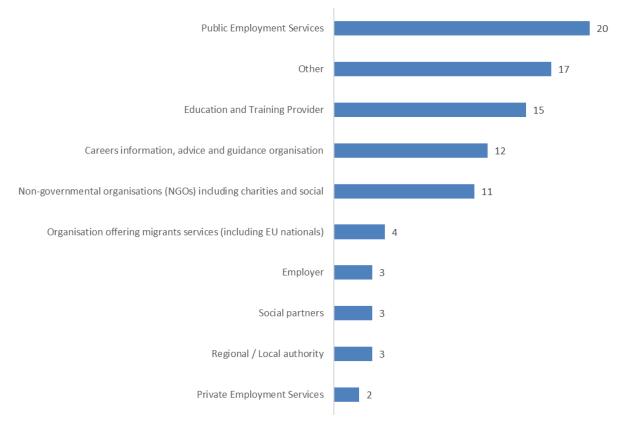
3.2 Types of providers of skills audits and their target groups

In all 16 countries under review, a range of stand-alone skills audit type initiatives exist. These initiatives are offered by a broad variety of entities, including:

- Public employment services
- Public or private further education and training providers
- Public or private adult education centres
- 3rd sector organisations (NGOs and voluntary sector organisations)
- Private enterprises¹⁶
- Private employer organisations or sectoral bodies
- Social partners
- Commercial providers

Regardless of the entities involved, these skills audit initiatives can in some cases be coordinated or financed by the PES. Generally, this means there is no clear demarcation between providers and sectors offering skills audits.

Figure 8. Organisation types taking part in the skills audit survey



Source: ICF survey of skills audit providers (n=90)

The main provider of skills audits in the **public sector** is PES who offer an array of initiatives aimed at identifying and documenting the knowledge, competences and skills of different target groups that access their services (mainly jobseekers, unemployed, low-qualified). The provision of skills audit activity by PES is organised under regulations

¹⁶ This concerns mostly internal initiatives addressing staff

governing the PES – this includes partnership arrangements between the PES and other providers undertaking skills audit activity.

- In Belgium (Wallonia), France and Luxembourg, PES are involved in coordinating the provision of *bilan de competences* with other entities, most often education and training providers. The PES coordinates and funds the skills audits carried out by socio-occupational integration organisations or training providers.
- In France, the *bilan de competences* is performed by an accredited provider (known as "Centre de bilans de compétences"). A list of such providers is regularly updated and made available by social partner organisations at a regional level. The *bilan* is primarily conducted on behalf of the PES, the social partners and/or the vocational training organizations; yet, the vast majority of providers are HR consulting or professional development services companies.
- In Luxembourg, the *bilan de compétences* is a service are provided by the PES (ADEM) in partnership with the lifelong learning public institute. In addition, several reforms were recently passed in Luxembourg to reinforce the level of coordination among stakeholders with regards to vocational education and training the PES is involved associated in most major programmes implemented by other key operators (e.g., the Chamber of Commerce, Orientation House) to boost skills development and improve job matching.

Similar arrangements involving coordination from the PES exist in other countries for the provision of skills audit type activities in all the other countries reviewed.

There are also entities in the public sector that may provide skills audits independently of the PES. These can include vocational schools and higher education institutes (e.g. Austria, Croatia, Ireland, Netherlands, Poland) or adult education centres (e.g. Austria and Finland).

- In Croatia, the Faculty of Humanities and Social Sciences of the University of Zagreb developed in 1999 a computerised Career Guide that provides the user with assistance in making professional decisions based on self-assessment of skills.
- In Ireland, certain HE institutions, such as the Cork Institute of Technology, have developed systems for Recognition of Prior Learning including the assessment of skills gained through formal and non-formal education.
- In the Netherlands, VET colleges offering skills audits based on formal/informal/non-formal learning experiences for learners to gain access to the VET programmes on offer, or exemption from certain programmes, or to receive a full certificate. The basis for granting access, exemptions or certificates is governed by the Law on Adult & Vocational Education (WEB, 1996). Target groups are all citizens without a basic qualification or citizens with a demand for obtaining a higher qualification level. There are also dedicated projects for refugees, unskilled, low-skilled, job-seekers (with municipalities) and adults.
- In Poland, projects that embrace the analysis of competences are offered by higher education institutions on an individual basis and for various specialisms.
- In Austria, certain HE institutions offer skills audits or competence portfolio approaches to support people transition to the labour market (e.g. the career service at the University of Vienna). Adult education centres in Austria are very active in the provision of skills audits: to young people or adults outside the formal system, workers looking to switch careers, and migrants and refugees. However, some of the initiatives are coordinated by the PES.
- In Finland, several initiatives led by independent adult education centres aim to enhance the recognition and validation of prior learning. These centres have also developed a methodology and learning outcome based certification.

Skills audits are provided by public sector bodies with responsibilities for enhancing the employability of young people or workers more generally. This is the case in Ireland and the United Kingdom.

- In Ireland, Youthreach provides the opportunity for beneficiaries to identify options within adult life, and provides them with opportunities to acquire certification.
- In the United Kingdom, the National Careers Service attached to the government's Skills Funding Agency provides an online skills self-assessment/appraisal tool open to all.

In the **private sector**, there is a relative diversity of skills audits providers. These include:

- Private companies using skills audits with or without a sectoral focus to manage workforce development. Companies may conduct skills audits primarily internally with their employees (e.g. Deutsche Bahn) or for recruiting purposes.
 E.g. in France, companies are very active, as larger companies have an obligation to develop a forecast management agreement for jobs and skills (GPEC).
- Commercial HR service providers offer career counselling and orientation services (including professional assessment, skills audit and vocational training) to prepare for a professional change.
- Private education providers and freelance guidance or counselling practitioners working independently: e.g. Croatia¹⁷, Malta¹⁸, Poland¹⁹, United Kingdom²⁰.
- Private education providers with active links to the PES and other public services to increase and diversify the provision of support: e.g. Belgium (Wallonia), France.

In several countries (e.g. Belgium, Sweden, United Kingdom), there is evidence that certain social partners – whether employer representative organisations or trade unions – are or have been involved in the provision of skills audits through various channels. Again, these audits may or may not have a strong sectoral element.

- In Belgium (Wallonia), the bipartite funds agreed in collective agreements among social partners often serve to carry out training activities. In some sectors, these funds have set up initiatives to foster skills audits in their sector. For instance, a skills audit initiative was recently implemented targeting employees in the education, health, and administration sectors.
- In Sweden, industrial sector representative organisations have been involved in the development of the assessment tool on behalf of the PES as well as Snabbspåret: an initiative to enable immigrants and refugees to integrate quicker into the Swedish labour market, using validation of prior learning. Both initiatives cover several sectors and concrete occupations.
- In the United Kingdom, Prospect the trade union for the professional sectors hosts Career Smart, an online self-assessment tool open to all. The tool focuses primarily on basic, transversal and workplace skills.

The survey identified fewer examples of the use of skills audits in the **third sector** (NGOs). Note, however, that this is possibly the case due to the methodology and the fact that the third sector was not initially covered by the terms of reference for the assignment.

¹⁷ Sirius – Centre for psychological counselling, educational training and research

¹⁸ MISCO - independent consulting firm providing resources for worker development

¹⁹ QUO VADIS – School of Social Psychology

²⁰ ForSkills – the UK's leading e-learning provider for English, maths and ICT assessments and learning resources for post-16 education and e-portfolios.

Voluntary sector organisations target their skills auditing activities to specific groups of people that are 'hard to reach'. These are typically local practices. In several of the countries reviewed, organisations in the voluntary sector offer skills audit type activities as part of a wider offer of integration services for immigrants.

- In Finland, there is no direct legislative requirement for voluntary sector organisations to take part in such activities, but these organisations are very important players in developing new methods for skills audits especially regarding immigration.
- In Italy, NGOs assisted by local organisations part of the SPRAR network (Sistema di protezione per richiedenti asilo e rifugiati) provide skills audit type activities to migrants and refugees. A prerequisite for participation is sufficient command of the Italian language
- In Sweden, an own initiative launched by an NGO target skills audits/validation in relation to the youth sector and volunteering (ELD Kompetens).
- In the United Kingdom, the Refugee Council provides skills audits based on its own framework to facilitate the labour market integration of refugees

Cross-border collaboration between voluntary sector organisations in this respect also exist. For instance, the European project RISE gathered NGOs from Germany, Ireland, and the United Kingdom to help refugees improve the employability skills of migrants and refugees.

The review also shows that voluntary sector organisations in many countries provide skills audit type activities targeting other groups (e.g. young volunteers) to improve their employability or help with confidence building and preparation for the world of work. EU initiatives support this, for instance through the Youthpass.

Box 5. Youthpass - the EU Recognition tool for the Erasmus+/Youth in Action programme

Youthpass is a recognition tool for non-formal and informal learning in youth projects. It is available for activities that are supported within the framework of the EU Erasmus+/Youth in Action Programme. It was launched in July 2007, and has in the following years been increasingly used.

Youthpass also aims at supporting the employability of young people and of youth workers by raising their awareness of and helping to describe their competences, and by documenting their acquisition of key competences on a certificate. While creating their Youthpass certificate together with a support person, project participants are given the possibility to describe what they have done in their project and which competences they have acquired. Thus, Youthpass supports the reflection upon the personal non-formal learning process and outcomes.

As such, Youthpass can be considered as the EU Recognition tool for the Erasmus+/Youth in Action programme. Within the Erasmus+/YiA. Youthpass certificates are currently available for the following activities: Youth Exchanges, European Voluntary Service, Mobility of Youth Workers, Structured Dialogue, Transnational Cooperation Activities (TCA) of the National Agencies. The certificates can also be issued for projects that were granted under the previous, Youth in Action programme (2007-2013).

All participants of the projects approved within these frameworks are entitled to receive a Youthpass certificate, and thus recognition for their non-formal learning outcomes.

Youthpass entails information about the overall initiative or project where the person participated, and an individualised description of the specific activities

undertaken and the learning outcomes. To create links with European lifelong learning policies, the European key competences framework²¹ was chosen as the structure within the Youthpass Certificate to describe the competences gained through Youth Work. Hence Youthpass describes what skills a young person gained in relation to eight 'key competences': 1) Communication in the mother tongue; 2) Communication in foreign languages; 3) Mathematical competence and basic competences in science and technology; 4) Digital competence; 5) Learning to learn; 6) Social and civic competences; 7) Sense of initiative and entrepreneurship; and 8) Cultural awareness and expression.²²

An impact study from 2013²³ shows that between 50-80% of respondents think that Youthpass enhances chances of young people in the labour market, especially when they apply for a traineeship or internship, employment or further education. Between 70% and 80% of Youthpass holders participating in the study planned to use Youthpass when applying for a job. More than 40%also saw the potential of using Youthpass when applying for higher education or setting up a business. Hence, Youthpass is perceived as fostering individuals' ability to communicate effectively what they have learned.

The Erasmus+ mid-term evaluation for 2018 revealed that due to Youthpass, mobility in the context of the Erasmus+/YiA programme boasts a high degree of recognition of learning outcomes from mobility: 88% of young people taking part in youth exchanges state they have received a form of validation, mostly Youthpass. This is equal to the number of students receiving recognition for mobility in the context of formal VET (through Europass).²⁴ Participants of projects that finished in 2015 were asked 2-11 months later, whether they had used their Youthpass certificate when applying somewhere – for example, a job or an internship, or for studies. 30% had presented their certificate, and 68% of them said that Youthpass had been helpful in the application process²⁵

Due to its success, Youthpass will be used as a blueprint for the development of a certificate to document learning outcomes from activities in the framework of the European Solidarity Corps²⁶.

Initiatives in the field of volunteer work identified under this study include:

- In the Netherlands, the Centre for Social Development, MOVISIE has developed a auditing procedure for volunteers primarily based on transversal skills as well as a specific procedure for social relief workers in which its target group gains accreditation of their prior learning experiences. Examples come from the Dutch Red Cross, Scouting and social care organisations.²⁷
- In Poland, the LEVER model, which resulting from an international project implemented by the Good Network Foundation, is a simple tool to help volunteers and volunteer coordinators to identify transversal skills gained during volunteering. Its main purpose is to raise awareness of these target groups in

²¹ Revision of the Recommendation on key competences for lifelong learning (upon a Commission Proposal submitted on 17 January 2018, adopted 22 May by the Council of the European Union (Education, Youth, Culture and Sport): https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=uriserv:OJ.C_.2018.189.01.0001.01.ENG&toc=OJ:C:2018:189:TOC ²² https://www.youthpass.eu/en/. This will soon be revised in line with the 2018 Revisions to the key competence framework.

European 2013: Youthpass impact study, https://www.youthpass.eu/en/about-Commission youthpass/youthpass-impact-study/ ²⁴ Exploring Erasmus+: Youth in Action. Effects and outcomes of the Erasmus+: Youth in Action Programme from

the perspective of project participants and project leaders. Transnational Analysis 2015/16.

²⁵ European Commission 2018: Mid-term evaluation of Erasmus+. https://ec.europa.eu/programmes/erasmusplus/resources/documents.evaluations en

²⁶ https://europa.eu/youth/solidarity en

²⁷ http://www.movisie.nl/publicaties/EVC-procedure-vrijwilligerswerk

terms of their soft competences; enable them to participate in the process of validating and confirming their competences, and support them in identifying strengths and areas for development and inspiring them for further development.

• In the United Kingdom, the Princes Trust Talent Match project is designed to support 18 to 24-year-olds who have been out of work or training for over 12 months.

Hence, it can be concluded that a broad range of skills audits, for a variety of target groups, offered by different institutions and providers, and used by a range of individuals and organisations has been identified.

There seem to be low thresholds regarding the financial accessibility of skills audits. Most practices that address target groups that may not have the means (financial or motivational) to pay for skills audits are either fully publicly funded or offered at a reasonable cost. Yet, problems impacting on the ability of beneficiaries to access initiatives and/or continue the educational path identified through the skills audit included 'hidden' economic (transport, opportunity costs) and time constraints²⁸. While skills audits are often offered free of charge, beneficiaries - particularly those in remote locations - often face difficulties linked to long journeys (which for workers mean that they also need to take time off work) and high travel costs. Moreover, costs may occur at a later stage (training costs, issuing of certificates etc.)

To get a more systematic overview, the following chapter presents a typology of skills audits based on their purpose.

4 Typology of skills audits based on their purpose

Box 6. Summary of main findings

- Skills audits have a couple of common features but are also distinctly different as to their purpose and expected outcomes.
- There are four main types of skills audits according to the purpose and expected outcome:
 - Skills audits for self-development;
 - Skills audits for educational advancement;
 - Skills audits for labour market integration; and
 - Skills audits for talent management.
- The types of skills covered, the extent to which standards are used as part of the process and if so which standards, the type of outcomes vary depending on the type of skills audit.
- The Council Recommendation on Validation of non-formal and informal learning and that on Upskilling Pathways suggest that skills audits are a first step in the process of upskilling or validation and that they focus on identification and documentation of knowledge, skills and competence. The mapping and analysis shows that in practice, the relationship with validation is more varied. Some skills audits go beyond identification and include assessment and possibly even certification, hence can be considered a fully-fledged validation process. Others indeed focus on identification and documentation only.

²⁸ BE-Fr 'Consortium for the validation of competences'; AT 'Du kannst was'; MT Construction Industry Skill Card; UK Moving on Up; IT CVoI; FI KIITO

 Analysing the steps covered by the different types, it shows that Type 2 (Skills Audits for educational advancement) and Type 3 (Skills Audits for labour market integration) often boast an explicit intention that the outcome of a skills audit can lead an individual to assessment (be it of formal, non-formal or informal learning outcomes) and/or certification. These steps are not necessarily an integral component of the Type 1 (Skills Audits for self-development) and Type 4 (Skills Audits for talent management).

This section presents the typology of skills audits that emerged from the analysis carried out as part of this study. It further maps the 41 examples identified to the typology and shows how the four main types identified are related to the four steps of validation (including a preparatory and follow-up step).

4.1 Key features of skills audits

As can be expected given the variation of terminology used and underlying concepts, skills audits vary significantly as to their purpose, methodology and expected outcomes. Nevertheless, a few key features can be identified:

- In most cases, the process is owned by the individual, and participation is voluntary. Some target groups are recommended or obliged to take part in a skills audit (for example, certain categories of unemployed or certain profiles of employees if it is a company-level initiative);
- Forms of assessment which combine narratives of past experience, interviews, self-assessment are frequently used. There is typically some form of self-assessment which can be done on an individual basis or in a guided context. However, for some target groups, for example, people facing issues with literacy or with the language of the host country, support through trained counsellors is needed to help extract evidence from a persons' narrative.
- These forms of assessment can be combined with more rigorous and 'authentic' approaches, such as observations and demonstrations under real-life conditions, tests, and work trials. This is especially the case when the individual receives a certification for his/her knowledge, skills and competence from prior learning.
- The output from the process is often a portfolio, particularly in cases of more complex and in depth skills audit practices. When the output is not a fully-fledged portfolio, there is still some form of profile documentation, such as a skills card or skills map. In some cases, skills audits lead to the certification of skills and the award of a qualification.
- Where the skills audit is carried out together with a counsellor, this is typically accompanied by advice on next steps. This may simply be advice on how the outcomes of the skills audits can be used, or, in the context of Public Employment Services, the skills audit can be used as a basis to develop an individualised action plan. In the case of online assessment tools, skills audits typically lead to more general career suggestions.

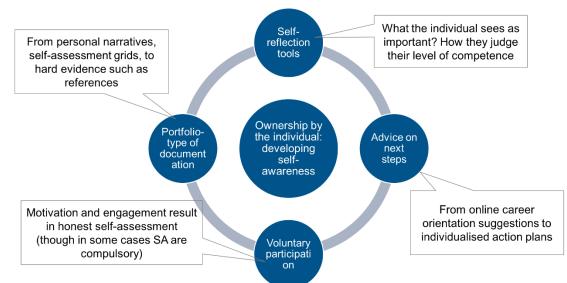


Figure 9. Key features of skills audits

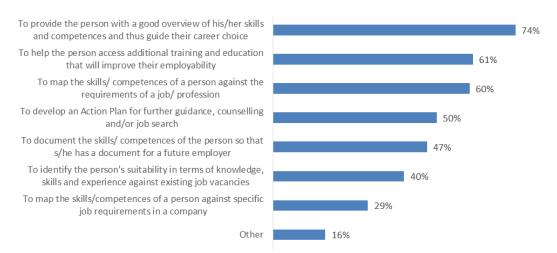
4.2 The four main types of skills audits identified

When analysing the variety of skills audits covered in this study, the research team considered different dimensions that could be the basis for a typology. The dimensions considered included: target groups, use of methods, steps in the process. However, none of these offered a satisfactory result which would enable making clear distinctions between the examples gathered in a way that would resonate with the specialist community.

The most clear cut typology emerged from the comparison of skills audits according to their purpose.

During the survey of skills audits providers, the researchers asked about the purpose of the skills audit initiative. Most often the respondents stated that the purpose is to give the individual a good overview of his/her skills. This shows that skills audits are primarily done for the individual to support his/her future decisions about education, training or job applications. However, many of the skills audit initiatives analysed also have other purposes (accessing or tailoring education and training, labour market orientation or company specific purposes, such as recruitment or appraisals). As discussed further in this section, most skills audit have one or two prominent purposes which are associated with other key characteristics and define distinct types of skills audit practices.

Figure 10. What is the main purpose of the skills audit your organisation delivers?



Source: ICF survey of skills providers (n=90)

Four main types of skills audits were identified when considering the aims and objectives of the process for the individual:

- **Type 1:** Skills audits supporting self-development of the individual
- **Type 2:** Skills audits supporting educational advancement of those wishing to (re)integrate education and training
- **Type 3:** Skills audits supporting labour market integration of those outside employment or in transition
- **Type 4:** Skills audits supporting talent management within an organisation

The table below (Table 4) gives an overview of the main characteristics of each of these types.

Skills audits: tools to identify talent

able 4	The four main types of skins addits and their main characteristics				
	Type 1: Skills audits supporting self- development	Type 2: Skills audits supporting educational advancement	Type 3: Labour market integration	Type 4: Talent management	
Purpose	Support an individual to better understand their own strengths and weaknesses, build self-awareness and better present themselves to others in a professional context. Generally, Type 1 initiatives aim to have an activating or motivational effect on job seekers, persons interested in (further) education and training or change of professional pathways.	Prepare validation of formal, non-formal and informal learning to shorten education/training pathways, tailor the training offer and leading towards acquisition of a qualification on completion of the training process.	matching candidates and jobs, or the mapping of participants' profiles against	Support companies' recruitment strategies, performance review and talent management process. Type 4 initiatives are often related to promotion and career growth within a job/company.	
Providers	Typically offered by Career IAG (incl. career websites), and schools, volunteer organisations, youth organisations, or commercial providers	Typically offered by training providers and other competent institutions	Typically offered by PES but also in the private sector	Typically offered by companies and service providers offering HR solutions	
Voluntary /compuls ory	Typically voluntary (sometimes even fee-based)	Typically voluntary	Typically compulsory (as part of PES activities, or other ALMP)	Typically compulsory (as part of a performance review or application process)	
Costs	Varies – can be free of charge or rather expensive (where offered by commercial provider)	Typically free of charge, but hidden costs (taking time of work, travelling to provider) and costs for next steps (e.g. training and recognition/certification) can occur	Free of charge for job-seekers, but possibly also hidden costs (as under type 2). Some organisations make tools available for a fee to those who wish to use the service as part	Typically free of charge and no hidden costs where offered by employer.	

Table 4The four main types of skills audits and their main characteristics

	Type 1: Skills audits supporting self- development	Type 2: Skills audits supporting educational advancement	Type 3: Labour market integration	Type 4: Talent management
			of guiding their decisions for career transition.	
Users and bene- ficiaries	 People in transition. Often these are people who are not in at risk situations, such as long term unemployment or risk of exclusion Young people at the transition from education to work Volunteers interested in mapping their skills acquired through volunteering against professional competences Adults considering career progression and/or career change (both employed and unemployed) Low-skilled adults interested in identifying their own capacities and opportunities (both employed) 	People already in employment or those for whom finding an employment is difficult without further upskilling These are people who could be at risk if they are not supported through additional training NEETs returning to E&T Adults returning to E&T for upskilling (both employed and unemployed) Individuals changing educational pathways (both employed and unemployed) Individuals aiming at career change Migrants, refugees (both employed and unemployed) Other disadvantaged groups	People for whom the priority is finding a job in short term People who are in situations of risk and who need rapid support Jobseekers of all levels NEETs Low-skilled adults Migrants, refugees Other disadvantaged groups	People in employment, including in high potential situations. In most cases, these are not target groups that are particularly at risk in the short or medium term Companies Employees Job applicants
Use of standards	Broad mapping of skills and competences. Standards are not used as the point of departure. A comparison to a standard can be made at a later stage in the process	Educational or qualifications standards are used so as to decide on the exemptions and tailoring	The standards used can be occupational standards or job- specific requirements	Job-specific requirements of company competence frameworks

	Type 1: Skills audits supporting self- development	Type 2: Skills audits supporting educational advancement	Type 3: Labour market integration	Type 4: Talent management
Prevalent metho- dologies	Diagnostics, skills assessment, competence assessment (bilan de competences): Mapping an individual's skills, competences, and personality traits against a matrix/model, through Online-self-assessment tools Face-to-face counselling embedded in/related to Career IAG School activities to prepare secondary students for career choices	Skills assessment, skills profiling: Assessing previously acquired learning outcomes (incl. language skills) against qualification profiles and frameworks through Face-to-face counselling embedded in/related to Career IAG interviews self-assessment tools (sometimes online) theoretical and practical tests.	Skills profiling: Assessing (and, in some cases, validating or certifying) previously acquired learning outcomes and qualifications (incl. language skills) against job requirements or qualification profiles through Face-to-face counselling embedded in/related to Career IAG interviews self-assessment tools theoretical and practical tests.	Skills profiling, skills audit: Assessing a persons' performance against company- specific matrixes and competence frameworks detailing both hard and transversal skills related to a certain job profile through interviews self-assessment tools theoretical and practical tests on-the-job monitoring and observations of performance at the workplace.
Outcomes	Personal portfolio of skills and competences.	Tailored training offer (ideally leading to acquiring a qualification).	Action Plan, recommendation of job opportunities (or specific training courses preparing for jobs), Certificate of experience.	For the individual: promotion, career planning; For the company/sector: better view on further recruitment and skills management needs and strategies.
Supply- or demand- oriented	This type of skills audits are usually <u>supply-driven</u> (focusing on the needs of learners/employees/job- seekers)	This type of skills audits is usually <u>supply-driven</u> (focusing on the needs of learners/employees/job- seekers)	This type of skills audit is usually <u>demand-driven</u> (focusing on the needs of sector/labour market).	This type of skills audit is usually <u>demand-driven</u> (focusing on the needs of a company or a sector).

