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International Report analysis of skill supply and demand

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PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
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1. Description of task

Task 6.3: International analysis of skill supply and demand (months 19-24): Drawing from the results of the National Reports, the WP leader and core partners produce a synthetic international comparative report, identifying differences and commonalities between countries; systematizing comparative evidence; and developing a European typology of modes of governance of the relationship between skills supply and demand at national and regional level. The results contained in the international comparative report will directly feed the synthesis to be carried out in the works of WP8. **Role of participants:** WP leader and WP core teams draft the International Report with the comparative analysis of skill supply and demand; all partners are requested to read comment and give feedback to WP leader, who completes the Report.

2. Description of work & main achievements

The main intention of WP6 (Comparative Analysis Skills Supply and Demand) is identifying the actors involved in the supply and demand of skills at the regional level and understanding how they govern, manage and coordinate their activities, as well as the implications it has for young adults. To attain WP6 main objective of describing and understanding the governance of the supply and demand of skills within and across the Functional Regions (FRs) under study, nine WP6 National Reports were produced with information and evidence for each FR (two per national report). Their content consisted of: 1) national skills system; 2) mapping of actors, institutions and structures involved in the regional skills system; 3) actor's policy orientations (interests, frame of references); 4) levels and forms of coordination of governance activities in the region; 5) the quality and relevance of the skills developed and deployed by young people in the region.

The WP6 International Report builds on the evidence provided by the nine WP6 National Reports submitted by the partners in September 2017. Results provided in the national reports come from two main sources: 1) semi-structured interviews with key regional policymakers and stakeholders (n=81); and 2) grey literature used by regional actors in relation to skills policies (n=129). In some cases, information and data coming from WP4 and WP5 are also included, depending on the degree of overlap in the fieldwork of these WPs across countries and regions.

WP6 successfully completed the task 6.1 (research framework analysis) and 6.2, resulting in the National Reports on national strategies to govern the supply and demand of skills (D6.2) and this Reports provides the international analysis of those results. This International Report analysis of skill supply and demand (D6.3) provides a synthetic international comparative report, identifies differences and commonalities between countries by systematizing comparative evidence of modes of governance of the relationship between skills supply and demand at national and regional level.

After the reception of the national reports (September 2017), the WP6 leader and the core team worked towards the completion of the international report. GU (as WP leader) has been leading the analysis and synthesis of the National Reports and the

drafting of the international comparative report, while being strongly supported by the core team members UNIGE and UNIZG. WWU has also provided support during the drafting of the International Report.

During the Consortium meeting in Genoa (November 2017) the team leader and the core team members discussed the first insights of the national reports and used the session dedicated to WP6 to contrast and gain more insights from the partners.

The initial synthesis and analyses were divided between the three teams, dividing the comparison of sections of the national reports. Finally, GU gather together the preliminary synthesis and analyses and draft the international report, which was circulated among the partners asking for feedback in the first draft. The suggestions were introduced and included in the final draft.

3. Deviations from the Work plan

The international Report identifies the differences and commonalities between countries and regions; systematizing comparative evidence on the mapping of actors, the actors' policy orientations, the levels and forms of coordination and the existent skills (mis)matches. However, instead of developing a European typology of modes of governance of the relationship between skills supply and demand at national and regional level we have used existent typologies to classify the regions and countries according to the different dimensions studied. Therefore, we have contributed to existent typologies providing empirical evidence at the regional level and with cases from the South and Eastern Europe, which are underrepresented in the already existing typologies.

4. Performance of the partners

As described in section 2 of this report (see above), GU as WP leader together with the core team members UNIGE and UNIZG have been leading the analysis and synthesis of the National Reports and the drafting of the international comparative report on LLL policies. Together with the project coordinator WWU the WP leader initiated meetings of the core group discussing the draft by e-mail and during the Consortium meeting in Genoa (November 2017).

A first draft of the report distributed by e-mail and most of the consortium partners provided feedback to the first draft of the International Report, which was integrated into the final version of the report.

5. Conclusions

The Full Assembly deems this deliverable to be fulfilled satisfactory.

ANNEX: INTERNATIONAL REPORT



Work Package 6

WP6 International Report

Comparative Analysis of Skills Supply and Demand

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Capsada-Munsech, Q. & Valiente, O. (2017): Comparative Analysis – National Report: Scotland. YOUNG_ADULLLT Working Papers. Glasgow: University of Glasgow.

Domović, V., Bouillet, D. & Pažur, M. (2017): Comparative Analysis – National Report: Croatia. YOUNG_ADULLLT Working Papers. Zagreb: University of Zagreb.

Dzhabarova, Y., Miran, P., Milenkova, V. & Apostolov, G. (2017): Comparative Analysis – National Report: Bulgaria. YOUNG_ADULLLT Working Papers. Plovdiv and Blagoevgrad: University of Plovdiv and South-West University “Neofit Rilski”.

Jacovkis, J., Rambla, X., Barroso, D., Torres, M. & Luzón, A. (2017): Comparative Analysis – National Report: Spain. YOUNG_ADULLLT Working Papers. Barcelona & Granada: Universitat Autònoma de Barcelona and Universidad de Granada.