4.3 Mapping examples against the four types of skills audits

Box 7. Summary of main findings

30 out of the 41 skills audit initiatives analysed clearly relate to one of the four types.

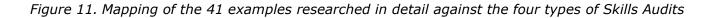
- **Type 1:** 14 initiatives analysed support self-development
- Type 2: 5 initiatives analysed support educational advancement
- **Type 3:** 8 initiatives analysed support labour market integration
- Type 4: 3 initiatives analysed support talent management

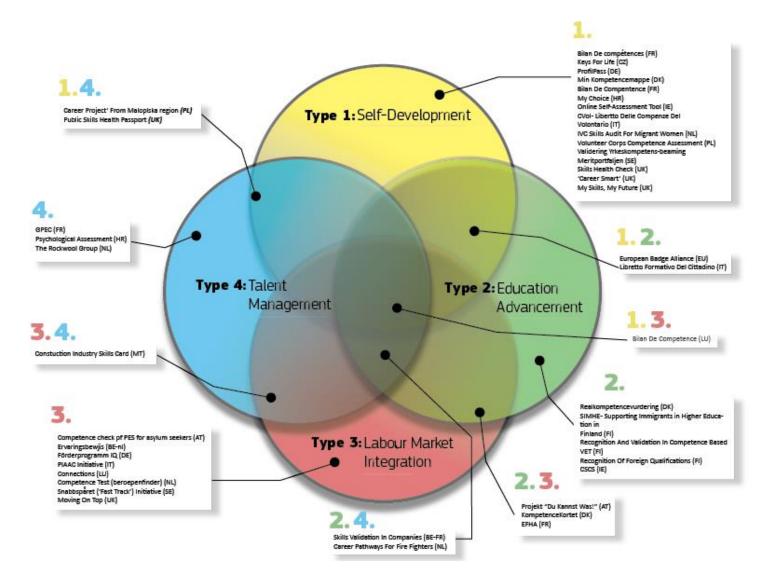
11 initiatives boast characteristics of two types, and therefore serve several purposes:

- **Mix of Type 1 and Type 2:** 2 initiatives support self-development as well as educational advancement
- **Mix of Type 1 and Type 3:** 1 initiative supports self-development as well as labour market integration
- **Mix of Type 1 and Type 4**: 2 initiatives support self-development as well as talent management
- **Mix of Type 2 and Type 3:** 3 initiatives support educational advancement as well as labour market integration
- **Mix of type 2 and type 4:** 2 initiatives support educational advancement as well as talent management
- **Mix of Type 3 and Type 4:** 1 initiatives support labour market integration as well as talent management

The mapping of examples reviewed against the four types confirms that the typology does enable clustering the variety of initiatives analysed. Many skills audit initiatives align well with one of the types. There are also a number of initiatives that are at the borders between two types and demonstrate characteristics of two types. This shows that the typology is not clear-cut and that some skills audits fulfil more than one purpose.

Figure 11 below shows the mapping of examples reviewed against the main types of skills audits.





The following sections give examples of how the Skills Audits identified relate to the four Types.

4.3.1 Type 1: Skills audits for self-development

Box 8. Skills audits for self-development

The first type of Skills Audits has the purpose of helping an individual to better understand its own strengths and weaknesses, build self-awareness and learn how to better present themselves to others in a professional context. These skills audits are often an input into an individuals' decisions about career orientation or educational/training choices, however, the Skills Audit process as such does not entail these steps (see section 4.3).

Individuals undertake the skills audit for a number of reasons: Because they believe it will help them to learn more about themselves, identify 'hidden' skills, career interests, career opportunities and learning needs. Objectives connected to undertaking a Type 1 Skills Audit include the management of transitions, decisions on the next career move, prevention of burn-out, or better focus a job search.

Undertaking a Type 1 Skills Audit is usually voluntary and takes place upon the initiative of the individual. A Type 1 Skills Audit is often related to a process of counselling (which may involve fees for the beneficiary). In that case, counsellors would support the process of identifying strengths and weaknesses and extracting information about skills, e.g. through tests and biographical interviews. Yet, many examples merely consist in an online-self-assessment.

Type 1 Skills Audits are typically offered by career IAG or commercial providers, but can also be offered by youth organisations or volunteer organisations, to help volunteers understand the value of their skills in a professional context.

However, this type of skills audit is also part of the curriculum of the last year of lower/upper secondary school in some countries, so that young people get the opportunity to identify strengths and weaknesses in relation to certain professional fields and are better prepared for the transition to work.

An important characteristic of this type of skills audits is that they are very open in terms of which skills and competences are covered. They are **not based on a standard** in the sense that individual's capabilities would be compared to a predefined standard. The starting point is the individual and this type of skills audits enables to carry out a broad mapping of individual's' competences. The outcomes of a Skills Audit for self-development are usually an individual portfolio that presents a person's skills and competences in relation to a skills matrix.

Skills Audits for self-developments typically do not entail any concrete recommendations on next steps, referrals or action plans. It is entirely upon the individual to decide on how to use the individual portfolio that forms the outcome of the Skills Audit.

Yet, they are expected to have an activating effect on individuals and boost their job search.

As shown in figure 11, 14 of the Skills Audit examples identified and researched for could clearly be characterised as examples of a Type 1 Skills Audit.

This includes the following typical examples:

 Profil Pass (DE): The Profil Pass is an instrument to identify skills and competences gained throughout life – with a focus on skills and competences gained through non-formal and informal learning. PP, however, also includes outcomes from formal learning. It is available as an eProfilPASS (for download) and a regular ProfilPASS (paper version) and can be used with and without consultation of a qualified coach – yet, it is recommended to complete PP during a professional counselling process with a certified counsellor, as this supports the identification of skills the individual is not necessarily aware of.

- **CVol (IT):** The Libretto delle Competenze del Volontario (CVol) from Italy is a competence assessment tool, documenting the skills and competences acquired by individuals thanks to volunteer's work. The process is structured around three main steps: 1. Identification of the formal, non-formal and informal learning outcomes ('competences') of the individual, and working out of the path leading to competence acquisition, 2. Documentation of the steps leading to the competences' acquisition, 3. Release of the 'Libretto delle Competenze del Volontario'. The Libretto can be used by the individual, but it does not have any legal value at the system level.
- **PES Online self-assessment tool (HR):** The Croatian Employment Service has implemented an online vocational guidance 'My Choice' (Moj izbor) that was originally developed in the UK and then adapted and applied to the CES for all those who need to choose their future occupation or change pathways. The programme contains descriptions of more than 250 occupations, as well as an interactive questionnaire on professional interests. The key objectives are to appraise: prior formal learning (as well as non-formal learning), job skills, transversal skills and motivations, language knowledge, IT knowledge and conduct an assessment of personality and broader knowledge, skills and competences. Based on respondents' answers the programme proposes a list of relevant occupations that should give an indication to the individual about a suitable career choice.
- Meritportföjl (SE): The initiative was originally developed by the Municipality of Malmö in Southern Sweden in 2003 as a tool for integrating immigrants and refugees into the labour market. The initiative was one of the first of its kind in Sweden, and became known as the "Malmö model". The Meritportfölj can be described as a methodology for gathering documentation and compiling a structured description of the entire sum of a person's knowledge, skills and competences, whether these be acquired in a formal, non-formal or informal way. The aim of the portfolio is first and foremost to give the client an increased insight into his or her own strengths and weaknesses in a labour market context, increasing their self-confidence and their ability to communicate about their skills to an employer or an education provider. With numbers of migrants and refugees increasing, Sweden discontinued the Meritportfölj, as it did not lead to the desired results, and replaced it by Type 3 initiatives (e.g. Snabbspåret),), which are much stronger oriented at Labour Market integration.

4.3.2 Type 2: Skills audits for educational advancement

Box 9. Skills Audits for educational advancement

Type 2 Skills Audits for educational advancement have a formative purpose: they point an individual in the right direction of possible training to take to achieve a specific professional goal, or enhance their overall employability.

Moreover, the purpose of Type 2 skills audits is to prepare the certification of formal, non-formal and informal learning to shorten education/training pathways, and tailor the training offer. Hence, this type often covers all the steps related to a fully-fledged validation process.

Type 2 Skills Audits are typically offered by training providers and competent institutions that are able to issue a certification. The target groups are often young people NEET, or adults with no or only low-level qualifications, wishing to return to the education and training system. Previously acquired learning

outcomes (professional and transversal skills) are assessed against qualification profiles and frameworks, hence **standards are being used** as a basis for the identification of an individual's skills and competences. The standards used are either qualification standards or other type of education standards (incl. sectoral standards or qualification profiles).

The outcomes are often used to assess whether or not a person has the right level of knowledge and skills to be admitted to a certain training course. To that end, Type 2 Skills Audits are often a compulsory pre-condition for taking a training course. They may also be used to make a recommendation to the beneficiaries on what types of training are available to them.

Ideally, a Type 2 Skills Audit would be a first step leading to upskilling and acquiring a qualification. Type 2 Skills Audits could in principle also be based on Type 1 Skills Audits, or use their outcomes, yet, no examples were identified where this is the case.

Five initiatives analysed support educational advancement. Typical examples of Type 2 Skills Audits include

• The Austrian initiative 'Du kannst was' ('You have skills'), a project initiated by the Austrian social partners, which targets low-skilled workers and validates competences acquired in informal and non-formal learning contexts. 'Du kannst was' leads to an 'Apprenticeship certificate or diploma' (the certificate of successful completion of the final apprenticeship examination), in a two-step examination process.

After an initial counselling session, beneficiaries participate in three workshops, guided by qualified trainers. During these workshops they take a series of tests which lead to creating competence portfolios with evidence files. The Apprenticeship Office of the Economic Chamber (i.e. the awarding body for apprenticeship certificates in Austria) evaluates and further processes the cases: in a first 'Competence Check' the existing competences are evaluated, and the missing competences are identified. Beneficiaries are offered the opportunity to acquire the missing competences in internships or specialised courses. After that, a second and final 'Competence Check' takes place, which constitutes the second part of the final apprenticeship examination, and focusses mainly on the competences that were lacking during the first 'check'. If the 2nd test is passed, the apprenticeship certificate can be awarded.

- The **SIMHE (Supporting Immigrants in Higher Education) services at the Metropolia University of Applied Sciences in Finland** aim to enhance the identification and recognition of prior learning of highly educated immigrants to make it easier to direct immigrants to higher education. The purpose is to ensure that the previous studies and degrees of highly educated immigrants are identified and recognised according to national policies as quickly as possible so that these people find their way to appropriate education and careers paths.
- **Realkompetencevurdering (DK):** Since the beginning of the millennium, validation of prior learning (in Danish: realkompetencevurdering) has been an integral part of Danish IVET. In 2007, a law was passed in Parliament making this not just an offer that a vocational school could make, but a right of the individual learner. In 2015, realkompetencevurdering was made obligatory for all learners over 25 years of age. Since then, all Danish learners over 25 (and many below that age) enrolling in IVET and who do not come straight from lower secondary school have gone through an initial validation process with a view to identifying relevant prior learning and recognising this in relation to the IVET-programme they will be pursuing. The validation process consists of an appraisal of qualifications from formal learning and an assessment of skills acquired in non-formal and informal contexts. The results are documented by the school according

to criteria – and using a template developed by – the Ministry of Education. On the basis of this, the identified learning outcomes are held up against the learning objectives of the programme, and are validated in relation to this. Subsequently, an individual learning plan is elaborated which ensures that the learner can accomplish his or her programme without having to duplicate learning.

 Construction Skills Certification Scheme (CSCS): This Irish initiative is an example of using Skills Audits to assess whether a person has the necessary knowledge and skills from prior formal, non-formal and informal learning to be admitted to a specific training course leading to a formal qualification. Learning outcomes are assessed, and a decision is made by the VET provider on whether or not the learner can be admitted to the course.

4.3.3 Type 3: Skills audits for labour market integration

Box 10. Skills Audits for labour market integration

Type 3 Skills Audits support the process of matching candidates and jobs, or support the mapping of participants' profiles against job requirements of occupational profiles. Type 3 Skills Audits are demand-driven, hence, they often relate to specific demand of skilled workers in a certain sector.

Like Type 2, this type is often used as compensation for a lack of formally documented skills or qualifications. Type 3 initiatives are typically offered by PES but also in the private sector, and tend to be compulsory (as part of PES activities, or other ALMP). Learning outcomes from previous learning are assessed – in most cases, against job requirements or occupational profiles.

Typically, a Type 3 Skills Audit results in an Action plan, a referral to a job vacancy or in a recommendation on how to proceed with job search and labour market integration. In a few cases, Type 3 Skills Audits have also been found to lead to certification (e.g. where employer organisations can issue those).

Eight initiatives analysed support labour market integration. Typical Type 3 examples include:

- The German initiative 'Hamburg Action Week', offered as part of the German IQ initiative: The Action Week addresses low-skilled immigrants that are new in Germany (mainly refugees), and was designed as a vocational integration strategy for the sectors "Nursing and Health" and "Metal Welding Electric". The Action Week was developed by the Chamber of Skilled Crafts Hamburg in collaboration with employers. The two sectors covered were identified as the sectors with the highest demand of skilled workers in the region. Throughout the course of a week, the participants go through a multi-level vocational orientation process and competence assessment regarding jobs ion these sectors. The Action Week gives them an overview of their own abilities in these fields as well as a better view on the opportunities they have on the German labour market. The clear focus of this initiative on sectors with a high demand of skilled labour ensures a) good prospects to find a job, and b) good chances that necessary qualification measures will be financed by Public Employment Services.
- The Belgian-nl initiative 'Certificate of experience', offered by Belgian PES and employer organisations (VDAB, SYNTRA): A 'Certificate of Experience' constitutes an example of validation of NFIL. In a conversation and a practical test, job seekers can demonstrate that they master specific skills. If the candidate passes, she/he will receive a 'Certificate of Experience', stating which skills were demonstrated in relation to a described occupational profile. The Certificate of Experience should enable a jobseeker to prove that s/he is qualified for vacancies on the labour market, even if they have no official diploma.

• **PES Competence check for migrants and refugees (AT):** The Competence Check is a tool used to assess the skills, qualifications and language skills of people recently granted asylum or subsidiary protection in Austria. Aim is to identify existing skills and qualifications and to define additional need for training or qualifications. It also provides refugees with information about employment opportunities and the Austrian education system. The Viennese PES ('AMS Wien') piloted the Competence Check in autumn 2015 and tested it with a first cohort of 898 refugees. Since the beginning of 2016, the competences of people who have recently been granted asylum or subsidiary protection have been collected in all federal provinces. In September 2017, the Competence Check became part of a compulsory introduction programme for all refugees, which is carried out either directly by the regional PES branches or by independent adult education and training providers in each federal province.

4.3.4 Type 4: Skills audits for talent management or HR management

Box 11. Skills audits for talent management or HR management

This type comprises all forms of Skills Audits that support companies' internal talent management processes. Skills Audits could be related to recruitment and talent search strategies, but also to performance review and career growth of employees.

Such skills audits are usually carried out within companies, or by specialised HR service providers, who offer their services to companies and act on their behalf. The standards used for the assessment are sectoral standards, or company-specific standards related to internal job descriptions or a job matrix.

Through research for the study, a few cases were identified where public institutions offer such services to companies to facilitate validation for low-skilled employees. For instance, the bodies responsible for validation in FR and BE-fr work with companies to offer skills audits to employees. In these cases, Type 4 Skills Audits would also lead to certification.

However, in the majority of cases, this is not the objective: the outcomes of the Skills Audit mostly relate to the current job/employment. While the individual may draw lessons for further development, it is not the aim to look beyond the current position. For instance, a typical outcome of a Type 4 Skills Audit for the individual would be feedback related to the annual performance review, and the definition of goals, objectives and next steps in relation to personal development and career growth in the company.

Three initiatives analysed support talent management. Examples of this type of Skills Audits include:

- **SELECTIO (HR):** 'Psychological assessment' is a service offered by a private employment agency to Croatian employers. It supports the assessment of potential candidates or existing employees. It is used so that employers obtain information on how the participant fits certain job requirements or what their areas for development are. In addition, assessment is provided to individuals who participate in career counselling programmes (outplacement).
- **Rockwool Group (NL):** Rockwool is a multinational company based in the Netherlands, the world leader in stone wool solutions. Since the 1990s the role of learning is a key element in the human resource management-policy of Rockwool, which is regarded as an on-going process of linking learning and working for each individual employee by means of skills audit-methods and development-programs. Skills audits can be considered in this context as both a summative as well as a formative method for enhancing performance of not only the employees for the company but also of the company for the employees. They are the main method

used for linking the potential of employees with the need for competences in the different function-groups: Learning goals are oriented towards employability and qualification on the one hand for strengthening the working-processes, and on the other hand for creating empowerment and opening up internal/external career-opportunities for the employees. Development is focused on offering learning trajectories that are beneficial for employees' employability and for their personal development and possible internal/external career-steps.

 Forecast management agreement for jobs and skills (Gestion prévisionnelle des emplois et des compétences - GPEC), FR: GPEC is an instrument for strategic work force planning that is embedded in French labour law. It brings together aspects of skills analysis and skills planning on policy level with processes of human resources management on company level (exchanges with unions and IORPs, training, mobility, recruitment ...). GPEC has been made mandatory for companies with more than 300 employees by the "Borloo" law, passed on January 18th, 2005.²⁹ GPEC data are used on national level to monitor the evolution of trades, jobs and skills. The method of carrying out a GPEC is more or less prescribed. There is state aid for SMEs available and companies with small HR departments can work with consultancies specialised on implementing GPEC.

The purpose of the GPEC is to anticipate, in the short and medium term, human resources needs in companies to ensure French employers are able to respond to their obligation to inform social partners about anticipated changes in the labour force. To that end, GPEC data feed into the collective bargaining process. It implies, for the company, to realize a global diagnosis of its employees' skills and abilities. This 'company-level' diagnosis is fuelled with individual reviews and documentation of skills and professional experiences.

However, GPEC goes beyond the collection of information and aims to effectively prepare employees for these changes. Several tools can be used at the employee level: individual performance review, validation of professional experience acquired on the job (VAE) but also training. GPEC medium-term objective is to adapt jobs, staffing levels and skills to the requirements of corporate strategy and changes in its economic, social and legal environment. It is a prospective human resources management tool that is expected to support change(s) within a company.

4.3.5 Skills audits with characteristics of several types

As stated above, the majority of initiatives could be allocated unambiguously to one type. Yet, 11 out of 41 initiatives had characteristics of more than one type. This includes:

- The UK initiative Public Skills Health Passport provides public health workers with a private and secure on-line tool to plan, record and demonstrate their individual learning and development in relation to a career in Public Health using the Public Health Skills and Knowledge Framework (PHSKF). It supports individuals to move between roles and across organisations and employers delivering public health. It can be used for self-development, but is also accepted by employers. Hence, it has Type 1 and 4 characteristics.
- The Austrian initiative 'Du kannst was', shows overlaps between Type 2 and Type 3: While it was classified above as a typical Type 2 initiative leading to validation, it also boasts characteristics of Type 3, as it works demand-oriented: The low-skilled workers aiming to acquire an apprenticeship certificate through validation of NFIL cannot choose freely from the ca. 200 apprenticeship qualifications available. Depending on the regional province, 'Du kannst was' is only available for a limited number of apprenticeship qualifications with a relatively high number of unskilled workers, such as baker, retail salesperson, cook or carpenter. The

²⁹ Law of programming for the social cohesion of January 18, 2005 ('Borloo law') (Law no 2005-32).

specific offer depends on the demand in the regional province and currently ranges from 3 to 19 apprenticeship qualifications per province.

- The Italian 'Libretto formativo' also boasts Type 2 as well as Type 3 characteristics: This is due to the flexible form of the Libretto and the high number of providers offering it, hence it can lead to validation as well as to integration into the labour market.
- The bilan de competence in as offered in FR, BE-fr and LU, is also offered by a variety of providers. The bilan was designed to support beneficiaries' self-development, hence would fall under Type 1. Yet, where the bilan is offered by PES, the counselling process around taking the bilan may be stronger labour market focused and hence boast Type 1 as well as Type 3 characteristics: E.g. in BE-fr, the counsellors have at her disposal the official occupational standards developed in Belgium, developed by SFMQ³⁰ these standards can be a reference point, along with other sources on the description of occupations in Belgium.
- The Maltese Construction Industry Skills Card can be seen as a **mix of Type 3 and 4**, simply because it is open to different users/purposes. For example, people with no formal qualifications or those who can have NFIL skills validated can take part in this initiative and the idea is to support their integration into the construction industry. Existing companies (often in partnership with providers) also use the initiative for the existing workforce to ensure their skills (including health and safety) comply with national standards.
- Type 4 Skills Audit typically do not lead to validation of NFIL. There are, however, exceptions where initiatives boast **type 2 and 4** characteristics: Belgium-fr offers collective validation as part of a company or sectoral project (with pre-defined objectives) in relation to the forecasting of skills and jobs, and based on needs assessment (e.g. in relation to staff profile). In its Strategic Note 2012-2014, the BE-fr Consortium noted that skills validation can benefit companies for reasons, such as: 1) it can help define occupations and job profiles more clearly; 2) it can be a way of carrying out an external evaluation of their employees' skills, using a reliable, fair, neutral mechanism with a quality assurance processes in place; 3) it can help optimise internal mobility and skills management in the company; 4) the employees' skills can be officially recognised; 5) the in-company training offer can be optimised, tailored to the needs; 6) it can improve staff retention as employees are more motivated and feel more appreciated ; 7) the company can better support the professional development of their employees; 8) it can improve the company's image (good HR practices; CSR).

5 Skills audits' coverage, methodology and quality assurance

Box 12. Summary of key findings

The majority of skills audits analysed cover transversal skills and personal competences. Skills audits supporting self-development (type 1) focus primarily on these types of skills. Type 2 initiatives (aimed at educational advancement) focus on occupational or vocational skills and knowledge, but some also assess transversal skills. Initiatives aiming at integration into the labour marker tend to assess profession specific competences and employability skills needed to respond to immediate needs of the labour market (type 3), whereas talent management initiatives (type 4) focus on professional knowledge, know-how and abilities in relation to specific positions and work environments. Yet, both type 3

³⁰ French-speaking Professions and Qualifications Service (Service Francophone des Métiers et des Qualifications – SFMQ). The SFMQ produces standards based on occupation standards elaborated by social partners (Profils metiers), and corresponding training standards (Profils de formation) elaborated by education and training stakeholders.

and 4 initiatives were also found to cover aspects of personal and transversal skills.

This section discusses what types of skills are covered by skills audits, and what methodologies are used to extract information and possibly assess the skills of an individual. Moreover, this section presents information about quality assurance arrangements of skills audits that were identified. The analysis is structured around the four types of skills audits presented in section 4.

5.1 The types of skills covered

Overall, most skills audits analysed focused on a range of transversal competences, often also called 'transversal skills' by companies while the initiatives that focus on professionspecific skills or job-specific skills are fewer among the 90 initiatives covered by the skills audit providers' survey (see Figure 12 below).

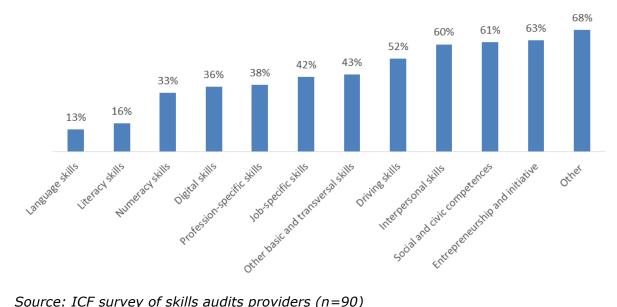


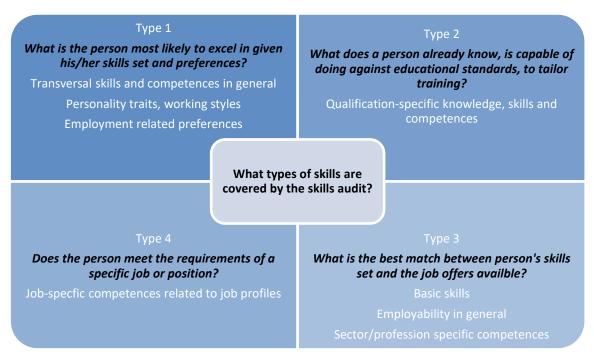
Figure 12. What types of skills are covered by the skills audit

Source: ICF survey of skills audits providers (n=90)

Figure 13 below gives an overview on how what skills are covered by the 41 examples analysed, differentiated by types.

Figure 13. Relationship between types of skills audits and what is being assessed³¹

³¹ Where initiatives boasted characteristics of both types, they have been added to both categories.



Source: ICF research (n=41)

When looking at the four types, there are clear differences as to what the related initiatives aim to find out. This entails differences as to the types of skills covered.

The following sections give an overview.

5.1.1 Type 1: What is a person most likely to excel in, given his/her skills-set and preferences?

The aim of these initiatives is not necessarily integration into the labour market; rather, the goal is often to raise awareness among beneficiaries of their potential and abilities. Beneficiaries are encouraged and supported on a process of reflection upon their own competences and personal drivers. This is supposed to have an activating effect on a persons' job search and/or further professional development.

Therefore, the initiatives tend to cover a broad range of key competences, and skills (primarily transversal skills). Technical and hard skills are covered with a generic approach without a link to specific standards, labour market needs, sectors or occupations.

All types of skills and competences acquired in formal, informal and non-formal settings are taken into account. Yet, in some initiatives emphasis is given to skills acquired in informal and non-formal learning settings as those achieved in formal settings are documented in form of qualifications. For example, in the Bilan de Competence in France when working with beneficiaries with low levels of formal qualifications, providers specifically focus on extracting knowledge, skills and competence developed through work, non-formal training, leisure or any other activity.

Some examples were identified where the skills audit (Bilan de Competence (FR, BE, LU), ProfilPass (DE)) can be considered as a form of coaching where beneficiaries are supported in a process of reflection mainly on their transversal and transferable skills (including problem solving), their motivations and personal drivers.

As part of this type of skills audits, one can also find approaches that take the form of online self-assessment tools. The aim of these tools is also to raise person's awareness of his/her capabilities and through this support future decisions about career or educational orientation. These online self-assessment tools are often tools to appraise basic technical skills (including language skills) and transversal skills in a broad sense, as well as professional interests and personal aspirations, examples include My Choice in Croatia,

Online self-assessment tools in Ireland, PIIAAC-based skills audits in Italy, the Skills Health Check and the Career Smart in the UK.

5.1.2 Type 2: What does a person already know and is capable of doing against educational standards, to tailor training?

These types of initiatives are strongly focussed on educational development and support the transition into education or training. The auditing is often undertaken to enter specific training, to tailor the training or to clearly identify training needs. Interests and motivations are also covered in view of identifying suitable educational and training paths.

Although the connection with labour market needs is not always direct, the aim of these initiatives is to assess 'what is needed' to professionalise beneficiaries through training. Therefore, the initiatives often review technical and professional skills, mainly hard skills but without completely overlooking transversal skills and competences. Often the backbone of these skills audits is a qualification standard or an educational standard. Subsequently all skills and competences defined in these standards are considered as part of the skills audit. For instance, In the CSCS (IE) the assessment is based on a multiple choice test containing twenty questions covering topics including manufacturer's instructions, legislation, regulations and industry best practice.

Unlike the third type of skills audits, initiatives falling under this category tend to have a somewhat longer term focus. They are addressed to individuals who might be already in employment or those outside employment but for whom the priority is to strengthen their skills and competences in order to support transition to employment. The Austrian 'Du kannst was' initiative is an example of this: Migrants and refugees are assessed against qualification standards (training regulations) of the apprenticeship system, with a view of integrating them and shortening the training pathway.

5.1.3 Type 3: What is the best match between a person's skills set and the job offers available?

These initiatives have a strong focus on assessing the employability of beneficiaries with the aim of supporting their integration into the labour market. As such, it involves the assessment of competences and skills, with the intent of appraising the skills gaps of the beneficiaries, vis-à-vis the labour market needs. E.g. in the Moving on up (UK) initiative which targets young black males aims at supporting participants into employment, a series of tests assess language and literacy skills, digital skills and transversal skills; self-assessment/psychometric tests are also used to assess personality traits.

Many of the initiatives reviewed which fall into this category were targeting migrants and refugees – in other words target groups which have little or no evidence of their past achievements and for whom the immediate priority is labour market integration. The purpose of these audits is to identify what would be the most suitable type of job for a given person in a relatively short term. They therefore focus on technical skills as well as general employability aspects. As these initiatives are designed for target groups that may have specific challenges with basic skills or language skills in the host country, these types of skills are also covered.

For instance, The Hamburg Action Week (DE) is a low-threshold skills audit initiative developed by the Chamber of Skilled Crafts Hamburg that addresses low-skilled immigrants. The skills audit covers motivation/willingness to learn and achieve, social competences, team spirit, professional competences and interests, communication skills, management and organisational skills.

Some targeted and small initiatives originated from specific skills needs in sectors with a bottom-up approach (e.g. the Construction Industry Skills Card in Malta).

5.1.4 Type 4: Does the person meet the requirements of a specific job or position?

These types of initiatives are led by companies, hence are originating within the labour market to respond to specific needs of companies or sectors.

The aim of the initiatives is to validate skills and competences gained in-work with the objective of fostering career paths or forecast company's needs. The auditing process has a strong focus on professional knowledge, know-how and abilities. Therefore, informal and non-formal learning are not always covered.

These initiatives have strong focus on job-specific or company specific competence standards. For instance, in the Forecast management agreement for jobs and skills (GPEC) (FR) the company undertakes a comprehensive diagnosis of employees' skills and abilities. Through the Bilan de compétences carried out in the context of a GPEC, an extensive review of competences is done for each activity/area of the company. Specific technical tests are also used to assess and document sets of specific skills by job profile.

Yet, such tests can cover technical as well as transversal skills. In the 'Psychological assessment' (HR) initiative offered by a commercial provider to companies, beneficiaries take part in a psychological testing including cognitive ability tests (cover general cognitive abilities and measure the candidate's capacity for logical reasoning and skills and knowledge acquisition and intellectual ability); personality tests, work values, sales skills and leadership style.

However, in all cases Type 4 sills audits are defined in rather specific terms and in relation to job-specific combinations of skills and competences. The outcomes are often used to get a better view on employees' potential for growth and career advancement.

5.2 The use of standards

Box 13. Summary of key findings

The extent to which standards are used as part of the skills audit process is a key difference with the validation process. Moreover, the use of standards is remarkably different across the four types of skills audits:

- **Type 2:** Qualification standards or education standards are consistently used in skills audits supporting educational advancement
- **Type 3:** Occupational standards are consistently used in skills audits for labour market integration
- **Type 4:** Company specific standards or competence frameworks are used in talent management initiatives
- **Type 1:** Skills audits supporting self-development the use of standards is on a case-by-case basis. Moreover, the use of educational/labour market standards is not always appropriate to the aim of the initiatives which sometimes overlap with forms of coaching. Therefore, Type 1 initiatives may rather use psychological standards (e.g. related to personality types).

The extent to which standards are used as part of the skills audit process varies – not all skills audits use standards that are related to qualifications, job profiles, or sectoral agreements. This is a key difference with the validation process, where the use of standards is seen as key to ensure the outcomes of an assessment has valuable currency for the beneficiary.

Moreover, as shown in Figure 14 below there are notable differences in using standards across the four types of skills audits. When looking at the use of standards as part of the initiatives covered by the survey, this trend is confirmed (see Figure 14).

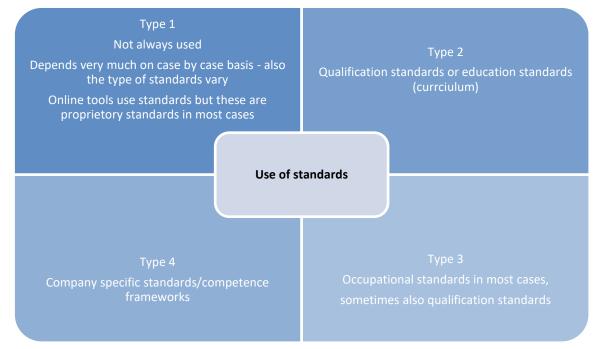


Figure 14. Use of standards as part of different types of skills audits

Source: ICF research (n=41)

Figure 15. Do you use standards to underpin the process of skills assessment?



Source: ICF survey of skills audit providers (n=85)

5.2.1 Type 1: Skills audit supporting self-development

In this type of skills audits, standards are used primarily as a way to aid individuals in their reflection on knowledge and skills and its transferability. The use of occupational or vocational standards is loose, and on a case-by case basis.

The very nature of some the initiatives, focussing primarily on self-development with broad objectives, with a highly personalised methodology, sometimes overlapping with forms of coaching, means that the use of educational or labour market standards is not always appropriate or cannot be consistently applied. For example, the German ProfilPass uses psychological standards to map a persons' profile against professional competence areas. Where occupational or vocational standards are used, Type 1 Skills Audits tend to informally benchmark skills against a framework rather than a precise mapping of skills and competences. This is often the case of self-assessment online tools. In My Skills, My Future (UK) an integral part of the initiative is to informally benchmark a person's skills against levels of the SCQF to give them a clear idea of where these skills sit in relation to formal qualifications.

The use of standards is more consistent in sector-specific activities, such as Public Skills Health passport (UK), where the sector skills council was commissioned to bring together all of the relevant national occupational standards (NOS) that relate to the disciplines and functions for public health activity, as described in the revised Framework. As such, the Public Health Skills Passport Framework maps the beneficiaries' skills against the national occupational standards for the public health sector.

In the Bilan de competence, the extent to which assessors use occupational or vocational standards depends on the objectives of each case. Assessors can refer to vocational or occupational standards to understand the individuals' knowledge and qualifications. It more likely that assessors use national standards in Bilan de competence carried out in specific sectors. Similarly, in the Libretto delle competenze in Italy, the use of standards depends varies across regions, depending on the structure and objectives of the pilots.

5.2.2 Type 2: Skills auditing supporting educational advancement

In these types of initiatives, where learning is assessed with the aim of supporting entrance into education or vocational training, there is a consistent use of either the qualification standards or the educational/vocational standards (curriculum). The outcomes can be used to enter a training pathway, and can provide the basis of a tailored training offer. The skills audit therefore leads to real 'currency' in relation to educational advancement.

Examples of this types of initiatives include:

- The Project "Du kannst was!" (AT), in this case the 'Competence Checks' are based on the competence profile of the training regulation of the respective apprenticeship qualification (which can be considered as 'qualification standards') since the main aim is to obtain an apprenticeship certificate.
- In the Construction Skills Certification Scheme (CSCS) (IE) candidates need to meet the required level to participate in the training which is based on the educational standards of SOLAS, the Further Education and Training Authority (previously FÁS). Successful participants receive a QQI Level 5 Certificate.
- In the Realkompetencevurdering (validation of prior learning in VET) (DK), the standards used are the learning objectives specified by the Ministry of Education for the relevant IVET-programme.
- In the Career pathways for fire fighters (NL), the competence management system of the fire brigade covers nationally all occupational standards that are needed for the organisation. The standards used are on VERT-levels 3-4 or HE-level 5-7; these levels are linked to career-opportunities within the fire brigade.

5.2.3 Type 3: Labour market integration

The use of occupational standards to benchmark competences and skills provides an assessment that carries a formal validity in the labour market. However, this is not necessarily a guarantee of adherence to labour market needs or requirements.

These types of initiatives are usually carried out by PES, and the ultimate goal is to enter the labour market. Yet, a distinction emerges between the use of occupational standards as a generic way to assess competences, and a thorough mapping of beneficiaries' profiles against labour market requirements/needs. • **Generic assessment of competences against occupational standards:** PES may use occupational standards to benchmark competences and skills to gain a better view on where a person stands, and, at the same time, provide beneficiaries with a 'portable' assessment. Such generic assessment may be used to map a persons' competences against a certain job profile, or may be used as a basis to decide on Active Labour Market Programmes (ALMP).

For example, the Competence check of PES for asylum seekers (AT) – professionals of proposed occupation verify the level of knowledge and skills compared to Austrian occupational standards. Formal learning outcomes (e.g. foreign qualifications) are covered through the cooperation with validation and recognition services (AST, NARICs).

• **Mapping of participants' profiles against labour market needs:** Skills audits where a thorough mapping of competences is carried out against labour market requirements is often part of regional or sectoral-focussed initiatives. The Förderprogramm IQ: Hamburger Aktionswoche in Germany where there aren't legal regulations for validation of NFIL and/or acquisition of partial qualifications, competence assessments like the one carried out in Hamburg allow for a valid assessment of existing skills. The Audit is strongly mapped to labour market requirements as it aims to identify skills in relation to certain qualification profiles in sectors with a high skills demand. The tests related to items in the official training regulations of the qualifications.

5.2.4 Type 4: Talent management

In these types of initiatives where the actors are already within the labour market, it is interesting to note a different use of standards between initiatives aimed simply at validation of competences and initiatives for forecast management or career progression.

- Initiatives with the objectives of simply validating skills: A strong adherence is pursued between tasks and occupational standards. In the 'Skills validation in companies' (BE-fr) initiative, the assessment is aligned to the occupational standards elaborated by the Service Francophone des Métiers et des Qualifications (SFMQ). Personal skills or transversal skills are not taken into account. Example of occupational standard used for the validation of the occupation "worker specialised in bakery/pastry": the document includes a list of key activities and key skills (compétences), such as the activity "prepare the work station" corresponding to 5 skills. Candidates' skills are assessed against the standards defined by Consortium (for the occupations corresponding to the Certificates that exist to date).
- **Initiatives aimed at forecast management and career progression:** Competences are assessed in a broad sense; personality traits and personal aspirations are a strong element of the overall assessment. For example, in the Forecast management agreement for jobs and skills (GPEC) (FR) the knowledge, skills and competences outlined during the bilan de compétences are used to map the current situation of the individual and compare with professional aspirations. If gaps are identified in terms of educational level, transversal skills or labour market needs, strategies are identified in the action plan. In the Psychological assessment (HR), assessors use Psychological methods with standards defined and approved by the Croatian Psychological Chamber. In addition to these psychological tools, there are additional assessment tools to evaluate different skills, these are not psychological tests per se, but rather skills assessments, or knowledge-based tests.

5.3 Methods used for skills assessment

Box 14. Summary of key findings

Most of the initiatives identified combine forms of self-assessments with an assessment by a third party, followed by assessments carried out only by a third party and initiatives based solely on self-assessment. An analysis across the four types shows that differences between the four types are not clear-cut, there is a lot of overlap between the types.

Yet, different degrees of tailoring exist according to the aims of the initiatives and target groups, which can be related to the four types:

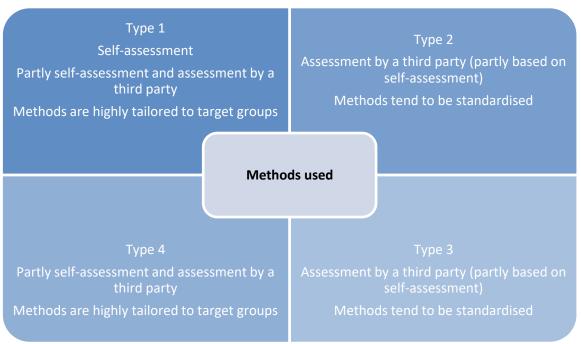
- A higher degree of tailoring to target groups and beneficiaries characterised initiatives aimed at self-development and talent management (Type 1 and 4), where skills auditing is related to a process of self-awareness.
- More standard-driven, 'objective' approaches with practical and written tests are used in initiatives aimed at educational advancement or inclusion into the labour market (Type 2 and 3).

With the exception of initiatives based exclusively on online self-assessment tools, in all initiatives analysed a mix-method approach is used to carry out the skills audit and assess the overall competences portfolio of beneficiaries.

Yet, there are tendencies that can be allocated to types: Most of the initiatives that are solely based on self-assessment can be allocated to Type 1 (this process may be guided by a counsellor). For Type 2 and 3 initiatives, assessment by a third party prevails (this may be partly based on self-assessment). Type 4 initiatives use a mix of methods.

Hence, differences between the four types are not clear-cut, there is a lot of overlap between the types (as shown in Figure 16 below).

Figure 16. Methods used for skills audits



Source: ICF research (n=41)

Skills audits frequently combine self-assessment together with an assessment by a third party or rely solely on a self-assessment process (see Figure 17). The latter can be guided by a counsellor. The vast majority of skills audits use interviews as one element of the assessment process. Other forms of assessment, which are based on actual demonstrations of competence through tests, observations or simulations, are also used

but less frequently (see Figure 18). As will be discussed below, the extent to which these more objective methods are used is linked to the purpose of the skills audit.

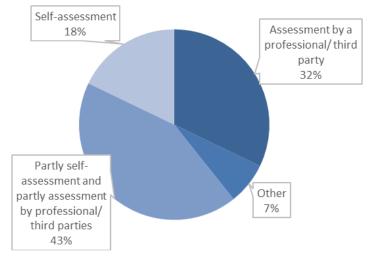
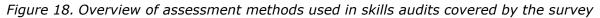
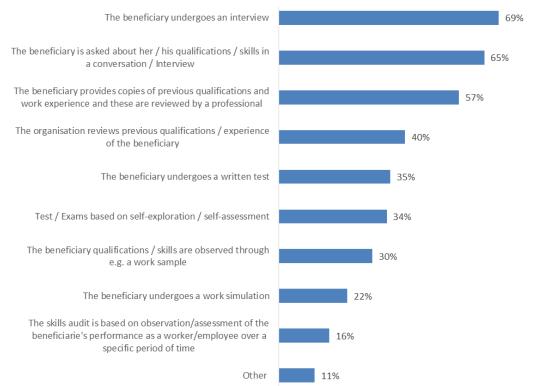


Figure 17. Who does the identification of skills in a skills audit?







Source: ICF survey of skills audits providers (n=88)

Across initiatives reviewed in greater depth there is different degree of sophistication and tailoring of the mixed approach. The initiatives span from a simple approach where assessors provide face-to-face assistance to beneficiaries in their self-assessment and or assessors use tools to extract the information during interviews, to a mix of face-to-face interviews (e.g. technical, behavioural interviews), observations, practical tests etc.

Similar approaches can be identified across the four types, with commonalities between Type 1 and Type 4, and Type 2 and 3 respectively.

5.3.1 Type 1: Skills audits related to self-development, and Type 4: Talent management

Initiatives with developmental aims, especially those that include a counselling element, tend to use a wide-ranging mix of methods with a higher degree of tailoring to the target groups and individuals. They rely strongly on self-assessment, guided self-assessment and interview based techniques.

This is in line with the exploratory nature of type 1 skills audits. It is also in line with the use of skills audits as a process for developing self-awareness.

Initiatives with a more developmental goal also tend to use a broader range of methodologies including different typologies of interviews, series of workshops and more alternative methods, such as drawing, role playing, group activities etc. In some of these initiatives there is a high degree of tailoring, flexibility and intensity of contacts with different counsellors and assessors, depending on the context and the beneficiaries' needs. Examples include the following:

- In the Bilan de competence (FR) accredited providers use a mix of self-assessment tools, interviews, and written tests carried out by a counsellor as well as collective workshops or interviews. Some bilans can also include real life professional situation which require beneficiaries to demonstrate, in a real or simulated workplace environment, their aptitudes and competences. Self-assessment tools are often used at different stages: to help map out formal, informal and non-formal skills, professional interests and motivations; at a second stage, based on the professional project, to assess specific skills, such as digital skills.
- In the IVC skills audit for migrant women (NL) the methodologies used during the skills audits to extract information about knowledge, skills and competences include feedback, performance assessment, interviews, observations, presentations and simulations. In both audits (pre-portfolio and portfolio) the participants go through the same phases: awareness, documentation and assessment. Pre-audit consists of several assignments focused on developmental methods, for examples "tree of life" were each part of the tree depicts an aspect of their life, drawing, roll playing, etc. The assessment is intended to give positive and reinforcing feedback to the presenting participant.
- In the Volunteer Corps competence assessment (PL) the guidelines on the methodological approach of the initiative include activities, exercises and questionnaires on preferences, values, personalities, role playing, brainstorming ideas, work on image and self-esteem. Also tests (interests, values, life experiences, motivations) and questionnaires on entrepreneurial skills are included. The use of methodologies and mix is tailored by counsellors.

Other initiatives of this type use a standardised approach, where the tools cannot be adapted to the beneficiaries' needs. However, the face-to-face meeting guarantee that the assessment is to some extent adapted to the needs of the person. Examples of these approaches include:

- In the Scottish Credit and Qualifications Framework (SCQF) My Skills, My Future (UK), the assessment is carried out through an interview with a practitioner and the use of 'My Experience Cards' covering either broad occupational areas or activities, experiences and interests. Participants are invited to select five Experience Cards based on relevance to them. On each card there are a series of statements that express a skill and linked to one or more of five skill areas adapted from the SCQF against which the skills are benchmarked. There is certain degree of personalisation as only relevant cards are used
- In the Public Skills Health passport (UK), the first step requires the individual to complete an online self-assessment of skills level. This is then followed up by a

discussion/interview with the line manager aimed at completing a personalised development plan.

5.3.2 Type 2: Skills audits supporting educational advancement, and Type 3: Labour Market integration

Those initiatives aimed at supporting educational advancements and labour market inclusion include more practical and written tests to assess specific technical skills. This is in line with the use of skills audits as an element of validation of non-formal and informal learning which is a basis for not only identification but also assessment and validation of knowledge, skills and competence.