Palumbo, M., Cossetta, A., Pandolfini, V. & Startari, S. (2017): Comparative Analysis – National Report: Italy. YOUNG_ADULLLT Working Papers. Genoa: University of Genoa.

Pot, M., Cefalo, R. & Kazepov, Y. (2017): Comparative Analysis – National Report: Austria. YOUNG_ADULLLT Working Papers. Vienna: University of Vienna.

Ribeiro, A. B., Rodrigues, M., Neves, T., Queiroga, R., Alves, N. & Almeida, A.J (2017): Comparative Analysis Skills Supply and Demand – National Report: Portugal. YOUNG_ADULLLT Working Papers. Porto & Lisbon: University of Porto and University of Lisbon.

Rinne, R., Järvinen, T., Silvennoinen, H., Tikkanen, J. & Plamper, R. (2017): Comparative Analysis – National Report: Finland. YOUNG_ADULLLT Working Papers. Turku: University of Turku.

Weiler, A., Ganter de Otero, J. P., Parreira do Amaral, M., Boutiuc-Kaser, A., Schaufler, S. & Verlage, T. (2017): Comparative Analysis Skills Supply and Demand – National Report: Germany. YOUNG_ADULLLT Working Papers. Münster: University of Münster.

Acronyms

CMEs – Coordinated Market Economies

CPE – Cultural Political Economy

ESF – European Social Funding

FR – Functional Region

GOV – Governance framework

LCR – Life Course Research

LLL – Lifelong Learning

LMEs – Liberal Market Economies

PES skills – Productive, Expandable and Social skills

VET – Vocational Education and Training

YA – YOUNG_ADULLLT research project

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0. Executive Summary

YOUNG_ADULLLT

- Lifelong Learning (LLL) policies are characterised by a high fragmentation and inconsistencies in terms of target audience, measures of implementation as well as intended and unintended effects, even though designed to create economic growth and guarantee social inclusion. In particular regarding measures aimed at young adults a lack of coordinated policy-making can be observed. The project YOUNG_ADULLLT aims to identify parameters for future decision-making support systems by understanding LLL policies for young adults in their interplay between economy, society, labour market and education and training systems at regional and local levels, including discussing issues of fragmentation and discrepancies, but also identifying best practices. Thus, the objectives of the project are:

1. To understand the relationship and complementarity of LLL policies in terms of orientations and objectives to their specific target groups including (intended and unintended effects);
2. To enquires into policies' fit and potentials from the perspective of the young adults;
3. To research LLL policies in their embedding and interaction in the regional economy, the labour market and individual life projects of young adults to identify best practices.

Aims and objectives

- The aim of WP6 *Comparative Analysis of Skills Supply and Demand* is to describe and understand the governance of the supply and demand of skills within and across the regions under study in the YOUNG_ADULLLT research project. In doing so, it focuses on the analysis how countries govern the relationship (match and mismatch) between the supply and demand of skills and support the transitions of young people across education, training and the labour market. As LLL policies become effective at the regional/local level, the sub-study – in view of the third objective – provides insight into the local context LLL policies are embedded in and how the interactions among the actors involved within this regional economy, the labour market and the individual life projects of the young adults is governed. The aim is by paying particular attention to these actors, dynamics, trends, (mis)matches and redundancies in a regional setting, to describe and understand the governance of the supply and demand of skills within and across the functional regions under study.

- Thus, this *International Report analysis of skill supply and demand* (D 6.2) provides a synthetic international comparative report by identifying differences and commonalities between countries based on the *National Reports on national strategies to govern the supply and demand of skills* (D 6.1). By systematizing comparative evidence it develops and European typology of modes of governance of the relationship between skills supply and demand at national and regional level.

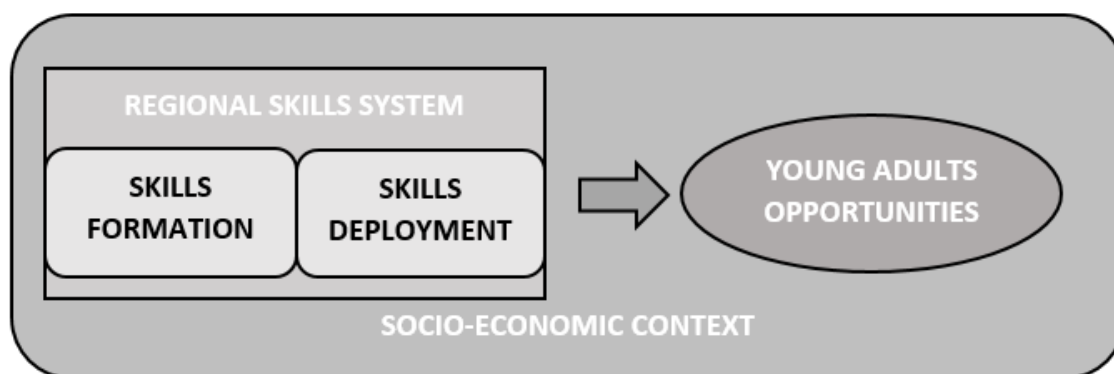
- Skills agendas are commonly drawn at the national level, but their enactment usually takes place at the regional and local level. The differences in educational and employment opportunities experienced across regions and varying socioeconomic contexts influence young adults' educational and labour experiences. This document addresses the challenges experienced by regions when governing skills systems, and the consequences for young adults.

- Skills systems are embedded into a regional socioeconomic context, which is likely to differ from one region to another and across countries. If we assume that the skills system is not impermeable to its context, we can argue that the regional context is likely to influence the actors involved in the

skills system and their activities. Conversely, actors and their activities might also have an influence in shaping the regional context.

- Actors involved in the skills system might participate in both areas and be involved in a range of different activities, depending on their policy orientations and resources. Furthermore, actors might be coordinating their activities across the skills system based on different levels and mechanisms of coordination which, as discussed above, are embedded in a regional socioeconomic context.

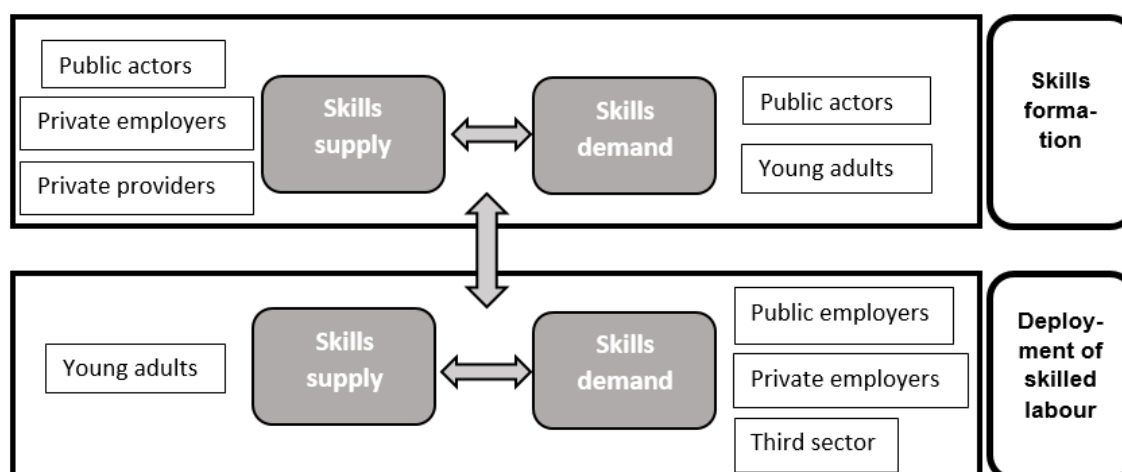
Regional skills ecology and influence on young adults' opportunities



- The objectives of WP6 are: 1) identifying the main actors and institutions involved in the skills system and the activities in which they are involved, the main focus being on LLL policies and activities relevant to disadvantaged young adults; 2) assessing the policy orientations which drive these actors and institutions to the activities they develop; 3) identifying and understanding the levels and mechanisms of coordination among these actors to pursue their activities; and 4) assessing the type and levels of skills present in the socioeconomic regional context.

Mapping of actors

- We have systematically mapped actors and institutions involved in the regional skills systems in two areas: skills formation and skills deployment. In each area there is a supply and a demand of skills, and different actors are involved in the activities taking place in each skills area, as shown in the figure below:

Skills system: skills formation and deployment of skilled labour

- A comparative approach across regions shows that the main similarity between them is the presence and direct influence of national institutions in the region, as in all regions national actors are present in the mapping. Similarities can also be drawn between regions within the same countries, as most of them present the same -- or fairly similar -- formal mapping of actors across regions.

- In most regions there is at least one institution mediating the supply and demand of skills formation, although with different degrees of involvement and action. Most regions also present an institution that aims at smoothing the relationship between the supply and demand of skills in the labour market. Similarly, most regions institutionally link the relevance of skills formation in the region to the labour market needs. These three key points where mediation is usually required present a series of regional challenges that are differently addressed across regions.

Actor's policy orientations

- Busemeyer & Trampush's (2012) typology of skills formation regimes (collective, liberal, segmentalist, statist) has been used as a basis to explore the policy orientations of the actors involved in the regional governance of skills formation across regions. The commitment and involvement of firms and the state with the skills system at the regional level are especially important for disadvantaged young adults.

- Across most countries, the institutions and coordination mechanisms with regards to the VET system are established at the national level and enacted at the regional one. Most countries have stressed the high public commitment to skills formation, mainly based on the provision and funding of VET. Several countries have pointed out the relevance of European Social Funding to fund VET and other employability courses in the regions (i.e. Bulgaria, Italy, Portugal, Spain).

- The degree of employers' involvement in VET is low in most countries (i.e. Bulgaria, Croatia, Finland, Italy, Portugal, Scotland and Spain), Austria and Germany being the exceptions. In most cases employers only contribute to the provision of VET if no extra direct costs are to be assumed on their part. However, some countries have highlighted the variation of employers' involvement across sectors (i.e. Bulgaria, Portugal, and Spain).