Initiatives with a stronger focus on supporting educational development and labour market integrations are likely to include additional methods to carry out more specific assessments of technical skills through observations, simulations etc. Some examples of initiatives with a stronger focus on technical skills include:

- In the project "Du kannst was!" (AT) methodologies used in this initiative include guided self-assessment, interviews, observations and simulations. Three initial workshops are dedicated to guided self-evaluation professionals help participants with the self-evaluation competence portfolio on the choice about the level of competences, terminology etc. Evidence is also gathered from former employers of participants and a final 'Competence Check' is carried out following the 'typical' apprenticeship examination' method with observations and work simulations.
- In the 'Move on Up' initiative (UK), the beneficiaries undergo a series of tests: language & literacy, digital skills, transversal skills, and a selfassessment/psychometric test (multiple choice, computerised). They also take part in an interview where advisers review the beneficiary's previous qualifications and work experience. Face-to-face interviews where test results and past experiences are discussed to identify the beneficiary's strengths and areas for improvement.
- In the Realkompetencevurdering (validation of prior learning in VET) (DK) a mixture of methods is used, but staff choose the mix that is deemed most appropriate. Methods include self-assessment, individual interviews, group interviews, oral and written tests, practical tests (observation, simulation etc.).
- In the Career pathways for fire fighters (NL), the fire fighter as first step completes an online self-assessment a set of questions/statements in relation to competences relevant to the programme, motivations and basic skills. This is followed by an on-line talent and motivational assessment. When the programme starts, skills audits are performed regularly, focusing on methods like: portfolioassessment, criterion based interviews, 360 degrees feedback, (simulated) performance assessment and knowledge tests.
- In the Skills validation in companies (BE-fr), the skills assessment is based on a simulation or a portfolio approach. The validation can take place at the company's premises or in a validation centre. All validation centres use standardised validation procedures.
- In the Hamburger Aktionswoche (DE) targeting migrants and refugees, the skills audit stretches over a week and uses a multitude of methods.
 - Day 1: Introduction, individual interviews and check of documentation on skills acquired so far, team-building exercises;
 - **Day 2: Assessment of motivation, professional skills and competences** through practical and theoretical tests, part 1 (using methods like simulation and role play as well as working with relevant professional tools and equipment in groups and teams);

- **Day 3: Assessment of motivation, professional skills and competences** through practical and theoretical tests, part 1 (same methods as on Day 2, but also including personal one-on-one coaching);
- **Day 4: Job application training**: how to prepare CVs and motivation letters and prepare for interviews. Moreover, on Day 4, an observer conference takes place to discuss outcomes and feedback;
- **Day 5: Individual counselling sessions** on outcomes, incl. feedback on observations and performance, employer-speed-dating.

5.4 Quality assurance procedures

Box 15. Summary of key findings

The quality of skills audits seems overall high, or at least fit for purpose. Quality assurance arrangements across the four types often include:

- Qualified and certified professionals in charge of the skill audits;
- Certification of providers;
- Harmonised quality systems for the assessment deriving from general guidelines and principles;
- The use of vocational and occupational standards for certain types (see section 5.4);
- The use of multidisciplinary committees with representatives from different stakeholder groups during the assessment process, to ensure the robustness of the auditing process;
- Monitoring arrangements that include feedback structures which are used to improve elements of the process;
- A few initiatives also evaluate effectiveness on a regular basis.

A holistic approach to beneficiaries' situation, strict criteria for the selection of participants, and links with key stakeholders seem to be further success factors to ensure the overall effectiveness of the initiatives.

Quality assurance procedures relate to the quality of the skills auditing in itself as well as the overall quality of the initiative. Although some initiates did not include specific provisions for quality assurance, others had in place a range of procedures, guidelines, monitoring or feedback arrangements to guarantee the quality of the auditing and the success of the initiative.

5.4.1 Quality assurance of the skills auditing process

In many initiatives the quality assurance of the process of skills identification and assessment is guaranteed by a number of elements, these are:

- The initial profile and qualifications of assessors to carry out the skills assessment and their continuing training;
- The use of clear guidelines (or standards) and the use of specific assessment tools originated from the guidelines (or standards);
- Whether the assessment is carried out by one person or rather a committee which guarantees robustness of results.

5.4.1.1 Qualification of the staff carrying out the skills audit

The analysis shows that in all initiatives and across the four types of skills audits the skills assessment is performed by qualified personnel in line with its nature and objectives.

- In **Type 1 and Type 4** initiatives that focus on individual development and more general assessment of competences, the skills auditing is usually performed by certified counsellors, work psychologists, HR staff in companies and similar relevant profiles. For example, in Bilan de compétences (FR, BE-nl, LU), assessors/counsellors often have a work psychologist background a specific diploma is required to carry out a bilan de compétences. In the ProfilPass (DE), the skills auditing can only be offered by experienced, qualified and certified counsellors. The certification has to be renewed every 4 years upon certain conditions counsellors can prove they actively use the ProfilPass and have taken part in further training.
- **Type 2 and 3** initiatives that focus on validation of specific skills and competences are performed by accredited VET bodies and their assessors. For instance, in the project "Du kannst was!" (AT), the three workshops for guided self-evaluation are carried out by professional trainers who are trained and certified. A 'pedagogical trainer' is available throughout all three workshops supported by experts in specific occupational fields. The professional experts need to be qualified at least as an in-company-trainer for apprentices in the dual apprenticeship programmes, or hold a similar or higher training qualification. The apprenticeship exam is carried out by a council of certified examiners experts in the occupational fields specified by the Vocational Training Act. In the Realkompetencevurdering (validation of prior learning in VET) (DK), the skills auditing is carried out by teachers within the relevant programme within the vocational school.
- **Type 3** initiatives that are carried out by PES are usually performed by PES counsellors. Yet, PES sometimes delegate this task to specified providers who then use their own trained staff.
- This is also the case for **Type 4** initiatives, e.g. 'Psychological assessment' (HR) -This skills audit is provided by Electus HR to Croatian businesses across sectors. Electus HR is a company that provides specialised recruitment searches, mostly for administrative and specialist positions, lower and middle management positions, and also provides the psychological assessment service.

5.4.1.2 Use of guidelines and standards to assure quality

In some initiatives, general guidelines are issued to ensure common standards and a minimum level of harmonisation in relation to processes and tools used. Although, some initiatives require a degree of flexibility and assessors can amend the tools to match their specific needs. It is therefore difficult to assess the degree of harmonisation at implementation level.

Examples of harmonised quality systems can be found across the four types:

- In the **Type 1 example** Bilan de compétences (FR, BE-nl, LU), the different tools that are used during the bilan are often recognized and standardized tools but some large providers have developed their own tools However, in some cases, more specific training and qualifications would be needed to carry out sector-specific bilan, and for more specific skills.
- In the Volunteer Corps competence assessment (PL) another Type 1 example

 the quality standard follows the "Standard of service Professional counselling
 for youth" for all Youth Career Centres and Mobile Vocational Information Centres.
 The document also serves as a kind of methodical guide for vocational counsellors.
 In addition, when introducing a new method, tool, or service, all vocational
 counsellors are provided with specific training. Finally, the Act on the promotion of

employment and labour market institutions requires that advisers are trained at least once per year.

- In the Realkompetencevurdering (validation of prior learning in VET) (DK) a
 Type 2 example general guidelines from the Ministry have been issued, on the
 basis of these guidelines vocational schools need to have in place their own
 guidelines and procedures to ensure transparency and documentation of the
 assessment process as well as validity and reliability of the methods chosen. A
 feedback process needs also be in place and relevant information provided to the
 learners.
- A broad range of examples (**mostly type 2 and type 3**, **but to a lower extent also type 1 and 4**) work with vocational and occupational standards. This also helps to quality assure the outcomes of the assessment and ensure they comply with the needs of the labour market (see section 5.4)

5.4.1.3 Assessment by committee

In some specific initiatives the assessment is provided by a committee or a group of trained assessors to ensure robustness of the process. Such committees are usually multidisciplinary and include labour market representatives. This is for instance the case in the Hamburg Action Week (DE), a group assessment which stretches over a week and includes practical work exercises. The last day is dedicated to the multidisciplinary staff (employers, psychologists, social workers, VET teachers and trainers) discussing the performance of the participants one-by-one.

5.4.2 Quality assurance of the skills audit initiatives

To ensure the effectiveness of the initiatives, the design of the overall measure and approach to monitoring, evaluation and continuous improvement are key dimensions. Moreover, certification of providers plays an important role. Examples for these quality assurance indicators can be found across the four types.

5.4.2.1 Holistic approach

A holistic approach and links with other key actors seems an important enabling factor for success. In some cases, selection or screening of participants ensures that the most suited persons or workers are targeted.

Examples of holistic approaches to ensure efficacy of the overall measures include:

• The Connections (LU) initiative **(Type 3)** was designed and is carried out by ASTI, a non-profit organization, in collaboration with the Education and Youth Ministry, the National Employment Agency (ADEM) and several professional chambers. These partnerships allow participants to take training classes in various fields (computer, language, butcher, accounting, etc.). In addition, private companies have partnered with ASTI to participate in information sessions, lead some of the workshops and provide internship opportunities for participants. The numerous partnerships made with public organizations and the private sector aim to facilitate the connections between migrants and employers but also to create a community of stakeholders around the topic of refugee integration into Luxembourg society.

The programme lasts for about 3 to 4 months and includes four major steps:

- A "screening" of skills based on an individual interview that determines the professional and educational background of each candidate,
- Several information sessions about the history and the culture of the Luxembourg society,
- six more specialized workshops on different subjects, such as "how to write a CV", "how to prepare a job interview", etc.,

- An unpaid internship in a company for a maximum of 240 hours, at the end of which a competences evaluation is performed by the company itself.
- The Forecast management agreement for jobs and skills (GPEC, FR) **(Type 4)** involves several steps: identification of the company's problem and analyses of the situation; definition of an action plan, write up the plan and signed agreement by all key stakeholders (employer/unions); implementation of the action plan; and, evaluation of the action plan. To carry out a GPEC agreement and implementation of the action plan, the company will generally call on human resources consulting firms to support the overall process, perform specific tasks or assessment, such as Bilans de compétences. The GPEC agreement specifies eligibility and accessibility rules to benefit skills assessment measures. These rules are part of the negotiation with the unions. In practice, depending on the challenges the company is facing at the moment of the GPEC agreement, skills assessment tools can be made available (and as such fully paid by the company) to all employees or only to selected categories based on number of years of experience, level of qualification, type of job, etc.
- In the Snabbspåret ('Fast track') initiative (SE) **(Type 3)**, employers, trade unions and Job Centres are involved in Snabbspåret and educational institutions may be involved to provide supplementary education and training.

5.4.2.2 Certification of providers

In the ProfilPass (DE) **(Type 1)**, multipliers and dialogue centres need to be certified. The certification has to be renewed every 3 years. Multipliers have to prove they are active in counselling, and have experience in using the instrument.

In other cases, especially those leading to certification, providers are PES, education and training providers and other institutions that are competent to issue qualifications or certifications of prior learning (VNFIL) (see section 4.3, and section 5.4). This guarantees a high quality standard in line with education and training regulations and labour market needs. For instance, in the UK initiative 'Move on Up' **(Type 3)**, a qualification is issued by competent authorities (external examining bodies e.g Pearson/EdXCEL).

5.4.2.3 Feedback and monitoring arrangements

To improve the process, some initiatives also include monitoring and collection of feedback in several forms:

- The German ProfilPass (**Type 1**) is centrally administered by a provider specialised in research on adult learning (DIE German Institute for adult learning). One of the tasks of DIE is the monitoring of its use across Germany and the continuous development of the instrument which is constantly updated.
- In the Projekt "Du kannst was!" (AT) **(Type 2/3)**, the feedback is collected from project partners through regular meetings and from participants. In Upper Austria, the process was fully evaluated and reviewed in 2016.
- In the Recognition and validation of prior learning in the Competence based VET system (FI) (Type 2), procedures are evaluated and discussed regularly on the basis of feedback from stakeholders and clients' satisfaction surveys.
- Competence check of PES initiative for asylum seekers (AT) **(Type 3)** has in place an informal quality assurance system: e.g. in Vienna, the different providers hold meetings, approximately 4 times per year, with the regional PES to give and receive feedback, discuss problems and adjust the programmes accordingly.
- Förderprogramm IQ: Hamburger Aktionswoche (DE) **(Type 2)** After every iteration of the Action Week, the team sits together to debrief (what went well, what went not so well, which tasks were suitable, which were too easy/too difficult etc.). The conclusions are then used to refine the next iteration. Moreover, the labour market developments in the sectors concerned are closely monitored by the

provider of the skills audit. Should the demand in the current focus sectors (health care, metal/electric) decrease, the skills audit would target other sectors.

• For Snabbspåret ('Fast track') initiative (SE) **(Type 3),** the Labour Market Authority evaluates the initiative on an annual basis. Individual activities are covered by the quality assurance mechanisms of the Job Centres.

6 Outputs, outcomes and impact of skills audits

Box 16. Summary of key findings

- Depending on the type, skills audits are used by a variety of individuals and organisations.
- Skills Audits figure prominently in the VFNIL Council Recommendation, and their outputs are expected to feed into validation. The Skills Audit initiatives researched cover a varying number of the steps defined in the Council Recommendation. There is evidence that skills audits can and do cover all four steps related to the validation process. Moreover, the skills audit process can even cover the additional steps of pre-assessment information, guidance, and follow-up mentioned in the VNFIL Council Recommendation. Hence some skills audits are validation initiatives in their own right.
- Yet, the extent to which this is the case varies across the identified types. Both type 2 and type 3 examples were found to include all four necessary steps to a large extent, while type 1 and type 4 examples usually focus on identification and documentation of skills.
- However, identification and documentation of skills are an important part of validation. Hence, all types of skills audits add value to the validation processes.

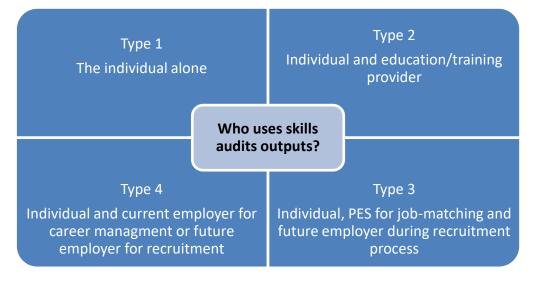
6.1 Main users of skills audits outputs and outcomes

The extent to which the skills audit takes place primarily for the individual or whether it is also expected to inform a third party varies between the four types:

- The majority of **Type 1** Skills Audits are solely for the use of the individual (a discussion of the target groups see section 3.2);
- **Type 2** Skills Audits serve the individual as well as the education and training or guidance counselling provider, who derives information about the individuals' status in relation to a training offer;
- **Type 3** Skills Audits are used by the individual, the PES (counsellor) for jobmatching and referral to ALMP measures, as well as the future employer during the recruitment process;
- **Type 4** Skills Audits are used by the individual and the current employer (HR department) for career management purposes. In some cases, the output can also be used by future employers for recruitment.

Figure 19 below gives an overview.

Figure 19. Who are the main users of skills' audit's outputs?



6.2 Main steps and typical trajectories of skills audits

As discussed in section 2, the Council Recommendation on VNFIL states that a validation process covers four steps:

- 1. Identification
- 2. Documentation
- 3. Assessment
- 4. Certification

Skills Audits are mentioned as a means to support the validation process, leading to certification. The articulation with skills audits is described in the box below.

Box 17. Skills Audits and the four steps of the validation process

1. Identification

The identification of skills is linked to other key functions that may be an internal to the process of identifying skills or an external component. One example includes information, advice, guidance (IAG), and counselling. These functions can be an internal component of the identification process but could also be external to the identification process associated with a skills audit, skills assessment or the validation of non-formal and informal learning.

These specificities are important to bear in mind when thinking about the needs of the different target groups undertaking a skills audit. An understanding of the role and potential of IAG and counselling is necessary in this respect, particularly in the context of outreach and/or as a preliminary (or pre-requisite) step in identification.

2. Documentation

Generally speaking, the documentation of learning outcomes is typically an integral element of a skills audit designed to identify and recognise an individual's skills. Although there's some evidence to suggest that some skills audits stop short at identification, and don't always include the documentation of skills as an integral component, it is possible that the outcomes of the documentation process (e.g. a portfolio) could be shared across different measures that enable an individual to progress along a learning pathway.

3. Assessment

As previous discussed, assessment can be an internal component of skills audit but not always. In some circumstances, the skills audit can lead to the assessment of learning outcomes but as an external function. This may be due to structural reasons, whereby organisations undertaking identification and documentation may not be a competent institution to undertake assessment and certification. Although those involved should be suitably experienced and qualified to make appropriate referrals or offer relevant IAG, this should not always be assumed. As a consequence, individuals may not proceed to assessment and/or certification. Instead of being central to the process, the individual is at risk of being lost in the process - due to the design of the process. For individuals that proceed to the assessment process, it is necessary to consider the type of support available to them (and practitioners) at this stage. This includes, for example, the provision of IAG and counselling, assessment tools and methods that best suit the needs of the individual. The design of appropriate assessment approaches (tailored towards the needs of the individual) could also be shared across different measures to facilitate the overall process of identification and recognition of skills.

4. Certification

A skills audit may result in the validation of learning outcomes from prior learning, but not always. The extent to which assessment and certification can and does take place should be linked back to the purpose of the skills audit and needs of the individual/user. In some cases, the main purpose of the skills audit will be for self-development, whilst in other cases, the main aim is to support educational advancement or labour market integration, where the stages of assessment and certification may be more prominent.

Moreover, the Recommendation asserts that skills audits should be embedded in a broader process that entails a sound system of pre-assessment information, guidance, and follow-up; including alternative routes for different cases of beneficiaries and different outcomes.

In practice, the Skills Audit initiatives researched cover a varying number of the steps defined in the Council Recommendation. Moreover, Skills Audits often also incorporate evidence on prior formal learning achievement, which is not part of validation arrangements in all countries. Many Skills Audit initiatives put an emphasis on information about next steps (e.g. preparation of Action Plans). This aspect may have a more central role in Skills Audits than in validation of non-formal and informal learning. Finally, there is the question of whether or not a Skills Audit leads to certification, as not all four main types of Skills Audits serve this purpose. Yet, while a specific initiative may not entail certification, there may still be links established (collaboration between institutions, use of common standards, referral processes).

The following sections give a more detailed overview of individual's trajectories as part of skills audits and the relationship with validation.

6.2.1 Individual's trajectories as part of skills audits

As previously stated, a skills audit initiative can entail all four steps related to validation, plus a preparatory and follow-up-step. Table 5 gives an overview of a fully-fledged process.

Table 5Steps of the Sk	ills Audit process		
Main Steps	Sub-steps		
Preparation	Recruitment and Outreach		
	 Personalised information and guidance before the skills audit 		
	Definition of scope		
	Agreement of personal objectives		
Step 1: Identification	Identification of skills, potentially over several stages using different types of methods (tests, interviews, self- assessment, work trials etc.)		
Step 2: Documentation	Documentation of the results and distribution to relevant parties		
Step 3: Assessment	 Assessment of the outcomes in relation to 		
	Qualification profiles		
	Job requirements		
	 Access requirements to education& training 		
	• Etc.		
Step 4: Certification	Certification of prior learning from different learning contexts		
Follow-up	Follow-up to achieve career progress, upskilling or labour market integration through		
	 Personalised Action Plan, and/or 		
	 Referral to certain job offers, and/or 		
	 Referral to other institutions can this be educational and training institutions? 		
	• Etc.		

Table 5Steps of the Skills Audit process

Yet, depending on the purpose, the provider in charge and the target group, not all elements and steps are always present. The following sections discuss this in more detail.

6.2.2 Relation to the fully fledged validation process

Despite the fact there is clear overlap between skills audits and validation in terms of the process and purpose, the detailed analysis of the skills audit initiatives included in our research shows that in the main, skills audits primarily focus on the identification and documentation of skills (though the nature of this documentation varies significantly between skills audits), accompanied with information and recommendations for next steps and thus less with assessment and certification.

Essentially, this focus is likely to be influenced by the overall purpose of the skills audit, its intended target group and available resources and infrastructure surrounding the

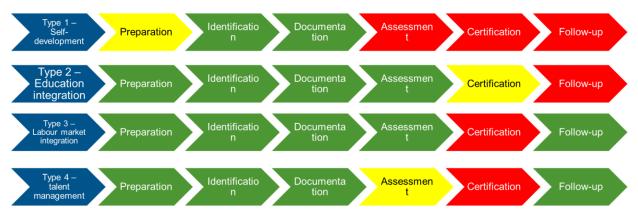
implementation of the skills audit. As shown in the previous sections, four main types can be differentiated: Type 2 (Skills Audits for educational advancement) and Type 3 (Skills Audits for labour market integration) often boast an explicit intention that the outcome of a skills audit can *lead* an individual to assessment (be it of formal, non-formal or informal learning outcomes) and/or certification. These steps are not necessarily an integral component of the Type 1 (Skills Audits for self-development) and Type 4 (Skills Audits for talent management). However, this is not always the case, as there are exemptions to the rule.

In the following section, we give an overview on typical trajectories related to the four types and show how the 41 initiatives identified relate to these trajectories. For the assessment, we used a traffic light system: `

- 'green': yes, the initiative covers this step
- 'red': No, the initiative does not cover this step
- 'yellow': the initiative contains this step only in some cases, or in a very basic manner.

Figure 20 presents a summary of the findings related to all four types.

Figure 20. Summary of skills audits analysed compared to a fully-fledged validation process



6.2.2.1 Type 1: Skills Audits for self-development

The main strengths of Type 1 Skills Audits are the identification and the documentation of skills. They usually do not lead to assessment and certification, or follow-up. For example, as part of the 'Career Balance' initiative in Poland, the first two stages of identification and documentation are very thorough and aimed at helping an individual understand where they are and where they could think about going. Yet, no further steps are covered.

Another example is the Danish '*Min Kompetencemappe'* initiative, which is a web-based tool that enables individuals to document their knowledge, skills and competences, irrespective of where these are acquired. It is a personal document that belongs to the individual user, but can also be used by enterprises wishing to map the competences of their personnel, provided that they have the consent of the involved personnel. The outcomes of the skills audit enables an individual to prepare for validation, supports them in terms of job search, or to produce individual competence development plans in the workplace. The tool, however, does not include formal assessment, certification or information on next steps.

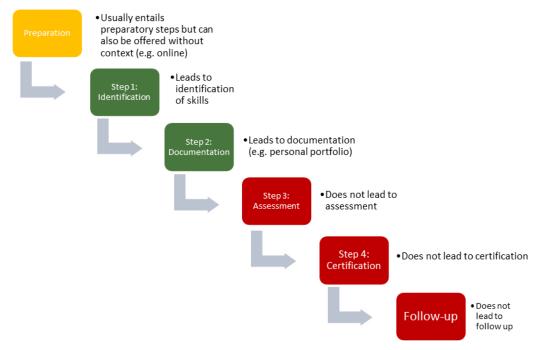
Table 6 below shows how the 19 initiatives characterised as Type 1^{32} can be assessed against the steps related to a fully-fledged validation process.

Table 0 C	able o One-by-one assessment of Type 1 initiatives							
Preparation		Step 2: Documentat ion	Step 3: Assessment	Step 4: Certification	Follow-up			
5	0	0	15	19	11			
4	0	5	4	0	7			
10	19	14	0	0	1			
19	19	19	19	19	19			

Table 6One-by-one assessment of Type 1 initiatives

Figure 21 below shows the overall picture emerging for all 19 initiatives, based on the one-by one assessment. Again, we used a traffic light system to rate the majority of initiatives of this type again the steps, to achieve a consolidated view for this type of initiatives.