Levels and forms of coordination

- Actors involved in the skills system might be more willing to be involved in some activities given their policy orientations. However, the way they collaborate and coordinate their activities with the rest of the actors very much influences the regional governance.

- Building on the three versions of localism identified for the UK by Hodgson & Spours (2012) (centrally managed, laissez faire, democratic localism) we explore to what extent the decentralisation process is a chance for collaborative and democratic policy- and decision-making at the local and regional level or, alternatively, whether it implies a smaller state intervention that leaves more room for privatisation, market efficiency, deregulation and exclusion.

- There is certainly some variation across regions on the degree of decentralisation, although within countries it remains stable. In Bulgaria, Croatia, Portugal and, to a lesser extent, Scotland (in reference to Scotland, not the UK) the degree of centralisation is high. In Germany, Finland and Italy the degree of decentralisation is higher, while Austria and Spain exist in a more intermediate position.

- The extent to which the steering and value of skills comes from a public or market perspective is more controversial, as some regions are difficult to classify into the different types of localism based on the UK models. While Bulgaria, Croatia and Portugal could more easily fit into the centrally managed localism category, Austria and Scotland find themselves in a middle position between it and the democratic localism category. Finland and Italy are in a mid-position between the democratic localism and the laissez-faire market approach, whereas Spain similarly fits into this intermediate position, but with a higher degree of centralisation. Germany has been located more towards the market value approach.

- Beyond the coordination among different levels of governance and their intentions in terms of education and training policies, the mechanisms of coordination experienced at the regional level between the education and training system and the existing firms are likely to vary within and/or between countries. Drawing on the main typologies identified by Hall & Soskice (2001), we use the main models (CMEs-LMEs) to understand the coordination mechanisms between the education and training system and the regional labour markets.

- There is variation across countries and, to a very limited extent, across regions in the same country with regards to the mechanisms of coordination. While Austria and Germany — and to a lesser extent Finland — base their overall coordination in institutional arrangements (CME), in Bulgaria, Croatia, Italy and Portugal institutional coordination is project-based. Scotland and Spain tend to do it based on providing information to address market failures, locating them towards the LME model.

Regional socioeconomic context and skills (mis)matches

- Beyond the influence of different actors, the skills system might be affected by the regional context and the existing skills levels, types and forms of market failures embedded into the regional skills system. One approach is to consider the relationship between the supply and demand of skills in the regional labour market. Based on a functional perspective, different types of (mis)matches can take place (e.g. high/low skills equilibrium, skills shortages, skills surplus). Some of the causes and consequences of these (mis)matches might be unemployment, skills underutilisation and workers' and employers' barriers to skills training. These (mis)matches and their consequences affect specific social groups to a larger extent than others.

- Variation in the types of skills (mis)matches are present across regions within and between countries. Several regions are affected by skills shortages, either in specific sectors of the economy (e.g. oil and gas in Aberdeen, ICT in Glasgow, Plodiv and Rhein-Main, textile and agriculture in Vale do Ave, metal and wood in Kainuu, marine and automobile in South West Finland, tourism and shipbuilding in Istria), for specific educational levels (e.g. shortage of high-skilled workers in Vienna) or during different seasons of the year (e.g. seasonal workers in Alentejo Litoral). In some cases these skills shortages are more related to the employability of youths, while in other cases these are more related to the unattractive working conditions (i.e. temporary contracts, hard work, low-skilled) and salaries of the jobs available.
- Skills surplus is another of the mismatches affecting several regions. Most regions with skills surpluses are related to an excess of higher educated graduates (e.g. Blagoevgrad in Bulgaria, Genoa in Italy, Istria and Osijek-Baranja in Croatia, Girona and Málaga in Spain) which translates in some cases into overqualification among higher educated graduates (i.e. Blagoevgrad, Genoa, Girona and Málaga) or unemployment (i.e. Istria and Osijek-Baranja). Only in Bremen (Germany) skills surplus is related to low-skilled people, as the region is increasingly attracting more highly-skilled people.
- Some of the regions experiencing skills surpluses of higher educated people also experience low skills equilibrium (i.e. Girona and Málaga in Spain), suggesting that the prevalence of the low-skilled sector has enough room to include low-skilled people and those with higher levels of skills who are overqualified for the job. In Milan (Italy) and Rhein-Main (Germany) the low skills equilibrium does not seem particularly related to specific industries of the economy but to the services sector in general terms, while in Upper Austria what used to be a low skills equilibrium seems to be upgrading to a middle-high skills equilibrium.
- Low-skilled youths in urban regions (i.e. Bremen, Glasgow, Milan and Vienna) are the ones facing more difficult educational and employment trajectories and are usually trapped in unemployment or low skills equilibrium. In many cases it is strongly related to youths' social background, especially in countries with educational pathways leading to dead ends or limited funding for VET.
- Youth with immigrant backgrounds or belonging to ethnic minorities are more affected by unemployment, overqualification and low-skilled equilibrium in several regions. In Plodiv (Bulgaria) and Osijek-Baranja (Croatia) youths from the Roma community are more likely to experience the consequences of low-skilled (mis)matches, while in Bremen and Rhein-Main (Germany) and Vienna (Austria) non-EU migrants and refugees are more affected by these mismatches, while non-EU migrants experience similar situations in Girona (Spain) and Kainuu (Finland).

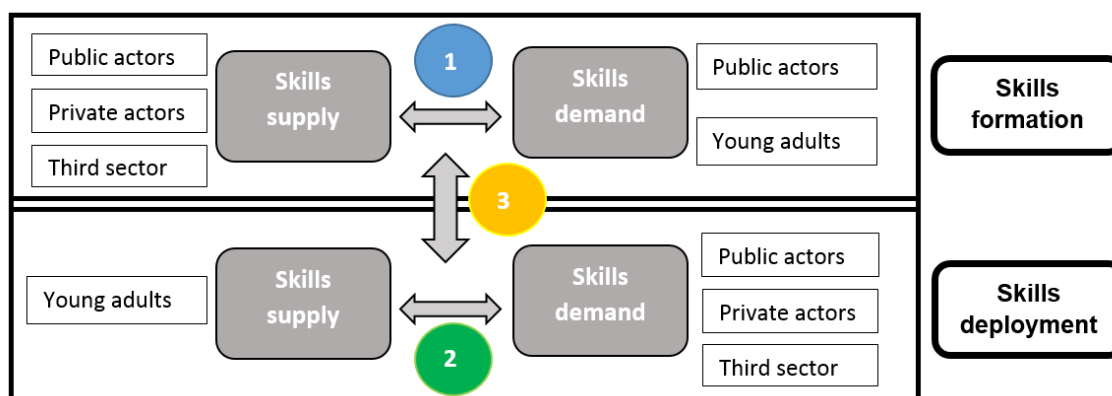
The social groups more affected by unemployment vary widely across regions, being in some cases higher educated youths, low skilled women or youths with an immigrant background or belonging to an ethnic minority. For instance, in Istria and Osijek-Baranja (Croatia) and in Genoa (Italy) unemployment hits higher educated youth harder, while in Girona (Spain) the prevalence of unemployment is larger among low-skilled women.

Regional challenges concerning skills

- The formal enactment of the national structures at the regional level can be considered fairly stable across regions. However, the actual functioning of these institutions, the relationship between actors involved in the skills system and the influence of these interactions on young adults' lives are very much affected by the structural and contextual regional factors.

- A set of regional challenges perceived by interviewed key regional actors have been identified. These can be classified into three groups which refer to key transition: 1) in the lifelong learning system; 2) from education to work; and 3) the relevance of skills formation for regional labour market needs.

Skills system and key transition challenges



- *The transitions within the lifelong learning system* is where less overall challenges have been encountered. In some countries the main threat refers to rigid educational pathways leading to dead ends or with challenging possibilities to move forward in the education system, which become a trap for skills upgrading of the most disadvantaged youths in Vienna (Austria) and in Bremen (Germany). However, this is not what youths experience in the corresponding national partner regions of Upper Austria and Rhein-Main (Germany). Thus, it suggests that the Austrian and German LLL systems struggle in providing second opportunities for skills upgrading in dynamic urban regions with a higher demand for high skills. The *Olov Strategy* in Rhein –Main aims at addressing this issue by supporting youths in their educational and career choices. Educational pathways are more flexible in other countries such as in Scotland, where the ongoing policy *Developing the Young Workforce (DYW)* aims at ensuring that all youths experience at least one learning component in their daily activities once they leave compulsory education, either in school- or work-based learning.

- The absence of higher education institutions limits the possibilities of young adults to enrol in this educational level in Alentejo Litoral (Portugal), in contrast with the corresponding Portuguese region of Vale do Ave. Youths who are willing to go to university have to move to other regions, this being a constraint for the most disadvantaged young adults.

- The funding of the VET system has been stressed as a challenge in several regions. In Istria (Croatia) the very limited public funding of VET makes youths dependent on their private funding, creating a huge barrier for financially disadvantaged youths. In Vienna (Austria) the sharing of existing funding with newcomers to the system (i.e. non-EU migrants and refugees) is creating some tensions among groups, while in the Spanish region of Málaga since 2011 the funding of some of the VET programmes stopped due to management, monitoring and accountability problems with national and ESF funding for these courses. A number of regions have mentioned the relevance of ESF for the regional VET system (e.g. Blagoevgrad in Bulgaria), without which youth opportunities in the region would have been scarce or non-existent.

- *The education and labour market spheres* are largely disconnected in several regions. While in countries with less developed VET systems and apprenticeship schemes its development is regarded

as the only way to smooth youth transition to the labour market (e.g. Blagoevgrad in Bulgaria, Genoa and Milan in Italy, Osijek-Baranja in Croatia), those regions where VET and apprenticeships have a long-standing record struggle with the scarcity of vacancies for students and the quality of the training (e.g. Aberdeen in Scotland, Bremen in Germany, Vienna in Austria). Unsurprisingly, the most affected by these problems are socially disadvantaged youths.