Figure 21. Assessment of Type 1 Skills Audit initiatives against the fully-fledged validation process (consolidated view)



6.2.2.2 Type 2 Skills Audits for educational advancement

Type 2 Skills Audit initiatives cover all steps of the validation process, including certification, and also entail preparatory steps. Yet, there is rarely any follow-up regarding job search or labour market integration in terms of personal action plans, job referrals, etc.

A typical example is the Austrian initiative 'Du kannst was'. The purpose of the initiative is validation of formal, non-formal and informal learning to shorten education/training pathways - in this case, apprenticeship training (participants do not participate in traditional apprenticeship training: they first attend three workshops to compile a 'competence portfolio' before entering the first part of the apprenticeship examination);

³² Where an initiative belongs to more than one type, it was counted under several types (double counting), hence the total is higher than 41.

tailor the training offer (missing competences, i.e. those not included in the first part of the examination, are acquired in tailor-made courses) and leading towards acquisition of a qualification (i.e. apprenticeship diploma, obtained after a second examination that focusses on remaining competences only). Participants are then on their own regarding the job search.

A rare exception here is the ENFH Scheme for employees in the health sector in France, where the results of the skills audit are presented as a pathway for progression to the employer. The skills audit provider offers two professionalization options: strengthening of basic skills or a training course leading to certification/qualification. The options are presented to both the participant and the employer, and the decision is made together.

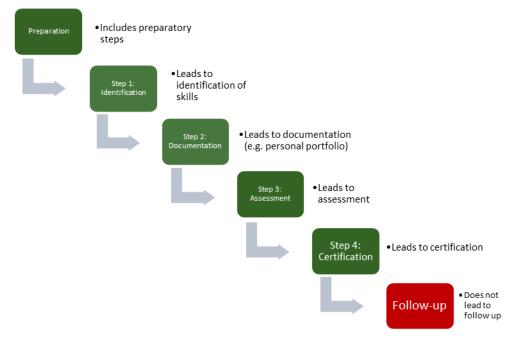
Table 7 shows how the 10 initiatives with Type 2^{33} characteristics can be assessed against the steps related to a fully-fledged validation process, using the traffic light system.

Preparation		Step 2: Documen- tation	Step 3: Assessment	Step 4: Certification	Follow-up
0	0	0	3	1	5
4	0	0	1	4	4
6	10	10	6	5	1
_10	10	10	10	10	10

Table 7One-by-one assessment of Type 2 initiatives

Figure 22 below shows the overall picture emerging for all ten Type 2 initiatives, based on the one-by one assessment, using a traffic light system.

Figure 22. Assessment of Type 2 Skills Audit initiatives against the fully-fledged validation process (consolidated view)



³³ Where an initiative belongs to more than one type, it was counted under several types (double counting), hence the total is higher than 41.

6.2.2.3 Type 3: Labour market integration

Type 3 Skills audit initiatives cover the first three steps of the validation process, but do not always lead to certification. In most cases, there is follow-up, especially where the initiatives are offered by the PES, or work together closely with PES.

For instance, the 'Connections' initiative in Luxemburg offers skills audits connected to internships. At a minimum, upon completion the beneficiary receives a fiche that identifies strengths and weaknesses against expected skills for the task s/he had to accomplish during the internship. General information as well as more specific data regarding qualification, level of expertise, professional experiences, and motivation can be found in the reports prepared by the skills audit provider. Participation in information sessions and workshops are also tracked in the participant's booklet and portfolio. All that information will be shared with ADEM (LU PES), where it will be used to shape up the job search process. Yet, there is no certification.

A few initiatives, however, also contain this step: The Swedish Snabbspåret initiative covers skills profiling, assessment, validation and supplementary education and training leading to a qualification. At the end of the process, the participant will be referred to job offers within one of the app. 30 occupations that are presently (2017) covered by Snabbspåret.

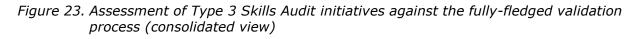
Table 8 shows how the 13 initiatives with Type 3^{34} characteristics can be assessed against the steps related to a fully-fledged validation process, using the traffic light system.

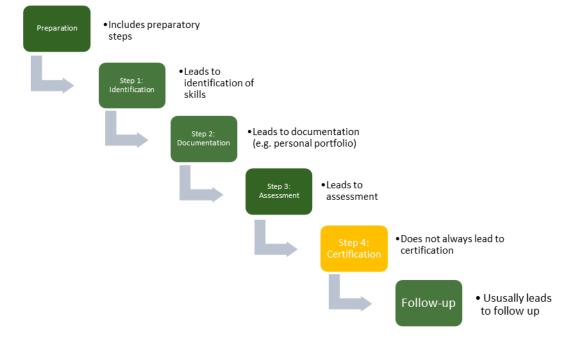
Preparation		Step 2: Documen- tation	Step 3: Assessment	Step 4: Certification	Follow-up
0	0	0	2	8	5
4	0	1	3	2	3
9	13	12	8	3	5
13	13	13	13	13	13

Table 8One-by-one assessment of Type 3 initiatives

Figure 23 below shows the consolidated picture emerging for all 13 Type 3 initiatives, based on the one-by one assessment, using a traffic light system.

³⁴ Where an initiative belongs to more than one type, it was counted under several types (double counting), hence the total is higher than 41.





6.2.2.4 Type 4: Talent management

Type 4 initiatives usually cover the first 3 steps of the validation process and include a sound preparatory phase. They normally do not lead to certification, but usually entail follow-up in terms of job offers or career progress.

For instance, the psychological testing offered by SELECTIO in Croatia to companies usually consists of the following methods: cognitive ability tests; personality questionnaires and additional questionnaires, in addition to expert knowledge assessments (that can cover competencies, such as computer, foreign language and accounting skills). Subsequent to the psychological assessment(s), data from the tests is collected and analysed in the form of a psychological interpretative report for the client. The main part of the report, in most cases, comprises a recommendation for each candidate/participant which includes information on their suitability for a certain position. Detected strengths and areas for improvement are included in the report.

The 'Forecast management agreement for jobs and skills (GPEC)' (based on the bilan de competences) in France includes several tools that are used at the employee level: individual performance review, validation of professional experience acquired on the job (VAE) but also training. The standard outcome is an action plan. There are no existing guidelines to determine the exact content of an action plan, but it should include concrete and specific steps and actions to be taken e.g. a list of potential local employers to make contact with, etc.

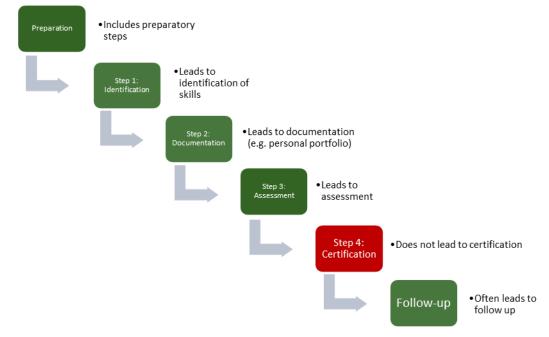
In the 'Career pathways for fire fighters' initiative in the Netherlands, the skills audit process entails the development of a personal dossier or portfolio that can be used for adding new work experiences and responsibilities (HRM) or for creating a personal development plan (HRD). In the latter case, the fire fighter has to organise a learning path in cooperation with a VET-college or a university. When this cooperation is established, in almost all cases, this skills audit takes the form of a recurrent portfolio-assessment and criterion-based interview, possibly in conjunction with simulation, 360 degrees feedback, and/or professional product-evaluation.

Table 9 shows how the 8 initiatives with Type 4^{35} characteristics can be assessed against the steps related to a fully-fledged validation process, using the traffic light system.

Table 9One-by-one assessment of Type 4 initiatives									
Preparation	Step 1: Identificatio n	Step 2: Documen- tation	Step 3: Assessment	Step 4: Certification	Follow-up				
1	0	0	2	4	2				
3	0	0	0	2	2				
4	8	8	6	2	4				
8	8	8	8	8	8				

Figure 24 below shows the overall picture emerging for all eight Type 4 initiatives, based on the one-by one assessment, using a traffic light system.

Figure 24. Assessment of Type 4 Skills Audit initiatives against the fully-fledged validation process (consolidated view)



6.3 Outputs and outcomes of skills audits

Box 18. Summary of key findings

All initiatives analysed lead to certain outputs. There is, however, a broad range of possible outputs and outcomes. While a Skills Audit may simply result in be a written summary of the assessment results, it may also be a more sophisticated personal portfolio, an Action Plan for job integration (e.g. in a PES context), an official certification of prior learning from VNFIL or a recommendation for a job.

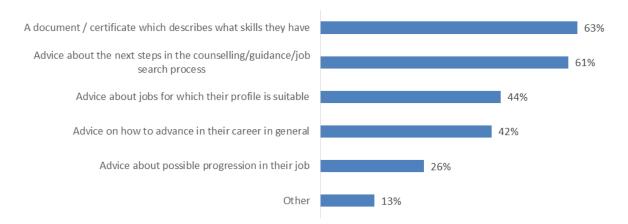
The initiatives also may lead to further steps, which can be tailored training as well as further counselling and support. In relation to the four types, the following commonalities could be observed:

³⁵ Where an initiative belongs to more than one type, it was counted under several types (double counting), hence the total is higher than 41.

- **Type 1:** The outputs of type 1 skills audits are most often a written summary of the assessment results or a personal portfolio. In some cases, this includes a personal Action Plan detailing recommended next steps towards a career goal or professional project
- **Type 2:** Type 2 skills audits often lead to the certification of NFIL and access to a training course which may ultimately lead to a qualification.
- Type 3: Type 3 initiatives may also lead to the certification of NFIL. In a PES context, they often lead to an Action Plan, access to ALMP and/or a job offer.
- **Type 4:** The outcomes of Type 4 skills audits are often restricted to the HR strategy of a specific company and or a persons' progress to a higher level within their job. Yet, there are also examples under this type where the outcomes/outputs are of use beyond the current employment.

Skills Audits may lead to a broad range of possible outputs. In the survey we analysed what beneficiaries receive on completion of the process. Figure 25 below shows that most respondents receive a document describing their skills and/or advice about the next steps in the process.

Figure 25. What do beneficiaries receive on completion of the process? Please select all applicable responses.

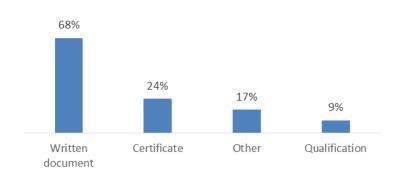


Source: ICF survey of skills audit providers (n=90)

Figure 26 shows what outcomes are produced from a certain initiative. Almost 70% of respondents indicated that they produce a written document (type: test result or personal portfolio). A smaller number mentioned a certificate, mainly issued by competent organisations, including employer organisations, agencies for qualification and training or PES.

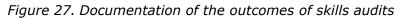
Around 17% of respondents mentioned other outcomes that included: psychological assessments, a written decision, skills passport or a study plan. Those that answered that a qualification is issued (9%), mentioned that accredited institutions, such as universities or national agencies issue such qualifications.

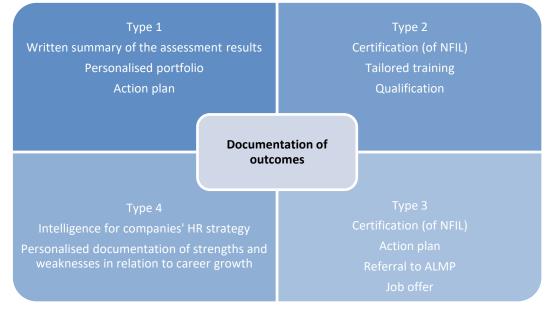
Figure 26. : What types of outcomes are produced from the initiative?



Source: ICF survey of skills audit providers (n=90)

Across the types, certain trends and commonalities can be observed, as shown in the figure below.





Source: ICF research (n=41)

6.3.1 Type 1: Skills audits supporting self-development

Under this typology of initiatives, the final document usually provides a personal portfolio that summarises the process, the results and in some cases an action plan for further development. The final document is primarily meant to have a formative value for the beneficiary, and possibly an activating effect. This is, for instance, the case of generic Bilan de competence (FR, BE-fr) where "A bilan de compétences" is, above all, a tool designed to serve the individual's professional project in a given context of employment or unemployment. The auditing is meant to strengthen the individual's capacity and confidence to move forward with a professional project.

The standard outcome of a Bilan de competence (FR, BE-fr, LU) is an action plan. The exact content is highly personalised, and it usually contains a summary of the process undertaken with the beneficiary, some action plans provide broad information on career or training options. Other the action plans include specific steps and actions to be taken such as name and reference of identified training, name of relevant training providers with contact information, concrete recommendations to pay for the cost of the training, a list of potential local employers to make contact with, etc. Depending on the type of bilan and also on the specific objectives of the bilan, connections with the labour market and employers will be more or less straightforward. For instance, in Luxembourg, the bilan included in the programme targeting disabled people is followed by a speed dating event

where jobseekers can value the results of the bilan and their experience directly with employers. Sector-specific bilan can also include information regarding vacant positions in the targeted sectors.

The Public Skills Health Passport (PHSP) (UK) leads to the production of a development plan containing a concrete "next steps" roadmap. Where relevant, the final document includes a training or tailored learning programme, career options, a downloadable personal profile and access to links to support professional development. When the PHSP is used in consultation with a line manager, the results may also include information about internally vacancies an individual could apply for. The outcomes of the PHSKF/PHSP are widely recognised across the public health sector.

In the IVC skills audit for migrant women (NL) a follow-up and monitoring system with 'group meetings' ensure that results are monitored, next steps are taken, and migrants are supported as long as they stay in the local community.

Yet, other tools leave the next steps open: The outcome document of the Volunteer Corps competence assessment (PL) is seen as a tool that helps beneficiaries to self-reflect on their competences and skills, and draw their own conclusions for their professional development.

6.3.2 Type 2: Skills audits supporting educational advancement

As shown in the previous sections, most of the fully-fledged validation initiatives leading to certification have been found under this type.

Type 2 initiatives often aim at validating previous learning to grant beneficiaries access to further education, and possibly tailor training offers. Therefore, the documents often summarise the skills acquired and the gaps of the beneficiary in relation to a standard (see section 5.4). Training leading to a qualification ensues. To that end, many of the skills audit examples leading to certification follow the three steps suggested by the 'Upskilling Pathways', where the outcomes of the Skills Assessment are used to tailor and/or shorten the training pathway, and the training ultimately leads to a qualification.

For example, in the Realkompetencevurdering (validation of prior learning in VET) (DK), the results of the process are mapped against the learning objectives of the relevant IVET-programme and documented by the school using a standard template developed by the Ministry of Education. Learners are then admitted to the VET system, where they can acquire a qualification.

6.3.3 Type 3: Labour market integration

Initiatives under this typology aim at supporting the beneficiaries entering the labour market, therefore a certification that is recognised by labour market actors is paramount. The key factor which impacts on the recognition of the outcomes of the auditing is the involvement of employers in the programme and the high level of trust between the institutions involved.

- In the Ervaringsbewijs (BE-nl) the Certificate of Experience provided is highly recognised by employers as employers have imputed the CoE-process defining the professional profiles.
- In the Förderprogramm IQ: Hamburger Aktionswoche (DE) every participant receives a certificate of completion with a recommendation on how to progress (training, language course, internship or progression into employment). The participants take this recommendation to their PES counsellor. Due to a high level of trust between the institutions, the PES counsellors tend to follow that recommendation.
- The Connections (LU) program has been developed in collaboration with the main PES operator in Luxembourg, ADEM. Participants receive a formal certification by the Ministry of Education and Youth after attending the several workshops. In

addition, when participants take specific training this is certified and used for job search purposes in the labour market.

- In the Competence check of PES initiative for asylum seekers (AT), a Competence Report and a Development Plan are set up and handed over to the participant as well as to the PES. The results are used by PES counsellors for further action/guidance, as well as for the PES project coordinators to further enhance the initiative. One of the possible results can be official recognition of a qualification, this would then also be recognised by employers or educational institutions. Although the reports and development plans per se are not recognised by educational institutions, they are valued in the labour market as an informal proof.
- The UK initiative 'Move on Up' provides recommendations on the occupations or training courses that would match their profile and interests. They also receive a written document (e.g. a 'portfolio' or 'transcript of records') stating all skills identified, and, where possible, a completion qualification – issued by competent authorities (external examining bodies e.g Pearson/EdXCEL). In-work support telephone calls up to 12 months + post-audit are carried out by the staff.
- In the Construction Industry Skills Card (MT) initiative the Construction Skill Card is compulsory for anyone working in the construction industry. As such they are highly valued and recognised by employers. They also provide reassurance to consumers that the service being received is provided by qualified trade persons.

6.3.4 Type 4: Talent management

The documents awarded under this type are often related to a specific career project within a certain job (a promotion, a job change etc.). Therefore, the content and validity are usually intrinsically linked to its purpose, rather than aiming at general recognition in the labour market. Yet, there are also initiatives that have a broader purpose.

- Initiatives strictly connected to companies' HR strategies target the employees and the company, therefore the outcomes are not intended for recognition in the labour market. For example, in the Rockwool Group (NL) initiatives the final outcome is a report which includes the SWOT-analysis, the description of competences and the linkage of personal learning experiences with company skills. In the Forecast management agreement for jobs and skills (GPEC) (FR) the standard outcome (and the final phase of the process) of a "bilan de compétences" is an individual action plan. In the case of a GPEC bilan de compétences, career options are likely to be developed. It can also include some arguments for the employee to discuss his/her situation with HR services.
- Initiatives with objectives that go beyond the specific company needs entail documentation that is intended for wider use. For example, in the Psychological assessment (HR) the main part of the report, in most cases, comprises a recommendation for each candidate/participant which includes information on their suitability for a certain position. The beneficiary makes the final decision with regard to the next steps that follow the assessment. The psychological assessments themselves are aimed at employers recruiting in the Croatian labour market. In the skills validation in companies (BE-fr) the successful validation results in the award of a skills certificate.

6.3.5 Portability of outputs

In view of validation, the question of the portability of skills audits' outputs is a pertinent one. How valid are outputs, and are they accepted by other institutions? For the cases analysed, the portability of outputs very much depends on the type of skills audit followed.

- For Type 1 approaches, the portability of documented achievements is not the main objective. Portability takes place through the individual who exit the process better equipped to advocate for himself/herself in the process of job-search.
- For Type 2 approaches, portability is indeed an inherent feature as in these cases skills audits are linked to the process of tailoring education and training provision which will result in acquisition of some form of portable certificate, which is accepted by other stakeholders.
- For Type 3 approaches the main concern is immediate portability from the skills audit to rapid recruitment. The documentation is not necessarily designed to be used over a life course of the individual but to help them find a job in the very near future.
- For Type 4 portability is typically restricted to the company concerned.

6.4 The future is digital: The use of open badges and online-portfolios

National education and training policies across the EU are still rooted in the idea that a person has better chances to progress in their career if they have a qualification that is pegged to the formal qualification system. In highly specialised and fast-paced industries (e.g. IT, aviation), this is already no longer the case. Qualifications relate to sector and company standards and are not part of mainstream education and training. Hence, new solutions are needed.

The previous sections show that outputs of skills audits are still to a large extent paperbased and include documents, certificates, and paper portfolios; which also has an influence on their portability. However, technological innovation makes it now possible to develop online portfolios that are developed over time, and can be accessed by anyone. This is particularly at the heart of the growing body of initiatives around **open badges**. Badges are user-friendly not only for the individual, but also for potential employers or for education and training organisations. They enable to record evidence of past achievements and they are easily portable as they do not require an individual to carry with him/her any paper documentation. The recording of knowledge, skills and competences that underpins the issuing of a badge is conditioned by the fact that a third party observed the KSC and awards the badge. In other words, the process of issuing badges is quality assured. Thus, badges include some form of guarantee that the skills and competences have actually been observed and identified by an external party.

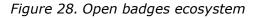
This study analysed in greater depth one example of initiative working with open badges; the work of the European Badge Alliance. However, through initial desk research, other initiatives have been identified. These were primarily in the private sector or third sector, but recently, Belgium has also developed a mainstream public initiative for awarding and earning badges (BE Badges)³⁶. There is clearly a growing trend in using badges to signal individuals' skills and competences online, but also to enable employers and other organisations to dig deeper into what forms of assessment underpin the issuing of a given badge.

Open badges are virtual objects which are represented in form of an image (a badge) but which contain more specific data about the skills and competences concerned as well as the issuing organisation and the conditions for the award of the badge. In other words, each badge is a mini-informal certificate.

Individuals accumulate badges in an online portfolio. They can accumulate badges over time and from a variety of awarding organisations. Organisations using the badges to identify possible recruits or for other purposes have the possibility to verify the

³⁶ See for example: https://www.oecd.org/gov/innovative-government/Belgium-case-study-UAE-report-2018.pdf

authenticity of the badge award on the side of the issuing organisation. This so-called `open badges ecosystem' is portrayed below.





Source: Erik Knutson, Concentric Sky, licensed CC-BY

Initially designed to facilitate recruitment and job search, open badges can also be used to facilitate career guidance and orientation, as well as individualisation of education and training programmes. They are also used to support motivation of individuals for completion of training, in particular, online training³⁷. The primary objective of open badges, when they were first developed less than a decade ago (2010), was to render non-formal and informal learning visible and support its recognition³⁸.

The use of open badges and online-portfolios has several potential implications for skills audits:

- Visibility of the results of a skills audit process: Through the electronic portfolio the output of the skills audit process could be made visible and available in a user-friendly format. The nature of these electronic objects means that it is possible to embed several layers of data into one simple badge.
- Enhanced portability and accumulation of badges over time: The fact that the portfolio is online and unique to the individual means that it becomes easier to transfer and accumulate outputs of skills audits together with outputs from formal or non-formal training over time in a single portfolio.
- **Completing the steps related to the validation process over time:** The existence of these online portfolios simplifies the possibility of completing the steps related to the validation process over time, as it is recorded and can be accessed at any point in time. Even if the person carries out a skills audit at a point in time when s/he does not wish to get these skills certified, the outputs of the skills audit process can be used by other parties for certification later in one's trajectory.

³⁷ Gobert (2017) Badges et certifications : ressentis d'apprenants ayant suivi des MOOC in Distance et Médiations des Savoirs (vol. 20)

³⁸ Ravet (2017) Réflexions sur la genèse des Open Badges in Distance et Médiations des Savoirs (vol. 20)

• Low or no costs: Some beneficiaries report financial issues as a reason not to take up skills audits, especially where this entails a long process with several steps leading to a qualification. In those cases, costs can occur related to ensuing training and certification. Open badges or similar technologies entail no or very low costs.

6.5 Benefits and impact of skills audits

Skills audit initiatives do not seem to be evaluated very often. This study identified only a limited number of evaluations related to the researched cases. In addition, most of the initiatives identified do not have a follow-up and/or monitoring post-audit embedded in their design. This dearth makes it difficult to assess the impact of the skills audits identified on beneficiaries and the success factors of the initiatives as well as the challenges. Therefore, the evidence for the effectiveness of the skills audits analysed for this study is patchy or missing.

However, an additional literature review was carried out which delivered additional evidence. The following sections give an overview on the findings related to benefits, success factors and challenges – both from the perspective of beneficiaries as well as employers and stakeholders. Summary tables of the evaluation findings are presented in Annex 8.