- *Initiatives to address the school to work transition vary across regions.* While in some regions the solution proposed is to improve youths' skills to meet the labour market demands (e.g. Girona in Spain, Genoa in Italy, Istria in Croatia), in some other regions they claim that the main problem is the limited number of jobs available in the region or the precarious working conditions offered in the predominant sectors, which youths do not find attractive (e.g. Aberdeen in Scotland, Blagoevgrad in Bulgaria, Kainuu in Finland). In some cases the labour demand struggles to fill some vacancies which are considered hard to fill. Some good practices mentioned to address this mismatch are the *Dote Unica* policy in the Milan (Italy), which aims at retraining and supporting people to get ready for these vacancies, and the *Vienna Employment Promotion Fund (WAFF)*, which funds education and training for employed people, trying to further align employees' skills with the ones demanded in the labour market.

- Regional data systems providing information on current skills supply and demand are in place and have been deemed useful in several regions (e.g. Aberdeen and Glasgow in Scotland, Kainuu and Southwest Finland, Rhein-Main in Germany). However, *the limitations of these labour intelligence systems* have also been stressed, as their slow pace does not allow for the rapid socioeconomic or labour shocks and it struggles with the forecasting of future skills needs.

- Cities have been detected as poles of attraction for high-skilled demand -- especially in the business and ICT sectors -- but these also inevitably coexist with a contrasting share of low-skilled demand -- especially in the service sector (e.g. Bremen in Germany, Glasgow in Scotland, Milan in Italy, Vienna in Austria). How desirable it is from a public perspective to meet the regional labour demands of low-skilled jobs remains debatable, as from a short-term perspective it might raise youths' employment figures, but also trap them in low-skilled jobs in the long-term perspective.

- In most regions there is an existent tension of to what extent the publicly-funded skills formation system should serve the needs of private employers, even if it promotes youth employment. While most public authorities are willing to provide general skills training, employers are more interested in occupation, industry and firm-specific skills. The tension is even stronger in those regions where there is a predominant industry or sector, as it might be the only feasible source of employment (e.g. the oil and gas industry in Aberdeen in Scotland, agriculture and tourism in Alentejo Litoral in Portugal, tourism in Girona and Málaga in Spain, shipbuilding and tourism in Istria in Croatia, metal and wood in Kainuu and automobile and marine industries in Southwest Finland).

- A cross-cutting issue across regions and countries is the employers' wish list with regards to youths' transversal and soft skills, as well as their positive attitudes and commitment to work. To what extent employers' claims might realistically fit with the standard level of maturity among youths at that life stage, and the working conditions offered by them (e.g. low wage, fix-term contracts, unskilled, seasonal), remains under discussion, as well as to what extent public institutions have to consider and fund transversal and soft skills in skills formation systems.

Structure of the international report

The international report first presents the analytical framework employed to compare the countries and regions under study in the YOUNG_ADULLLT research project. Second, the methodology and approach to work employed follows. Third, the results of the comparative analyses are presented, starting with the national and regional skills system, followed by the actors' policy orientations, the levels and mechanisms of coordination and the regional skills (mis)matches. Fourth, the skills challenges detected across regions are presented and discussed, organised in three subsections addressing the transitions in the LLL system, the transitions from school to work and the relevance of skills formation for the regional labour market. Finally, the conclusions end the report.

1. Analytical Framework

Overview

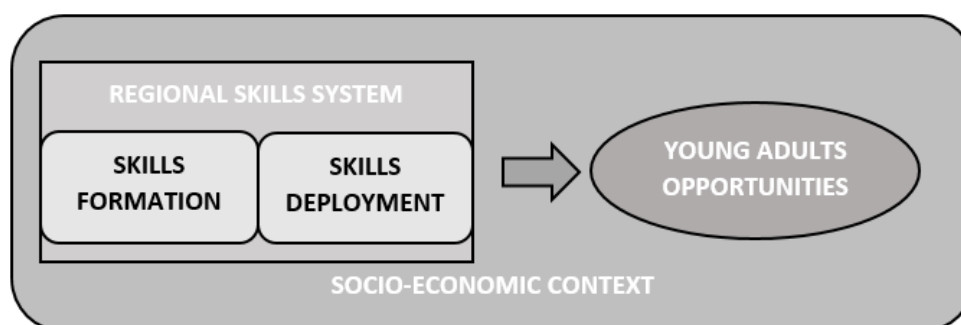
The aim of WP6 *Comparative Analysis of Skills Supply and Demand* is **describing and understanding the governance of the supply and demand of skills within and across the Functional Regions (FRs)** under study in the YOUNG ADULLLT (YA) research project. We refer to it as the governance of the regional *skills ecology*. In order to do so, the objectives of WP6 are: 1) identifying the main actors and institutions involved in the skills system and the activities in which they are involved, the main focus being on LLL policies and activities relevant to disadvantaged young adults; 2) assessing the policy orientations which drive these actors and institutions to the activities they develop; 3) identifying and understanding the levels and mechanisms of coordination among these actors to pursue their activities; and 4) assessing the type of skills and levels present in the socioeconomic regional context. This contextualisation will help us in assessing to what extent the context influences the governance of the skills system and vice versa, as well as acknowledging similarities and differences across FRs.

There are two terms used in the analytical framework presented worth introducing: the **skills system** (constituted by *skills formation* and *skills deployment*) and the **skills ecology**. As shown in Figure 1 below, the skills system is formed by two parts: the skills formation and the skills deployment areas. In each one of them there is a supply and demand of skills. Local, regional, national and supranational actors might be involved either in one or in both areas of the system, which jointly constitute the skills system.

Skills systems are embedded into a regional socioeconomic context, which is likely to differ from one region to another and across countries. If we assume that the skills system is not impermeable to its context, we can argue that the regional context is likely to influence the actors involved in the skills system and their activities. Conversely, actors and their activities might also have an influence in shaping the regional context.

The interaction between the regional skills system and the regional socioeconomic context constitutes the **regional skills ecology**. Thus, **the interest of this WP6 resides in understanding the regional governance of the skills system and assessing to what extent it is influenced by the regional socio-economic context and how it influences young adults' opportunities across FRs.**

Figure 1: Regional skills ecology and influence on young adults' opportunities



Source: Authors' elaboration.

One of the main contributions of WP6 *Comparative Analysis of Skills Supply and Demand* to the YA research project is that it goes beyond the policy approach, which tends to focus on skills formation. WP6 incorporates in the analytical framework the skills deployment into the labour market and the

contextual factors influencing the skills system and young adults' opportunities. In this report we refer to it as the *skills ecology*.

Following F. Green's (2013) definition of skills, we consider skills from a broad perspective, understanding them as *"personal qualities with three key features: a) they are Productive, as using skills at work are productive of value; b) skills are Expandable, as they are enhanced by training and development; c) skills are Social, as they are socially determined"* (PES skills).

The Skills Ecology elements

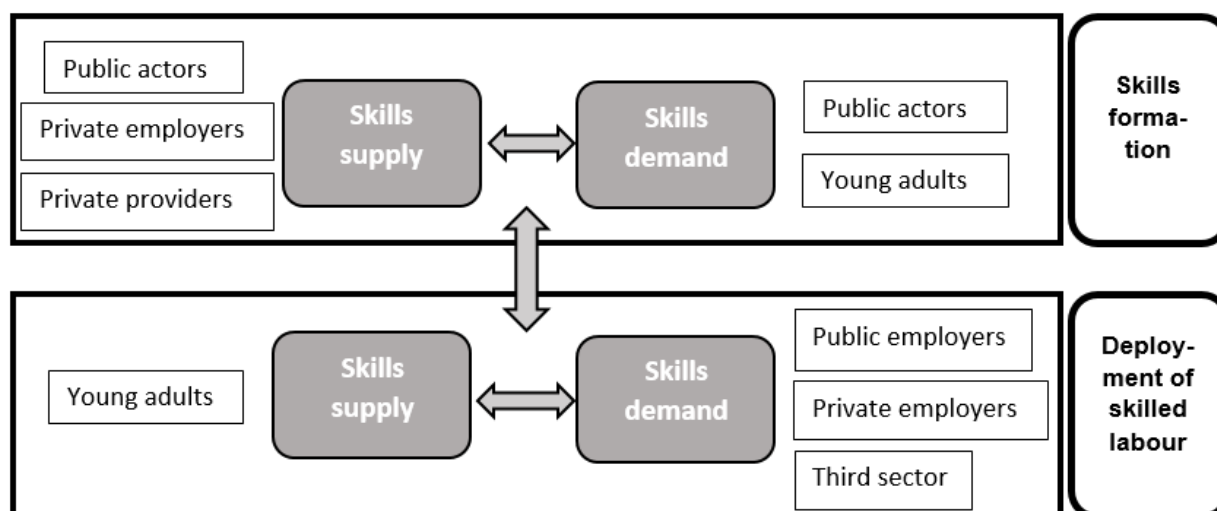
In order to approach the governance of the regional skills ecology as presented in Figure 1 above, we first describe the different elements comprising the skills ecology in detail and locate them in already existent analytical frameworks relevant for our objectives. We first frame the skills system and then look in depth into how actors involved in the system interact with each other in their particular socioeconomic context.

The Skills System

Partly inspired by the skills framework proposed by Francis Green (2013) at the national level, regional skills systems can also be organised into two areas: skills formation and skills deployment. In each area there is a supply and a demand of skills and different actors are involved in the activities taking place in each skills area, as represented in Figure 2 below.