Evaluation exercises as well as interviews with stakeholders and beneficiaries have identified a number of **benefits for beneficiaries** of skills audits:

- The most striking effect that has been observed in evaluations³⁹, as well as reported by all stakeholders and beneficiaries interviewed, relates to the **activation and motivational effect on individuals**. Skills audit are reported as an important instrument through which individuals gain an insight into their own skills and capabilities, thus increasing awareness of individuals' potential and triggering activation mechanisms.
- Skills audits are deemed effective in increasing jobseekers' chances of entering the labour market if unemployed. This was found in evaluation literature⁴⁰ as well as reported by stakeholders in case studies⁴¹ and perceived by beneficiaries interviewed and all case studies.

Box 19. Examples of beneficiaries' narratives: Motivational effects⁴²

Suzanne has a long experience in underwater archelogy. After having her second child she decided to work more for the television. She realized the level of competition was very high and at several occasions she experienced emotionally difficult conditions at her workplace. After a difficult episode she was diagnosed with a severe burnout and decided she needed to change career. She had heard of the bilan de compétences by some friends. She contacted a professional development organisation specialised in artistic careers (AFDAS) and requested a bilan.

Based on the analysis made by the coach, she could turn towards two new different activity areas: either teaching or working in a museum. She is now considering applying for different positions in museums or international organisations in charge of heritage preservation.

³⁹ AT Waff; AT Kompaz; BL-fr Bilan de competence

⁴⁰ FR CSP; NL digital skills profiling; FI recognition of foreign qualifications; BE-fr Bilan de competence

⁴¹ MT Skills card, AT Du Kannst Was!

⁴² These narratives are based on interviews carried out as part of the study, hence on real cases. Yet, they may combine information gained through more than one interview, and features from several cases ('vignette approach'). Names and other personal information have been changed.

Suzanne thought the process was very helpful to confirm or develop options she had considered at one point of her life (teaching). She insisted that the most important outcome of the bilan was that she regained self-confidence and felt she was psychologically and physically ready to move forward with her professional project.

Isabela has worked in a range of occupations, all different to her initial qualification. She is currently not working. She was a volunteer for around 20 years in the field of civil defence with various degrees of responsibility.

In 2015, as president of the second level volunteering association, Irene entered got to know about the Cvol- Libretto Delle Competenze del Volontario (Volunteer's Competences Record-Book. She never thought before about 'volunteering-competences', and she considered that the CVol would be a good opportunity for her in a personal, professional and volunteering capacity. She was so much convinced of the usefulness of such a process that - in her position as president of a volunteering association - she promoted the initiative among the volunteers there.

At the time when she decided to undertake the skills audit process, she was in a particular period of her personal and professional life and felt the need to reflect on what she had done until that point.

Isabela also highlighted that her main difficulty was the one of pairing competences and examples of volunteering activities where those competences were used/applied. The process of inferring competences from volunteering activities was for her particularly difficult, and the 'translation' of acquired competences in a way to make them valuable for both professional and education purposes also represented a critical exercise.

She declared that the skills audit process allowed her to understand a lot on herself, and for this reason she would suggested that anybody could undergo that or a similar process. According to her, in fact, the skills audit had an empowerment function for her, giving her more self-confidence and a completely new vision on her past experience. Furthermore, the skills audit increased her awareness of the competences she possesses, some of which she did not even know she had.

From the evaluations assessed it emerged that the impact of skills audit initiatives varies across target groups. A greater impact is likely to occur with high skilled workers. For example, in the KOMPAZ initiative in Austria, which entailed a self-assessment process, the effect on low skilled individual was minimal. Similarly, the Dutch digital skills profiling was found less effective for jobseekers with little or no IT skills. In the Netherlands, in the initiative supporting NEETs, face-to-face support was found more effective than online support. Whereas, the Bilan de competence in Belgium was found more successful with individuals holding, at minimum, end of upper secondary education diploma.

The Swedish initiative 'Meritportfolj' targeted groups with important challenges to enter employment (migrants and refugees), and was based on a portfolio approach which was expected to lead to an activation effect, and increased chances to find a job. Yet, an evaluation found that the skills audit has little association with increased take-up of employment in the beneficiary group. The practice has been discontinued and was replaced by the 'Snabbsporet' initiative which entails several steps following the skills audit, e.g. an individual action plan.

Benefits for employers were also identified in evaluations and interviews:

• The skills audit results enable companies to design and optimise their recruitment and talent management strategies by identifying occupations

and job profiles more clearly, optimise the training offer and better support the professional development of employees⁴³.

• Upskilling of low skilled workers to tackle skills shortages linked to technological developments in the sector was identified as a driver for companies to engage with skills assessment⁴⁴. Although, this emerged only from one interview in case studies, this provides an idea of the potential of skills audits for employers and workers.

Benefits for stakeholders include PES job counsellors and other guidance counsellors:

- Skills audits are considered a useful part of **PES modernisation towards an individualised service offer**. The outcomes of Skills Audits help PES job counsellors to make a more targeted offer towards a job or a suitable AMLP.
- The same applies for **other types of guidance counsellors**: The outcomes of skills audits help them to make a more targeted offer towards the right type of further training, individual support or the next steps in a persons' career.

These benefits for professionals working with unemployed persons contribute to the positive effect that skills audits have found to have on jobseekers' chances of entering the labour market.

7 Conclusions and Recommendations

Making knowledge, skills and competences visible is important from a variety of perspectives (individual, organisational, national) and reasons. Some people are not aware of knowledge, skills or competences they have. Others may be aware of their skills, but need these to be validated before they can capitalise on them in a recruitment or promotion process, in the navigation of educational pathways or to feel recognised.

Skills audits assessing knowledge, skills and competences together with work-related attitudes and behaviours can help individuals in a multitude of manners: Make a career choice, find a suitable job, complete a qualification, embark on a lifelong learning pathway, and increase their self-confidence. Moreover, skills audits support guidance counsellors to better tailor the case management of an individual, and support employers to meet their strategic goals through the effective deployment and development of the skills of their workforce. Ultimately, this helps European Member States to enhance their competitiveness by ensuring to all European citizens have labour-market relevant skills and qualifications.

As the European labour market is becoming more fluid and digitalised, and people are increasingly required to move between jobs throughout their professional career - the added value of skills audits will increase because of their capacity to make visible individual's knowledge, skills and competences, regardless of the context (formal, non-formal, informal) in which they have been acquired. This study has analysed a range of skills audit initiatives in 16 European countries, which aim, in different ways, to achieve greater visibility of individual's knowledge, skills and competences. A number of conclusions and recommendations can be extracted from this analysis, which are presented below.

7.1 Concept and terminology

Conclusion 1: The notion of 'skills audit' is rarely used; when it is used its meaning varies.

None of the initiatives analysed is called "skills audit". The study has also found that when this term is used, it can refer to something different to what the Council

 $^{^{\}rm 43}$ BE-Fr 'Consortium for the validation of competences'

⁴⁴ DK Realcompetencevurderink

Recommendation on the validation of non-formal and informal learning implies (a process for the "individual identification of knowledge, skills and competences"). Different terms, on the other hand, capture in various national contexts, elements of the meaning of the term in the Recommendation. This creates confusion amongst target groups, practitioners and stakeholders as to what a "skills audit" is. The term "audit" has negative connotations in some contexts.

Recommendation 1: An alternative formulation to the term 'skills audit' should be sought, and the concept should be clarified, including quality criteria.

There is benefit in working with specialised experts and representatives from different national contexts, to avoid negative connotations and overlaps with terms that are already used at Member State level for other practices, and increase clarity. The main elements of skills audits (or main steps in their methodology, as done in the French GPEC) should also be clarified: there is a lot of diversity in practices and this makes it more difficult to communicate what skills audits are. Finally, guidance on quality assurance measures that can enhance the validity of skills audits should be provided to practitioners.

7.2 Types of skills audits and their relationship with validation

Conclusion 2: Skills audits can be classified in a variety of types based on their objectives; connections between these different types would need strengthening.

This study has identified four main objectives for skills audits, based on their purpose and objectives: self-development, progression into and within education, labour market integration and talent management/career progression within companies. While this classification can be useful for a variety of purposes it should also be mentioned that in real-life initiatives, more than one of these objectives may be present in skills audits.

Recommendation 2: Connections between different types of skills audits and other related initiatives should be enhanced to ensure possible trajectories are clear for the beneficiaries.

For example, individuals undertaking an audit for self-development should receive clear information on how they can, at a later point, make (formative or summative) use of those results for education or labour market progression. Similarly, those audits tightly related to specific labour market requirements or educational standards may adopt a wider remit to inform individuals of other valuable skills/competences identified during the skills audit process, even if these are not directly linked to the core elements that the audit aimed to cover.

Conclusion 3: The articulation between skills audits and validation needs to be further developed.

The relationship between validation and skills audits is not always clear to stakeholders. In addition, the level of integration between validation (which encompasses identification, documentation, assessment and certification) and skills audits varies, depending on the type of audit. In some countries, the process for validation relies on strictly prescribed approaches whereby none of its component steps can be skipped or adjusted, even if there is evidence available from other sources that the individual has achieved a given skill or competence.

Those audits that focus on self-development and talent management often do not include assessment nor certification. Those that focus on labour market integration –and to a lesser extent those related to educational advancement - often do not include certification. Our survey of providers suggests that less than 10% of the skills audits initiatives analysed lead to some kind of qualification. Some, although by no means all, skills audits include formal learning in addition to non-formal and informal learning. In addition, most audit procedures do not include follow-up plans.

This raises important issues regarding the articulation between skills audits and validation initiatives, in order to ensure that those who undertake skills audits have routes available that enable them to progress into or within the labour market and education.

Identification and documentation can produce significant positive outcomes, for example, in terms of empowerment and motivation. They are integral to the definition of skills audit provided in the Council Recommendation on validation, because of their potential to help individuals analyse their career background self-assess their position and plan career pathways.

While assessment and certification may not be the main aim of skills audit procedures, or even appropriate for some target groups, it is good practice that skills audits have these options open, should their users want to make use of them. This may be in the context of the skills audit itself, or by establishing connections between those audits and validation procedures that have those options in place -or relevant educational offers - for example, through effective referral procedures.

Recommendation 3a: Clarify the relationship between skills audits and validation.

The relationship between skills audits and validation should be better clarified to the public, emphasising their commonalities, their differences and their complementarities.

Recommendation 3b: The purpose of skills audits currently embedded in the Council Recommendation on VNFIL could be broadened.

It is recommended that, in the next stage of the development, emphasis goes beyond the request in the Council Recommendation to have skills audits in place aimed at "identifying (...) knowledge, skills and competences" in two respects: a) to ensure that skills audit initiatives are systematically linked to and articulated with validation systems, through roadmaps that clarify, whenever relevant, routes to assessment and certification; and b) to ensure that follow-up plans regarding labour market or education integration become a more integral part of skills audits. Point a may require changes in some validation procedures so that they accept evidence generated outside of them. Point b is particularly important for low-qualified individuals (the target group of the Upskilling Pathways Recommendation) and other at-risk groups (such as NEETs, migrants and refugees), who may not be able to benefit directly from assessment and certification during or immediately after an audit.

7.3 Skills audit process and methodologies

Conclusion 4: In order to be effective, the skills audit process needs to be tailored to target groups

The characteristics of the target group have a bearing on the benefits that can be expected from skills audits. For example, skills audits requiring a high level of autonomy (such as online self-assessment tools) are more likely to benefit highly educated beneficiaries and those that require a high degree of verbalisation and writing may penalise immigrants and persons with low literacy skills.

At risk-groups often benefit from more inclusive assessment methods (e.g. more practical tests, less IT based solutions for the target group of UP, offer in several languages etc.). Also, more and better tailored tools for assessing basic skills (literacy, numeracy and digital skills) will be required.

This should be taken into account in the design of skills audit processes. One way of achieving this is through the use of mixed-methods approaches (combining for example, self-assessment and third-party assessments, or assessment of practical and theoretical knowledge with tests and in-depth interviews), whereby users can combine approaches or choose the approaches that better suit their needs. Moreover, mixed-method approaches were highlighted in this report as the most effective in identifying and

assessing knowledge, skills and competences of beneficiaries (technical and transversal) and their personal interests and motivations.

Recommendation 4: The production of practical guidelines on how to design and implement skills audits for specific target groups should be supported.

Practical guidelines on how to design and implement skills audits – including the use of mixed-method approaches -, with a particular emphasis on disadvantaged groups, would help to support practitioners in this area.

Conclusion 5: Work collaboratively to ensure the use of standards with currency in education and/or the labour market.

Some skills audit initiatives can lead to outcomes with a strong currency in education and the labour market. This is often the case, for example, of skills audits offered by education and training providers, which use educational standards as a basis for assessment, and employer-led initiatives. The youth sector, through initiatives such as Youthpass, underlines the importance of being able to show one's competences and skills to employers.

Yet, evaluations and beneficiaries of some initiatives reported a lack of recognition from labour market actors of skills' audits outcomes⁴⁵. A number of factors seem to affect this, which include overly complex and unclear outcome reports a lack of use of established and recognised standards (related to qualifications, occupations or job profiles) and the extent to which the forms of assessment used can be considered sufficiently robust and linked to those standards.

The use of a variety of standards in different initiatives is consistent with their differences in objectives and diversity in the target groups of skills audit initiatives. This diversity is thus enriching and helps audits be fit for purpose. Similarly, open and exploratory skills audits not linked to recognised standards can be useful in a number of ways –for instance to construct individual action plans-, but have limited currency in education and the labour market. It is important, thus, that beneficiaries be aware of the aims and results of specific audit processes, and the types of standard that are used.

In order to further improve the usability of the outcomes of skills audits in education and the labour market, clarity and connections to recognised standards are important. This often will require close collaboration between the provider of the skills audit and other relevant professional or educational bodies. It should be noted that the use of standards can be an integral part of the audit from the start, or at a later point –through ex-post mapping of the results obtained to certain standards (educational, occupational or job-specific).

In sector-led initiatives such as: the Construction Skills Certification Scheme and the Quarry Skills Certification Scheme in Ireland; the Construction Industry Skills Card in Malta; and the Competence-management framework for the fire brigade in the Netherlands, the skills audit is based on a skills framework that uses occupational/professional standards. The outcome is intended to equip an individual with the relevant documentation (e.g. Skills Card) to demonstrate their knowledge, skills and informal learning to be certified. They are trusted and valued by employers and are supported by sector bodies, social partners and employers. Yet, not many initiatives are based on similar collaborative work.

Given the intensive use of self-assessment in skills audits, detailed guidance to individuals on the standards against which to judge one's performance is crucial.

The majority of initiatives reviewed focus mainly on transversal competences. There is an enormous range of specific competences that are labour market relevant, and it is difficult to account for them in skill audit processes. Both sets of competences are

⁴⁵ AT Waff initiative; IT CVoI; FI initiative in IVET; FI competence based qualification system

important. Strong partnerships with employers and employer representatives are required in order to be able to cover specific skills appropriately and in an updated manner.

Recommendation 5: It would be beneficial to bring education and labour market organisations closer together with those organisations designing and implementing skills audits.

Collaboration between education and labour market organisations, and organisations that design and implement skills audits (particularly those that aim to go beyond self-development purposes) would be beneficial to increase transparency and the use of recognised standards in skills audit processes. This would also help to enhance the portability and usability of the outcomes produced by skills audits.

Such outcomes should be presented in a clear way to facilitate their use. Given the intensive use of "self-judgement" in skills audits, detailed guidance to individuals (by counsellors, peer assessors, detailed documentation/exemplars or practical self-assessment procedures) on the standards against which to judge one's performance is crucial. Very often, individuals are unclear as to what type of performance is associated with different proficiency levels.

Conclusion 6: Methodological innovations and the use of technology for skills audits are on the rise.

The research identified a range of methodological innovations in skills audits processes, for example, in relation to the use of open badges and peer assessment, or visual methods, which are not yet widely spread. Badges, use of technology and networks to help individuals document in an easy and playful manner (including gamification elements) what they are capable of doing based on past achievements. New methodologies have been used for the screening and profiling of migrants and refugees that have arrived in the EU in recent years, in particular, making use of visual methods, which could also be used with other target groups - for instance, low skilled adults.

Recommendation 6: There is scope to intensify exchange and mutual learning on good practices and on the use of innovative methodologies in skills audit initiatives.

Exchange and mutual learning between practitioners and developers of skills audits should be intensified. There are some documented precedents where exchange of knowledge took place, for example, in the Croatian PES self-assessment tool, adapted from an initiative originated in the UK. This may take the form, for example, of guidelines for practitioners, the creation of a repository of initiatives making use of innovative methods. or facilitation of the integration of some of these methodologies, such as badges, into widely used European initiatives, such as Europass and Eures, as well as national initiatives, in which they are still rare.

Greater exchange of good practices regarding innovative (and indeed effective) methodologies across the range of organisations involved in skills audits would also be beneficial (IAG, third sector organisation, public and private employment services, education and training providers, enterprises), e.g. in the form of Peer Learning Activities. Some target groups (for example, those with low digital skills) may need additional support to benefit from some of these innovations to reduce the digital divide.

7.4 Scaling up

Conclusion 7: There are different legal frameworks regulating access to skills audits.

Some skills audit initiatives are already highly used. In some cases, this derives from the compulsory nature of the initiative for their target groups or association with other policies (such as active labour market policies, refugee integration policies or policies for youth guidance). In terms of regulation, in some of the countries analysed, there is a universal right for citizens to undergo a skills audit (participation is open, voluntary and

available to all). Whereas in other countries, there are rights/obligations for certain target groups to undergo a skills audit, and yet, in others there is no legal framework regulating entitlements, but support policy frameworks facilitating the use of skills audits. Indeed, in about half of the countries under review there is no overarching legal framework for skills audits; instead, employment or education training policy strategies cover the provision of skills audits with no legal rights or obligations attached.

Recommendation 7: Ensure sufficient opportunities for access to skills audits.

While movement towards a uniform regulation of access to skills audits may not be desirable it will be important to ensure that, where skills audits are not a right, sufficient opportunities for access are provided within the context of skills and employment policies, in particular, at the lower skills levels and for disadvantaged groups.

Conclusion 8: Skills audits seek different aims and target groups; a differentiated approach would recognise this and provide different types of support from the public sector, establishing clear priorities in order to facilitate scaling up.

At the moment, skills audit activities are highly fragmented and diverse. Different stakeholders lead them. They seek different outcomes and use different standards, and are of different scale and scope. Large-scale initiatives may be complemented by initiatives that are more targeted to specific or local groups.

To facilitate sufficient opportunities for access to skills audits, scaling up might be needed. Yet, scaling up can be challenging. But this challenge can have different origins. Sometimes challenges may originate from a lack of sufficient resources to scale up, for example, when the initiative contains a high degree of personalised guidance. Other times, as in the case of some ICT-based initiatives, marginal costs may be low, however; scaling up may suffer from poor design or currency/lack of incentives to use it, may not be 'fit for purpose', or may lack of knowledge of the initiative amongst target groups.

Recommendation 8: Prioritise specific actions on EU level to support to the scaling-up of initiatives.

In the above context, it would be beneficial for the Commission to prioritise specific actions to support to the scaling up of different types of audits be clarified. In this respect, audits that aim to facilitate advancement in terms of education and employment are more tightly linked to European priorities than those aimed at self-development and talent management. The Commission could thus seek a leading role with regards to the improvement of the first, while maintaining a supporting role in relation to the latter.

For example, skills audits talent management tend to benefit already highly skilled individuals. Companies define them in a bespoke manner and are often reluctant to share their methodologies. Moreover, there is a market for the private provision of skills audits. Here, support could be provided mainly in terms of the facilitation of learning from best-practices or by incentivising companies to produce skills audit outcomes that are portable, and that thus have the potential to benefit individuals longer-term.

This is different from the support that could be provided to scale-up initiatives that aim to facilitate educational progression, (which can benefit particularly groups-at-risk) and where the public sector can help with finance, or by stimulating that systems for credit transfer or recognition of non-formal/experiential learning –including for part of whole qualifications- are available.

Conclusion 9: Financial and time restrictions can affect both providers and beneficiaries' extent of use of skills audits.

Reductions in educational budgets, in particular, can make institutions focus on what they see as their 'core business' of standard teaching and learning rather than devote efforts to targeted approaches such as skills audits, which have comparatively less use. Funding arrangements can also affect vary institutional incentives to provide skills audits. For example, whether funding for the provider is based on qualifications awarded or on overall numbers of students.

Problems impacting on the ability of beneficiaries to access initiatives and/or continue the educational path identified through the skills audit included 'hidden' economic (transport, opportunity costs) and time constraints⁴⁶. While skills audits are often offered free of charge, beneficiaries (particularly those in remote locations) often face difficulties linked to long journeys (which means that workers also need to take time off) and high travel costs. Lengthy processes to complete the skill assessment and complex procedures means that people from disadvantaged groups are adversely affected.

Recommendation 9: Ways to improve the sustainability of skills audit procedures should be explored.

Ways to improve the sustainability of skills audit procedures should be explored, for example, by modifying funding regimes to ensure that educational institutions have the right incentives to provide skills audits. Greater efforts should be put in place to ensure that ICT-based initiatives, which can be highly cost-effective, produce valid outcomes and are inclusive. There is also greater scope for multi-agency collaboration (for instance with local authorities, NGOs and other relevant local actors) in order to bring audits closer to individuals, in particular, in the case of those living in rural areas.

7.5 The effects of skills audits

Conclusion 10: Skills audits can have positive effects, however, evidence is still weak.

The initiatives analysed lead to certain outputs for individuals, in the form of changes in personal attitudes, dispositions or self-views, written summaries of assessment results, more sophisticated personal portfolios, educational or employment related individual action plans/recommendations or certifications, and there is some evidence that points to the positive effects of skills audits in terms of labour market outcomes, including for disadvantaged groups, such as immigrants and refugees.

The strongest effect of skills audits is a motivational/activating effect through strengthened self-awareness of one's knowledge, skills and competences. There are examples of beneficiaries' stories which illustrate the way in which skills audits develop individual's awareness of their own potential, and enable them to more clearly formulate their aspirations, orientate themselves towards relevant education and training or professional pathways and present themselves more effectively in job search processes.

However, in spite of this encouraging emerging evidence, this study has found that, overall, little robust evidence in terms of the outcomes of skills audits exists. Most of the practices reviewed have not been subject to strong evaluations, and some do not even collect basic data on the number of profile of their users.

Recommendation 10: Enhance efforts to monitor and evaluate the outcomes of skills audits.

Efforts in terms of monitoring and evaluation of the 'hard and soft' outcomes of skills audits need to be stepped up, in order to be able to assess the effectiveness and efficiency of different types of audits. This may entail, inter alia, making monitoring and evaluation compulsory for publicly-funded initiatives.

⁴⁶ BE-Fr 'Consortium for the validation of competences'; AT 'Du kannst was'; MT Construction Industry Skill Card; UK Moving on Up; IT CVoI; FI KIITO

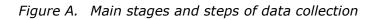
ANNEXES

Annex 1 Summary of the study methodology

Research and data collection related to this study were carried out in three main stages:

- Stage 1: Identify Skills Audit initiatives
- Stage 2: Describe Skills Audit initiatives
- Stage 3: Analyse Skills Audit initiatives

The results from all three stages were used to prepare this report. As shown in the figure below (Figure A), each stage entailed specific steps.





The box below gives an overview on the pool of data collected and the numbers of interviews carried out.

Box A. Pool of data collected and numbers of interviews

In total, the following data was collected for this study

- 90 valid responses to our survey among skills audit providers each response covering a distinct skills audit initiative;
- 16 country context fiches describing the background to skills audits at country level, in particular, identifying the main initiatives and the legal frameworks (if relevant) or rights to skills audits if existent;
- 41 skills audit initiative fiches whereby each initiative fiche describe a skills audit practice, its main features and processes entailed;
- 10 case studies which described in greater detail the perspective of practitioners and individuals.

Following initial desk research, 89 interviews with representatives of the skills audit initiatives, stakeholders, and 22 interviews with beneficiaries were carried out to prepare the fiches and case studies. In 4 cases, site visits were carried out.

In addition, over 100 written sources analysing Skills Audits (studies, academic articles, evaluations, monitoring reports etc.) were reviewed for a literature review.

A1.1 Stage 1: Identify Skills Audits initiatives

The first stage of the study entailed two specific steps, a survey of skills audits providers, and the preparation of country context fiches for all 16 countries covered by this study.

Survey of skills audit providers

The first task was to carry out a survey among skills audit providers to identify a range of skills audits in the 16 countries and collect basic descriptive information about them. The survey targeted a wide range of providers of skills audits in the 16 countries who are responsible for initiatives/processes to identify and assess skills and qualifications of persons in their country, or who are carrying them out in practice. These organizations may be large or small in size and may operate in the public, private or charity sector.

The survey questionnaire contained two parts: Part 1 asked general questions about the respondents and their organisation, and Part 2 asked questions about the skills audit initiative. In Part 2, the survey covered six themes:

- 1. **Objectives of skills audits:** Purpose and intended output of the initiative;
- 2. **Openness and accessibility:** How many people participate, how do people typically get involved, how long does the process take;
- 3. **User guidance and support:** What information, advice or guidance is provided to participants before or during the initiative, how is the setting;
- 4. **Method:** On which types of assessment is the initiative primarily based, what methodologies are used to extract information, how and against what standards is the assessment carried out;
- 5. **Comprehensiveness of skills covered:** what types of skills are covered by the assessment (formal, non-formal/informal, transversal, job-related etc.);
- 6. **Results:** What types of outcomes are produced (e.g. skills portfolio, certificate) what information they contain, who receives the outcomes, how valid are the outcomes for third parties (e.g. employers and education and training institutions).

After a testing phase, the survey was sent directly to 422 skills audit providers in 16 Member States. Additionally, other key stakeholders able to distribute the consultation in their networks were contacted. These include the European Globalisation Fund, European Migration Network and the EURES network who were sent tailored emails to disseminate the survey as intermediaries in their networks. A selection was made based on the 16 countries covered by this study. In total 290 persons representing these networks were contacted via email.

Hence, the survey was sent **to a total of 712 email addresses**, with a request to addresses to either fill in the survey, or distribute it through their networks.⁴⁷

Following the online launch, related promotion and dissemination activities were carried out including targeting organisations through e-mailing and follow-up phone calls. **90 valid responses were received and used for the analysis.** This represents a 12.6% response rate which is within the standard brackets for this type of survey.

Country context fiches

To gather information about the policy background in the 16 selected Member States, country context fiches were prepared for all 16 countries⁴⁸. Objective of the fiche was to

give an overview of national policies, framework conditions, main target groups and other general tendencies related to the use of Skills Audits in the country. The fiches were expected to provide a broad-brush overview rather than a high level of detail, and consisted of five sections:

- Summary overview of the main types of skills audits
- Policy context and relevant policy frameworks
- Skills Audit Providers
- Prevalent activities related to skills audits
- Outcomes of skills audits

A1.2 Stage 2: Describe Skills Audit initiatives

The second stage aimed to gather more detailed descriptive information on a smaller number of initiatives, and to describe them in a tailored Skills Audit initiative fiche. For this task 41 initiatives were selected. These initiatives were selected to ensure coverage of a variety of practices across the 41 examples. The research team looked for variety in terms of:

- Sectors in which the skills audit is delivered (public employment service, education, civil society, private sector);
- Approaches covered (assessment-based approaches or demonstrations; online diagnostic tools, counselling-based approaches, etc.); and
- Target groups (unemployed, migrants/refugees, open to any target group).

Each initiative was described in form of a fiche. The fiche structure is presented in the box below.

Box B. Structure of Skills Audit fiches

The fiche contained 26 questions related to 8 sections:

1. Scope and significance in the country: How widespread is the initiative in the country? What type of organisations offer this specific type of skills audit?

2. Objectives and target groups of the initiative: What are the main objectives of the activity – in view of the beneficiary and in view of other stakeholders (employers, education and training providers, society at large)? What specific target groups are prioritised? Is it targeted towards specific occupations?

3. Openness and accessibility: What are the conditions, if any, for an individual to access the initiative?

4. User guidance and support: Is the skills audit supported by sufficiently clear information, advice and guidance for users (on objectives, methods, pedagogical issues, finance, etc.)?

5. Methodologies used: What methodologies are used during the skills audit to extract information about knowledge, skills and competences? (e.g. interviews, observations, simulations, etc.) What standards are used (if any)? Is there a quality assurance system in place?

6. Comprehensiveness of skills covered: To what extent is the skills audit comprehensive in terms of the knowledge, skills and competences covered? (e.g. technical skills, transversal skills) Does the skills audit cover motivation,

values and interests? Does it cover informal and non-formal learning as well as formal learning?

7. Progression (employment or education): Does the skills audit explicitly aim to be developmental in terms of validation, further education or employment? What type of information (if any) is provided as a result in relation to next steps, for example:

- production of an associated development plan/concrete "next steps" roadmap
- Referral to validation systems
- Training or tailored learning programme
- Career options
- Specific information on vacancies the person can apply for
- 7. **Evaluation findings:** What evidence is there that shows added value for the beneficiaries (e.g. participation rates/completion rates, feedback from employers/education training providers, feedback from learners, progression to employment/education and training) etc.

The initiatives were selected using the following sources:

- Information gathered from survey responses;
- Results of desk research related to the preparation the country context fiches for the 16 countries, taking into account information on scope and significance of initiatives in the country; and
- In some case one interview with a person in charge of the initiative was also carried out (in case of large scale decentralised initiatives a local office was selected when searching for interviewees)

In Annex 4, a table is presented that gives an overview of the selection of the 41 initiatives that were researched and written up in a 'Skills initiative fiche'.

The fiches aimed to provide a detailed description of a broad range of different types of Skills Audit initiatives. The objective was to gather information about the most prominent and widely used initiatives per country; but to also cover some of the most original, innovative initiatives, which may be of smaller scope. Below a short breakdown against countries, providers, and target groups:

- Countries: All 16 countries covered by this study are represented in the selection. For most countries, 2-3 initiatives were selected. Exceptions are the Czech Republic and Malta, where only one example was selected. Four examples were selected from the Netherlands, and 5 examples were selected from the UK (one of them from Scotland). For Belgium, 3 examples were selected – one in BE-nl (which covers a portfolio of approaches for different target groups), and 2 in BE-fr. One example of a European initiative was added, a project which tries to facilitate skills assessment and validation across European countries.
- **Providers:** The skills audits selected for further research represent a broad range of 'typical' skills audit providers (see sections 4 and 5): the largest part are offered by PES (9), followed by NGOs (6), and sectoral organisations (5), volunteer organisations (4) ministry-led initiatives (4), and VET providers (3). A small share of examples was selected that are offered by commercial providers (2), Career IAG (2), regional providers (2) and companies (2). Two more initiatives are offered by several types of providers. The sample of initiatives analysed also covers 11 initiatives offered by private providers (8) or by public-private

partnerships (3), which represents 27% of all initiatives selected. The remaining 30 initiatives (73%) are offered by public providers.

• **Target groups:** The largest number of initiatives selected (9) is open to all. Eight initiatives address migrants and/or refugees and seven skilled workers or the unemployed. A small number of selected example address volunteers (3), VET learners (3), youth at risk (2), and low-skilled workers (2).

A1.3 Stage 3: Analyse Skills Audit initiatives

In the third stage, the data collection moved on to gathering more analytical information about the effectiveness of Skills Audits initiatives. The research team prepared 10 Case Studies based on further research and interviews, including interviews with labour market stakeholders (employers) and beneficiaries.

In addition, the team carried out a literature review in all 16 countries and complemented our own data with information on the effectiveness of Skills Audits from the literature review.

Case Studies

Ten of the 41 Skills Audit fiches were further developed into Case Studies. The Case Studies had the objective to provide more analytical information on how and why these initiatives are effective (or what are the challenges to strengthen effectiveness). To add value to the information gathered earlier, the Case Studies included further desk research and interviews as well as field work, and added value in two key ways:

- **Depth of analysis:** The case studies move beyond the descriptive analysis of the fiches and instead bring a depth analysis of implementation and a thorough assessment of how and why skills audits are effective.
- **Specific examples:** Specific examples of implementation and outcomes based on our investigations of delivery in particular settings (e.g. a specific type of provider, profession or user etc.) are provided.

The 10 initiatives presented in Table A below were selected for analysis in a case study:

	Name of initiative	Country	Rationale for selection
1	Projekt "Du kannst was!"	AT	The initiative addresses low-skilled adults and bears strong resemblance to the 3 steps included in the 'Upskilling Pathways' Recommendation.
2	Consortium for the validation of compentences	BE-fr	The validation consortium offers skills audits leading to validation to companies, so that their employees can acquire a qualification. The Case study describes the case of Delacre, a production company in Wallonia.
3	Realkompetence- vurdering i EUD	DK	This practice is offered to all learners in IVET to ensure NFIL are taken into account when acquiring a VET qualification. Evaluations of the initiative have been carried out several times over the past years (2014, 2015, 2017) which conclude that vocational schools are challenged in implementing the practice.
4	Recognition and validation of prior learning in the	FI	Validation is offered by all VET providers using methods of skills assessment. The case study describes the case of Tampere Adult Education Centre.

Table A.Selection of initiatives for case studies

	Name of initiative	Country	Rationale for selection
	competence-based VET system		
5	Bilan de competences	FR	The 'bilan' is a tool with a long tradition that has been evaluated and is used in many different contexts and for different target groups.
6	CVol-Libretto delle competenze volontario	IT	Small initiative offering individuals assessment of their competences obtained through volunteering
7	Construction Industry Skills Card	MT	Example of a sector-specific initiative validating and certifying competences in the construction sector
8	Career pathways for fire fighters	NL	Example of an initiative targeting a specific group of professionals (fire fighters) that cannot carry put their job until retirement age
9	Career project in the Malopolska region	PL	Large-scale initiative aiming to assess skills of all persons in working age in the region
10	Move on up	UK	Initiative aimed at raising skills and employability of young black males. There are about 6 partner organisations - all who offer slightly different approaches to identifying skills and supporting young black male into employment.

Given that an important element of the case studies was to analyse the effectiveness of a given approach, the team prioritised those initiatives that have been evaluated or on which at least participation data is available. Balanced coverage in terms of countries, target groups and purposes were ensured:

- All 10 examples were from different countries;
- **Providers** covered companies, VET-providers, public organisations, validation consortia, volunteer organisations, and specific projects;
- Three examples (BE-fr, MT and NL) described examples of from the private sector sometimes in close collaboration with the public sector; and
- **Target groups** covered migrants and refugees, volunteers, adult learners in VET, disadvantaged youth, and skilled professionals on the job.

Stakeholder interviews

Interviews were conducted with a range of stakeholders for the skills audit initiative fiches and the case studies. In total, across the 38 skills audit initiative fiches, a total of 45 stakeholders were interviewed. Across the 10 case studies, 44 stakeholders were interviewed. This was done in order to gain a comprehensive view of the range of actors and motivations behind the variety of skills audit initiatives assessed. The stakeholders interviewed covered the following profiles:

- **Initiative developers:** people involved in the design or development of the skills audit fiche, separate from the practical implementation;
- **Initiative implementers:** people responsible for practically implementing the fiche, whether in terms of immediate provision, or in the context of follow-up activities;
- **Employers**: employers that either do, or have the potential to, benefit from employing people that have undergone the skills audit initiative.

Beneficiary interviews

Interviews were conducted with a range of beneficiaries for the case studies. In total across the 10 case studies, a total of 22 beneficiaries were interviewed; this was done in order to reconstruct the journey of the individual and to understand the process undertaken by them.

Researchers also asked the interviewees about the concrete benefits of the skills audit. The persons interviewed included the following profiles:

- **NEETs:** young people currently not in employment, education or training, but interested in re-entering the system;
- **Unemployed persons:** Adults currently not in employment, seeking a job (also called job seekers)
- **Skilled workers:** Employees in companies interested in having their skills from work-based learning documented and/or validated
- Low skilled workers: persons who are seeking to acquire a EQF level 4 qualification;
- **Migrants and refugees**: migrants and refugees with a full qualification, and others with only partial or no qualifications;
- **Volunteers**: Individuals who are interested in having their skills from volunteering documented and/or validated).

Section 4 of this report gives a more detailed overview on the skills audits analysed for this study.

Annex 2 16 Country fiches

Submitted as a separate deliverable: <u>https://ec.europa.eu/social/main.jsp?advSearchKey=skillsauditsannex&mode=advanced</u> <u>Submit&catId=22&doc</u> submit=&policyArea=0&policyAreaSub=0&year=0

Annex 3 Overview of 90 initiatives included in the survey

Submitted as a separate file: https://ec.europa.eu/social/BlobServlet?docId=20581&langId=en

Annex 4 Overview of 41 initiatives selected for skills audit fiches

Table B.Overview of 41 initiatives selected for skills audit fiches

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
1	Projekt "Du kannst was!"	AT	Low qualified, low skilled (including people with literacy/numeracy gaps)	Career IAG (Chambers, Adult learning providers)	The initiative maps the skills/competences of a person against the requirements of a job/profession. A document/certificate is issued which describes what skills they have and how they can be used on the LM.	Specific instrument for low-skilled (target group of Upskilling Pathways)	Public
2	Competence check of PES - initiative for asylum seekers): implemented nationwide by PES	AT	Asylum seekers	PES	The Competence Check is a tool used to assess the skills, qualifications and language skills of people recently granted asylum or subsidiary protection in Austria	Well-researched PES example	Public
3	Bilan de compétences	BE-fr	All job seekers can in principle undertake a skills audit.	PES	Individual modules for skills audits	The bilan is offered in all three FR-speaking countries covered by the study. It will be interesting to analyse similarities and differences	Public
4	Consortium for the validation of competences	BE-fr	Employees	Companies, with the support of the Consortium in charge of skills validation	Skills validation (validation des compétences) aims at recognising the professional knowledge and know-how acquired outside of typical training channels	Public sector initiative trying to encourage/motivate companies to use skills audits for NFIL	Public/pri vate partners hip

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
5	Ervaringsbewijs/Be kwaamheidscertific aten ism de sectoren/Vrijstelling sproeven voor opleidingen	BE-nl	Anyone - the initiative is open to all	PES and specific test centres	A service offered by PES and other for validation of non- formal and informal learning for workers, unemployed, students and others. Skills assessment is made to map the skills/competences of a person against specific job requirements in a company, and provide advice about jobs for which their profile is suitable	Interesting portfolio of instruments for different target groups, following a similar process	Public
6	Keys for Life	CZ	Youth volunteering sector	Youth volunteer organisations	Skills diagnostics instrument offered to youth volunteers	Diagnostics example from youth volunteering sector	Public
7	Aktionswoche Hamburg (Förderprogramm IQ)	DE	Migrants and refugees	Hamburg Chamber of trade	Profiling of refugees' skills against certain job profiles	Base on work trials, close involvement of labour market stakeholders	Public
8	ProfilPass	DE	Adults interested in discussing further career opportunities (mostly employed)	Career IAG (Adult Learning Centres (vhs))	Competence check for adults to decide on further career opportunities and possible learning needs to achieve these	Broad use in career guidance for adults across Germany. There is also an international variant available to include skills from learning abroad	Public
9	Min kompetencemappe	DK	Jobseekers and adults wanting to re-enter formal education and training	Ministry-led	Tool to be used for self- assessment of	Example of a self- assessment tool that prepares for re-entering education and training	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
10	KompetenceKortet	DK	Immigrants and refugees who are participating in short work placements in enterprises.	Ministry-led	The tool is used to assess their skills and competences in relation to concrete work tasks, and may be part of a longer skills audit/development process.	Interesting method as assessment is done based on work trials	Public
11	Realkompetencevur dering (validation of prior learning in VET)	DK	All Danish learners over 25 (and many below that age) enrolling in IVET and who do not come straight from lower secondary school		Identifying relevant prior learning and recognising this in relation to the IVET-programme	System-inherent initiative that is based on a mix of methods (inlc. work- based) and is well- evaluated	Public
12	SIMHE - Supporting Immigrants in Higher Education in Finland	FI	Immigrants	UAS Metropolia	It is part of the service offered by the UAS Metropolia to immmigrants who want to study in HE	Comprehends a variety of methods for rpl including also "real" skills audits: Self-evaluation, Professional interview/dialogue, Authentic or simulated working, Professional portfolio, Written assignment/tasks, Interaction and team work, Practical work, Use of pictures, Internet-based work and assessment, Peer evaluation, Mind map etc.	Public
13	Recognition and validation of prior	FI	VET learners	Tampere Adult	In Finland, VET all prior learning is recognised as part of	Interesting example of a system level initiative that	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
	learning in the Competence based VET system			Education Centre TAKK	a VET qualification. The system allows to integrate all forms of NFIL, and learning from abroad	is inherent to the Finnish VET system	
14	Recognition of foreign qualifications	FI	Migrants (3rd country)	Finnish National Agency for Education	Recognition of diplomas	Example from HE	Public
15	Bilan de competence	FR	Open to all	Vocational education and training providers and HR consulting firms	A tool to analyze professional and personal competences, as well as aptitudes and motivations to build a professional development project	Example of a national framework	Public
16	Forecast management agreement for jobs and skills (GPEC)	FR	Employees of companies implementing a jobs and skills plan (GPEC)	HR services in large companies	Larger companies have an obligation to develop a forecast management agreement for jobs and skills (GPEC). HR services offer career counselling and orientation services (including professional assessment, skills audit and vocational training) to prepare for a professional change. Sectoral approaches have been developed for those industries that are undergoing major transformations (e.g. banking, media, retail industries)	Example of skills audits implemented by companies/HR	Private
17	EFHA	FR	Employees in the health care sector (hospitals)	ANFH	ANFH developed a skills audit tool enabling each employer to	Example from Health care sector (hospitals)	Private

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
					collect data about their low skill staff		
18	PES/CISOK: My Choice (e- usmjeravanje) implemented countrywide either by PES and by CISOK (PES affiliated organisation)	HR	Job seekers (incl. secondary school students and students of higher education	Croatian Employment Service (CES) and CISOK	This program contains descriptions of 300 occupations, as well as an interactive questionnaire on professional interests, while based on respondents' answers the program proposes a list of relevant occupations	PES example	Public
19	Psychological assessment	HR	Job seekers	SELECTIO	The tools serves as a psychological testing of job seekers which is carried out by SELECTIO on behalf of employers.	Example of a tool offered by a private employment service	Private
20	Construction Skills Certification Scheme (CSCS)/Quarrying Skills Certification Scheme (QSCS)	IE	Employees in the quarrying sector	SOLAS	Provides for the training, assessment, certification and registration of non-craft operatives within the quarrying sector	Industry-led initiative (collaboration with government departments and national education and training agencies)	Private
21	Online self- assessment tool available on Ireland's National Career Guidance website	IE	Open to anyone but main target groups are graduates, students and job- seekers	Private organisation with the support of the Department of Education	Enabling a user to find out how their interests, personality, skills etc. can tie-in with various different courses and careers	Example of online service	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
22	CVol – Libretto delle competenze del volontario	IT	Volunteers	VOLABO - Centro Servizi per il Volontariato della Città Metropolitan a di Bologna	Validating and certifying the competences acquired by individuals during their activity as volunteers	Example from the sector of volunteering	Public
23	Libretto Formativo del Cittadino	IT	Various	National framework	Recording the competences acquired by an individual throughout his/her working life thanks to training having taken place during apprenticeships, specialised and continuous training paths, as well as in non-formal and informal learning if validated and certified	Very well-known example of and instrument implemented on a broad scale	Public
24	PIAAC experimentation at PES	IT	Unemployed	PES/ANPAL	Implementation and use of PIAAC assessment in ca. 180 Italian PES for 4.500 individuals.	Interesting experiment to see the use of the PIAAC methodology in a one-on one setting	Public
25	Connections	LU	Migrants/refugees	ASTI's (Association to Support Immigrant Workers)	The "Connections" project, aims to prepare refugees for the Luxembourg job market.	Skills assessment is part of a more comprehensive process with several steps which would be interesting to analyse.	Public
26	Bilan de competences	LU	Every individual registered with the PES (ADEM)	PES	The bilan de compétences aims to provide unemployed with a better view on their skills and map their competences against the requirements of the LM.	The bilan is offered in all three FR-speaking countries covered by the study. It will be	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
						interesting to analyse similarities and differences	
27	Construction Industry Skills Card	MT	Workers in construction sector	Sectoral initiative	Validating and certifying the competences acquired by workers in the sector	Broadly used and well- established in the sector	Private
28	Career pathways for fire fighters	NL	Fire fighters	'Fire service' organisation	High relevance and practical consequences for beneficiaries	Example of an offer for a specific profession	Private
29	Competence Test (beroepenfinder)	NL	All unemployed persons, incl. long- term unemployed, people with disabilities and unemployed over 50 years	PES	The competence tests competences and interests. Afterwards clients can use occupations in the occupation finder (www.beroepenvinder.nl). There is also a capacity test to see what level someone can reach in his work/education. Upon taking the test, an Action Plan for further guidance, counselling and/or job search is developed.	Example of Skills audits used by PES to help long- term unemployed	Public
30	IVC skills audit for migrant women	NL	Migrant women in the Netherlands.	International Women's Centre (IVC)	The initiative aims to outcomes is used to identify career opportunities and support their integration into society. One of the activities is help women identify and describe their personal skills and competences. The training is organised according to the Swiss CH-Q method (a Swiss vocational qualifications programme) and follows the	Example of an initiative targeting migrant women	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
					steps of: raising awareness, documentation, presentation, assessment and certification.		
31	The Rockwool Group	NL	Employees	Rockwool Bedrijfsschoo I, ROC Leeuwenborg h, Vapro	Process of linking learning and working for each individual employee by means of skills audit-methods and development-programs	Example of approach develop by a company	Private
32	Competence assessment	PL	NEET	Voluntary Labour Corps	Competence assessment is offered to young people with difficulties regarding school completion, acquiring vocational qualifications, finding a job.	Example of targeted support to young people at risk of exclusion.	Public
33	Career Project' from Malopolska region	PL	Everyone in the region	Regional initiative	Skills audit aims to assess skills supply of all workers in the region	Broad-scale initiative that entails an individual test as well as a survey	Public
34	Validering Yrkeskompetens- beamning Meritportfoljen	SE	Long-term unemployed	PES	Development of a portfolio with skills and competences for long-term unemployed, to develop an Action Plan on their next steps	Examples of PES use of skills audits for long-term unemployed	Public
35	Snabbspåret (`Fast track') initiative	SE	Migrants and refugees (but also others)	PES	The initiative consists of a range of tools and methodologies focused on validation and skills audits. Materials have been translated in non-European languages and encompass appraisal (and recognition) of qualifications gained overseas, learning	An example of a method that is used with newcomers in Sweden, but also with other target groups	Public

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
					outcomes from non-formal and informal contexts, language proficiency, personal competences and general knowledge. These are then matched with specific occupation or job vacancies, and the necessary upgrade of skills and competences is initiated.		
36	Skills Health check	UK	Open to anyone	National Careers Service (Skills Agency)	Assesses personal skills (skills, interests, personal working style, and motivation), information handling and problem-solving (working with numbers and writing, checking information, mechanical problems, abstract problem, and working with shapes)	Example of a broad-range multi-purpose tool with comprehensive coverage of skills – possibly reserve list as very similar to My Skills My Future in UK-Sc	Public
37	'Career Smart'	UK	Workers trying to identify career opportunities	Prospect	Online skills audit test designed to identify the skills areas in need of development for different careers	Example of a commercial offer	Private
38	The Scottish Credit and Qualifications Framework (SCQF) - My Skills, My Future	UK	Young people who have left, or may be about to leave school with few or no formal qualifications.	Scottish Credit and Qualifications Framework Partnership	My Skills, My Future is a resource pack aimed at supporting individuals in identifying the skills they have gained from other experiences outside formal qualifications.	Example for young people	Public
39	Moving on up	UK (EN)	Young black males	Trust for London	Initiative aimed at raising skills and employability of young black male. There are about 6	Interesting initiative for an unusual target group,	Public/pri vate

N o	Name of initiative	Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
					partner organisations - all who offer slightly different approaches to identifying skills and supporting young black male into employment e.g. one partner is called evaluation networks - they undertake a skills assessment and then match young people to corporate employers they work with (KPMG). Other partners do psychometric tests for example.	might be interested in validation festival	partners hip
40	Public Skills Health Check	UK (EN)	Professionals in the health care sector	Public Health England	To provide public health workers with a private and secure on-line tool to plan, record and demonstrate their individual learning and development in relation to a career in PH using the Public Health Skills and Knowledge Framework (PHSKF) The 'passport' will support movement within and across organisations delivering public health and across public health domains (non-core areas)	Interesting initiative comparable to ANFH (FR)	Public
41	European Badge Alliance	Cross- country	Learner mobility	AFS/YEU International	The EBA developed a model on how to earn badges for experiences and competences developed during a mobility time abroad to ensure every learning counts. Badges can help to capture learning	Example of a modern digitalised way of visualising and validating skills (outside of formal education sector)	Public

N o	Name of initiative Country	Target group	Provider	Purpose of initiative	Rationale for selection	Public/ Private
				experiences and visualise progress. They can lead toward new education, career and lifelong learning opportunities. Badges can be organised into collections and share them where it matters: on social and professional networks, on-line portfolio and resume (e.g. Europass CV). For employers, organisations and education institutions badges can provide more detailed and contextual information about learning and achievements.		

Annex 5 Summary of 42 skills audits analysed for the report

Submitted as a separate file: <u>https://ec.europa.eu/social/BlobServlet?docId=20580&langId=en</u>

Annex 6 Summary of evaluation findings

A6.1 Main evaluation outcomes

 Table C.
 Main points identified by existing evaluations

Points identified by existing evaluations	Which evaluations mention this	Examples
 Activating and motivational effect on individuals The process is rather complex, and the outputs are not necessarily very user- friendly. Challenges to access the tools by those who are low skilled and low qualified, 	 AT initiative Waff⁴⁹ and KOMPAZ⁵⁰ HR initiative e-advice⁵¹ FR initiative Contrat de Securisation Professionnell e (CSP)⁵² NL initiative digital skills profiling system⁵³ and an initiative targeting refugee women 	 AT: Waff - a resource-oriented coaching process for identifying/assessing and systematically documenting learning outcomes gained in formal, non-formal and informal learning contexts offered by the Vienna PES- is described as having a highly activating effect and personal impact with participants realising where they stand in terms of the skills they have and those that they may need. The only downside of the process is its complexity, with the generated reports not being sufficiently userfriendly to have any value for employers. KOMPAZ - a self-assessment process covering a comprehensive portfolio of skills - including soft skills - which comes with a handbook used for orientation and for documenting competences obtained in NFIL. KOMPAZ again has an activation element as it intends to encourage and support self-reflection. Participants receive a certificate for self-competence management and also have the possibility to attend an assessment centre for one day, carried out by external assessors. The downside of this process is that low skilled individuals are reported as not seeing as many benefits.

⁴⁹ waff: Evaluierung der Kompetenzenbilanz im waff, 2009

⁵⁰ Haben die Erfassung, Bewertung und Zertifizierung informell erworbener und bisher nicht sichtbarer Kompetenzen für die langfristigen Lebenschancen der Menschen Bedeutung?, 2007

⁵¹ Validity of E-Advice: The Evaluation of an Internet-Based System for Career Planning, 2002

⁵² Le contrat de sécurisation professionnelle : un accompagnement intensif et personnalisé?, 2016

⁵³ Wordt aan gewerkt, 2015

Points identified by existing evaluations	Which evaluations mention this	Examples
		 An evaluation of a web-based system for self-directed career planning that was developed in Croatia found it to be particularly rich in occupational information and career-management advice. The system contains an interactive questionnaire covering personal skills and interests. Based on a user's answers, the system generates an "e- advice" – a limited set of occupations that match the user's individual characteristics. It also provides an online resource for self-assessment. While the evaluation found that user satisfaction was very high, it also found that the e-advice generated had high validity by being overall congruent with advice given by expert PES counsellors.
		FR:
		 In France, the Contrat de Securisation Professionnelle (CSP) was evaluated. This programme, launched in 2011, aims to support transition to labour market of specific groups of unemployed people. It entails an individual interview with a PES counsellor in which a skills profile is established to draw up a personalised action plan. Depending on the individual, various other support services can be included in the CSP: e.g. psychological, training, job search assistance, labour market information. The skills profiling element of the CSP is found to be the most effective element of CPS in maximising jobseekers' chance of getting back to work – usually in the sector or occupation best suited to their individual skills. The evaluation study shows that CSP participants have overall better access to support services and vocational training than regular PES users. While the CSP has a strong formative element, raising motivation for training among low skilled jobseekers remains a challenge.
		NL:
		 In the Netherlands, a digital skills profiling system introduced by the PES has been reviewed in a study identifying its success factors but also making recommendations for improvement. The outcome of the process is a digital portfolio that can be linked to specific occupations and vacancies in the system upon the jobseeker's request. This online platform enables self-profiling and self-promotion. While the study shows the effectiveness of this tool in general, it appears that this system is less effective for jobseekers with little or no IT skills. It is also a challenge for both the low skilled and the high skilled to use the system effectively due to the fairly rigid occupation and

Points identified by existing evaluations	Which evaluations mention this	Examples
		qualification standards listed in the system. It is therefore recommended that more comprehensive and flexible lists of skills be linked also to the system to enhance its effectiveness.
		• Another study explores the power of recognising one's talents through portfolio-style self-assessments targeting refugee women. The self-assessments cover personal, transversal, IT and work-related skills. Once the skills portfolio is validated, a personal action plan and a certificate of personal career guidance are issued. The main lesson is that the personal ownership of learning experiences can be organised. A personal reflection based on self-assessment provides a real and workable approach for integrating refugees in Dutch society.
 Benefits of a mixed-method approach to assessment 	 DK initiative in IVET⁵⁴ FI initiative in IVET⁵⁵ and on the competence based qualification system⁵⁶ FR "Validation des Acquis de I'Experience" (VAE) 	 DK: Research on the pedagogical value of assessment and validation practices in IVET has been carried out in Denmark which shows that a mixed approach combining theoretical and practical tests and simulation of actual work tasks are most effective. FI: In Finland, a study mapping out the current situation and good practice examples in relation to skills recognition and validation processes has been carried out. Firstly, the assessment and recognition of competences which are acquired through formal education are easier to process than NFIL ones. In general, the study shows that the range of use processes and methods in recognition varies very much depending on the field. For IVET, the study recommends that clearer and more harmonised guidelines would create a more unified system of skills recognition and validation.

⁵⁴ Fra ufaglært til faglært - realkompetence og pædagogik, 2014

⁵⁵ Tohditko tunnistaa? Osaamisen tunnistamisen ja tunnustamisen nykytila ja kehittämishaasteet ammatillisessa peruskoulutuksessa. (Dare you recognize? Recognition of competences and the current situation of recognition and challenges for further development in initial VET.), 2010

⁵⁶ Näyttö in Denmark tutkintojärjestelmä 20 vuotta. Historia ja vaikuttavuus, 2015

Points identified by existing evaluations	Which evaluations mention this	Examples
	 DE initiative on competence check⁵⁷ and and evaluation⁵⁸ of the PES three-step PES profiling system NL initiative 	 A comprehensive review of the competence-based qualification system in Finland as well as the practices of skills assessment centres was also carried out, with a focus on their development over the decades. A competence-based qualification is completed by demonstrating the vocational skills required by the qualification, which involves the completion of actual work tasks. This system relies on tripartite cooperation (employers, employees and teachers) whereby the structure of the qualification and the qualification requirements are decided. This system is shown as effective while having gradually improved over the years. There has been a substantial increase in the average impact of competence-based qualifications on income levels over the years with tests taken more recently having the highest impact. Results also show that the competence-based qualification system has successfully adapted to rapid
	on supporting NEETs ⁵⁹	chances in society. FR:
	 PL initiative on the potential of skills profiling 60 	 In France, a review was undertaken of the "Validation des Acquis de l'Experience" (VAE) system which enables persons to get recognition for skills learned on the job or in other contexts and eventually reinforce some other skills through training. The analysis shows that while all type of skills and qualifications can be assessed, in practice most validation processes relate to education, childcare, senior care, health
	 SE initiative on validation as a tool for the integration on 	care. The review suggests that the VAE could be part of a more comprehensive professional development process whereby candidates would have more ownership in deciding what exact outcomes they want to achieve from taking part in the VAE. DE:
	the labour market of immigrants	 A study published in Germany emphasises the importance of applying a more holistic understanding of professional 'competences' as the 'professional capacity to act' in auditing the low skilled after undertaking a review of various PES approaches offering

⁵⁷ Eignung von Kompetenzfeststellungsverfahren in der beruflichen Nachqualifizierung, 2011

⁵⁸ Zehn Jahre Migrationsberatung für erwachsene Zuwanderer (MBE). Erfolge, Wirkungen und Potenziale aus Sicht der Klienten, 2015

⁵⁹ Werkzoekende jongeren gevolgd, 2015

 $^{^{\}rm 60}$ Skills audit in the career counselling process, 2014

Points identified by existing evaluations	Which evaluations mention this	Examples
	and refugees ⁶¹	a mix of services (counselling, surveying, standardised and practical tests). The study argues that approaches are most effective when they combine self-assessment and third-party assessment, practical and theoretical knowledge, and when they go beyond the simple goal of achieving profession-related learning outcomes.
		 Germany has recently invested significantly in skills profiling for migrants and refugees. An evaluation of the PES three-step PES profiling system – explorative interview; competence assessment; individual support plan – shows a positive effect on professional integration of migrants. Profiling measures for migrants are well- developed in Germany⁶², covering all types of skills and with a distinction between formative and normative ones.
		NL:
		 Qualitative research has been undertaken in the Netherlands into possibilities for supporting NEETs through self-reflection and self-assessment across a range of transversal skills, entrepreneurial, communication and networking skills. Both online and face-to-face settings were trialled and reviewed. The study found that face-to-face individual support worked better than online support among the selected participants. The study reached the conclusion that further investments in individual coaching with a focus on NEETs self-management could potentially generate positive future returns.
		PL:
		 In Poland, an analysis was undertaken of the potential of skills profiling in different professional situations. It shows that skills profiling works best when it entails the coverage of personal interests, predispositions, educational background, general knowledge, work experience and practical skills. Profiling through a mix of counselling, surveying, and self-assessment can have a positive impact on people's professional development and helps them make informed career choices. The analysis also reveals that skills self-management is particular important in today's society with the "job for life" paradigm having all but disappeared. People who do not manage their own

⁶¹ Validering av nyanlända indvandreras kompetens, 2015

⁶² Expertise "Kompetenzfeststellungsverfahren als Instrument der beruflichen Integration für Zugewanderte, 2009

Points identified by existing evaluations	Which evaluations mention this	Examples
		careers often condemn themselves to lower professional expectations and outcomes, which negatively affects their social situation. Skills profiling assists workers in choosing their optimal career path, one in which they can make full use of their potential.
		SE:
		 In Sweden, a study analyses validation used as a tool for the integration on the labour market of immigrants and refugees. While the process is described as covering an extensively wide set of skills, the Swedish study identifies challenges for the PES around the need to professionalise practitioners and recommends that the validation of new arrivals' skills is undertaken as early as possible. The study's recommendations on how to ensure integration through skills validation are useful not only in a Swedish context.

A6.2 Evaluation findings on success factors (from the perspective of stakeholders)

Table D.Common successes from the perspective of stakeholders

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
 The degree to which skills audit initiatives met their goals 	 'Realkompetencevurderink' (DK) 'bilan de competence' (FR) 'validation en enterprise' (BE) 'Construction Industry Skill Card' (MT) 'CMS' (NL) 	 'Realkompetencevurderink' (DK): some employers were actively encouraging their employees to undergo skills assessments in order to tackle the problem of skills shortages as a result of technological development across sectors. One employer from a manufacturing company stated: 'we encourage our unskilled workers to go for an adult apprenticeship, and we currently have 35 adult apprentices across the various trades that are relevant in our context'. This voluntary engagement by employers with this particular initiative demonstrates a success in the delivery of effective learning assessments.
		 'Bilan de competence' (FR): practitioners reported that the initiative tended to improve the clarity and soundness of a professional project, which would seem to meet its objectives regarding the analysing of 'aptitudes and motivations to build a professional project'.
		 'Validation en enterprise' (BE): one employer found that advantages for the company indeed did correlate with the objectives of the skills validation process: 'the advantage for us is to make sure that employees are experts in their domain, that they master the necessary skills, and with validation we

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
		get a confirmation of that, based on an objective assessment.'
		 'Construction Industry Skill Card' (MT): employers of construction workers carrying a Construction Industry Skill Card reported being very satisfied from a recruitment perspective and being abl to confirm that certain employees did indeed have the skills they attested to have in their application. One employer stated: '[As employers of construction workers], we receive many CVs that are not accurate; an individual will say that they can do something when they can't. Now with the CISC everyone is in line with each other'. Another employer in this Maltese example reported the importance of the Construction Industry Skill Card in bringing a sense of professionalism to a sector which many believe needed tighter regulation and expertise: he stated that there was a need for 'doctors in the construction industry' in order to express this idea.
		 'CMS' (NL): practitioners responsible for this skills audit stated that prior to the assessment many beneficiaries "do not realise what they already know and can do". Often this can mean that a firefighter will begin the skill audit process unaware that they are actually performing management duties in their current role, until the CMS assessor

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
		draws it out of them during the assessment. In this sense, beneficiaries began to demonstrate the successes of the skills audit early on, in terms of being able to identify existing skills and competences.
 Instilling self-belief in beneficiaries 	 `Du Kannst Was!' (AT) `Construction Industry Skill Card' (MT) `validation en enterprise' (BE) `Bilans Kariery' (PL) 	 'Du Kaanst Was' (AT): this was a main 'side-outcome' according to trainers of this initiative. One practitioner noted: 'Not only do participants have a better standing in the labour market, they also grow so much personally, once they realise how much they are able to do'
		 'Construction Industry Skill Card' (MT): one practitioner, representing the public employment service responsible for conducting the validation of informal and non-formal learning of construction workers, noted: 'In the construction sector, generally people are low-skilled, so don't have a high educational attainment, so encouraging them to acquire recognition will enable them to have more belief in themselves.'
		 'Validation en enterprise' (BE): for practitioners of this initiative, the impact upon beneficiaries' self-esteem was the 'added value' that the scheme provided. One practitioner representative (from the validation centre FormAlim) stated, 'What we observed, clearly, is the satisfaction of

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
		the participants who took part in the project. From a human point of view, this was great. They could go home and show their Certificate to their partners and children. We are talking about people who don't have degrees, who did not go to university. So for them it was extremely rewarding, they felt valued in the eyes of the families, friends [and] colleagues'. Interestingly, an employer that facilitated this initiative at their company noted that this 'added value' (the benefit to employee self-belief and employability) was one of the only concrete benefits they gained from the scheme.
		 'Bilans kariery' (PL): practitioners reported that the career audit opened up the possibility for broader thinking on a personal level about how the individual will be able to learn in the future: 'people simply see a greater range of learning opportunities after this audit.' Another practitioner expressed that participants, by undergoing the career audit, would begin to 'feel their worth, especially those who have been working in one place for a long time'.
The importance of an effective network of stakeholders	 `Du Kannst Was!' `validation en enterprise' (BE)	 'Du Kannst Was!' (AT): one practitioner spoke highly of the strong network that included a vast array of providers and

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
	 'Moving on Up' (UK) 	stakeholders. They reported that: 'We cooperate well, and ensure that everyone can pass on their knowledge and expertise to the best possible outcome'.
		 'Validation en enterprise' (BE): practitioners of this initiative noted that strong collaboration between all partners was needed in order that the initiative was a success. A FormAlim representative stated that: 'To carry out such a project successfully, one has to ensure, from a very early stage that all partners, especially social partners and particularly employee representatives in the company, adhere to the initiative.' In the context of this particular initiative, dialogue between social partners and the company was maintained by a steering committee (which also monitored each stage of the project) in order to keep all relevant stakeholders in contact and able to provide strong collaboration to make the initiative a success.
		 'Moving on Up!' (UK): with regard to stakeholder engagement, practitioners of this UK initiative stated that a central aspect to the success of the initiative was being able to create distinct "horizontal relationships with adults in the working world". This was deemed to be important to the beneficiaries, in

Main successes from the perspective of stakeholders	Skills audits that evidence this	Examples
		order that they could interact with a network of employers as equals, and to be able to communicate with them without any psychological barriers that might have hindered them before.

A6.3 Evaluation findings on challenges from the perspective of stakeholders

Table E. Common challenges from the perspective of stakeholders		
Main challenge from the perspective of stakeholders	Skills audits that evidence this	Examples
Finance and resource constraints	 `Realkompet encevurderin k' (DK) `Bilan de competence' (FR) 	 'Realkompetencevurderink' (DK): some practitioners (at a vocational school) involved in this initiative noted that potential unemployed applicants expressed a desire to obtain a particular qualification, 'but when they found out about the financial implications of going back into the formal VET-system – which means having to survive for 1 ½ - 2 years without a salary and on a student grant – they back off again, as in many cases they have either families, or a mortgage, or both'. This represents a disincentive to engage in the skills assessment for potential beneficiaries that don't have the sufficient financial means.
	 'Validation en enterprise' (BE) 	 'Bilan de competence' (FR): for this scheme, financial issues represented a challenge in the context of implementation costs. Over the last ten years, the budget for professional development and training organisations (OPCA) began to decrease. A recent move to allow certain individuals to fund a bilan using their individual training account is expected to remedy this challenge.
	• 'Du Kannst Was! (AT)	 'Validation en enterprise' (BE): one challenge raised by employers of this initiative was the fact that skills recognition can lead to requests for pay rises from skills certificate holders. To tackle this challenge, the company managers in question made clear in a letter of intention (that would serve as a roadmap for the initiative) that there would be no positive of negative consequences that would follow the validation test: including any anticipated pay rise.
	 'CVol' (IT) 	 `Du Kannst Was! (AT): practitioners reported that one of the biggest challenges facing the initiative was financing, as the scheme currently relies upon the willingness and cooperation of regional governments.
		 'CVol' (IT): a counsellor involved in the provision of this initiative identified that the main challenge of continuing to provide the 'service with high quality standards and on a one-to-one basis' was due to the limited resources – of both finances and staff – that the initiative had been allocated.

A6.4 Evaluation findings on success factors from the perspective of beneficiaries

Table F. Common successes from the perspective of beneficiaries		
Main successes from the perspective of beneficiaries	Skills audits that evidence this	Examples
 Appreciation for the skills audit 	• •	• 'Construction Industry Skill Card' (MT): the beneficiaries of this Maltese initiative were already in employment, but understood the importance of the skills card for procuring employment in the future, especially when it becomes mandatory for all construction workers to have one post-2020. One part-time construction worker and beneficiary stated that having a similar skill card in his other part-time job enabled him to be promoted as: ' <i>my skills were an asset. It is the same in the construction sector.'</i>
W • `R er k'	Was!' (AT) • `Realkompet encevurderin k' (DK)	• 'Du Kannst Was! (AT): one beneficiary of this Austrian initiative found that having an Apprenticeship Certificate was an instrumental component of her intention to find a job as a hospital cook, and indeed, was a requisite: ' <i>This</i> would be a perfect job for me as this position would have fixed working hours compatible with my child care duties. The prerequisite is an Apprenticeship Certificate. My plan is to apply for this job and once I have passed the examination I can get it.'
	 'Moving on Up!' (UK) 	• 'Realkompetencevurderink' (DK): one beneficiary of this Danish initiative found that undergoing a skills assessment enabled her to gain validation of her prior skills without having to undertake a full apprenticeship that would enable her to gain an industrial technician qualification. She reported: 'I decided that I needed a qualification to ensure my employability in the longer run My employer thought it was a good idea [to get a qualification], so I underwent a skills assessment, and on the basis of this I was able to shorten the length of my training considerably. Given my plans and my age, it was a major incentive for me that I did not have to do the four-and-a-half years that an apprenticeship normally takes."
		 `Moving on Up!' (UK): in the UK, a beneficiary of this initiative that it was directly responsible for his current job role and for enabling him to identify his actual interests with regard to his career. He stated: `I wouldn't be where I am today if

Main successes from the perspective of beneficiaries	Skills audits that evidence this	Examples
		it weren't for () the Moving on Up! programme I'd probably still be at college doing something I don't really like, and I'd probably struggle to find an apprenticeship.'
• Instilling self- belief	 `validation en enterprise' (BE) `Construction 	 'validation en enterprise' (BE): employees that partook in this initiative spoke of the personal value that was bestowed onto them by undergoing the initiative. One beneficiary noted that receiving his skills Certificate was a 'personal challenge', while another stated: 'After the test I felt more confident in performing my tasks, and I think it changed the way my managers perceive me. It also gave me more confidence to go and speak to them for instance when something is wrong'
	Industry Skill Card' (MT) • `Moving on Up!' (UK)	 'Construction Industry Skill Card' (MT): one beneficiary of this initiative stated that despite the fact that the skills card is soon (by 2020) to become mandatory for all construction workers in Malta, he decided to obtain one for reasons relating to personal professional fulfilment: 'When you do something – when you've been doing it for years – it is good to have something that recognises that you're good at what you.
	 'CMS' (NL) 'CVol' (IT) 	 'Moving on Up!' (UK): the focus on participants as unique individuals throughout the skills audit process garnered success in terms of beneficiaries feeling as if their personal needs and issues were tailored to. One participant stated: 'You feel more than just a number, you feel like they're actually dedicating their time to you'. Further, it was this highly individualised approach that made the same beneficiary state that this was what they 'love' about the process, and that as a result they felt that they could grow within it.
	• 'KIITO' (FI)	 'CMS' (NL): personal growth was cited as a successful factor for one beneficiary of this Dutch skills audit, who distinctly compared the learning environment to 'a culture, an atmosphere', and found that this particular learning culture, in which one had to be open to feedback, enabled the firefighter undergoing the audit to 'grow as a person'.

Main successes from the perspective of beneficiaries	Skills audits that evidence this	Examples
		• 'CVol' (IT): one beneficiary of this skills audit said that they would recommend the process to anyone, as it had a sort of personal transformative effect in a way that positively impacted her self-belief and understanding of prior experiences and work history. ' <i>The skills audit had an empowerment function for me. I was more confident after that, and I had a particularly new vision of my past experience in volunteering associations'</i> . This personal development and awareness did, however, correspond to an experience of enhanced employability (explored below).
		 'KIITO' (FI): instilling self- confidence was considered in the case of one beneficiary of this audit, as he gained more self-esteem through the charting phase of the skills audit and through receiving feedback from practitioners.

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