1. Skills formation: this refers to the space where different actors offer skills training and some others take part into this training to improve their skills.
 - a. *Supply of skills formation*: this usually comes from: a) public authorities (local/regional/national) via the formal education and training system; b) employers, who are willing to supply skills formation relevant to their specific productive activities; and c) private training providers.
 - b. *Demand of skills formation*: this usually comes from individuals who want to improve their skills for economic, cultural or social purposes. In the YA research project, we specifically focus on disadvantaged young adults. Public authorities might also promote the demand of skills with positive externalities for society. However, the demand of skills formation is partly driven by the supply, as both public authorities and employers are likely to be supplying skills formation because they are demanding them to serve their interests.
2. Deployment of skilled labour: this refers to the space where different actors offer and/or seek relevant skills to be used in the labour market. The value of skills can be for economic, cultural, social or personal reasons. However, in the present analysis we focus on the economic-productive deployment of skills in the labour market.
 - a. *Supply of skilled labour*: this refers to the individuals (in the present case, disadvantaged young adults) who might want or need to offer their ready-to-use skills for economically productive reasons in the labour market.
 - b. *Demand of skilled labour*: this usually refers to employers in either private, public or third sector organisations. Individuals might also be willing to self-employ them, acting at the same time in the supply and demand of skilled labour. Beyond paid employment, we also consider the demand of skilled labour for volunteering purposes.

Figure 2: Skills system: skills formation and deployment of skilled labour



Source: Authors' elaboration, based on F. Green (2013).

Actors involved in the skills system might participate in both areas and be involved in a range of different activities, depending on their policy orientations and resources. Furthermore, actors might be coordinating their activities across the skills system based on different levels and mechanisms of coordination which, as discussed above, are embedded in a regional socioeconomic context. The following paragraphs address the remaining relevant elements influencing the skills ecology.

Actors' policy orientations

The regional governance very much depends on the actors involved in the skills system and on their policy orientations with regards to skills formation and the relevance of what is taught for the labour market. We approach this issue with the skills formation typology suggested in the *Political Economy of Collective Skills Formation* (Bussemeyer & Trampusch, 2012). Based on the varying degrees of firm involvement and public commitment to VET, the authors differentiate four regimes of skills formation, which differ in four key points of the skills formation system:

1. **Who provides VET?** Or the division of labour between the state, employers, their associations and individuals;
2. **Who funds VET?** Or the division of funding arrangements between the state, employers, their associations and individuals;
3. **Who controls VET?** Or the relationship between firms' autonomy and public oversight in the provision of training;
4. **How do VET relates to the education system?** Or the relationship and linkages between VET and the general education system.

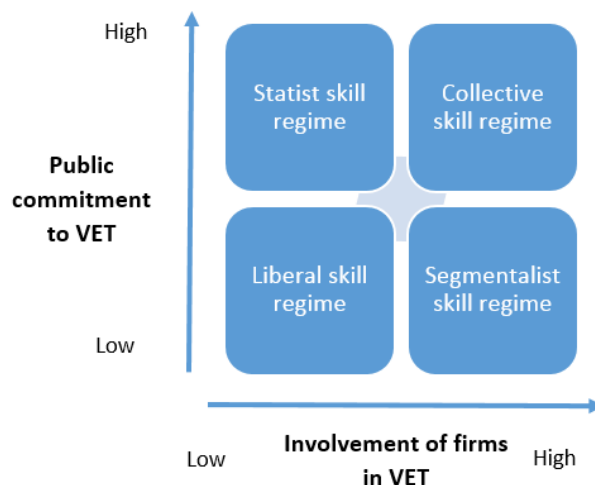
Figure 3 below shows the variation in the position of the skills formation regimes in reference to the degree of firms' involvement and public commitment to the skills formation in the VET system. A brief description of the four skills formation regimes follows:

1. **Liberal regime** (e.g. United States): *Low firm involvement– Low public commitment*. In these countries public funding for VET is low to medium, but generally the level of public commitment to adult education is low; skills are offered primarily in general education

and/or through market provision and complemented by on-the-job training in firms. Thus, the suggested solution to provide vocational skills and training relies on on-the-job training.

2. **Statist regime** (e.g. France, Sweden): *Low firm involvement– High public commitment.* These countries show high rates of VET participation as it is integrated into general schooling, which raises its social value. Adult education is also state-funded and institutionalised. Therefore, the solution relies on the state as a provider of vocational skills and training.
3. **Segmentalist regime** (e.g. Japan): *High firm involvement– Low public commitment.* Countries in a segmentalist regime are characterized by low public commitment to vocational skills and training, as the education system mainly offers general education. However, in contrast with the liberal regime, firms are willing to invest in the training of their employees. Skills formation and training continues at the firm once individuals have left school. Large firms usually combine job rotation schemes and off-the-job training courses in in-house training centres and vocational schools. Hence, the suggested solution for skills formation in VET is relying on the self-regulation of the state and the firms.
4. **Collective regime** (e.g. Austria, Germany, Switzerland): *High firm involvement– High public commitment.* In these countries VET has a long tradition of collaborative effort between employers and the state. Adult education is partly state-funded, but also relies on a system of formalised social partnerships. Employers and trade unions also take part in the decision-making of the VET system and take responsibility for it. Thus, the suggested solution involves the collaboration between firms, associations and the state in providing and financing vocational skills.

Figure 3: The variety of skill formation systems



Source: Authors' own elaboration, based on Busemeyer & Trampusch (2012).

Table 1 below summarises the differences across the four skills formation regimes in reference to the neuralgic points of contention.

Table 1: Key characteristics across skills formation systems

	Who provides VET	Who funds VET	Who controls VET	Links VET-ES
Liberal regime	Schools offer academic and VET tracks; some firms are willing to provide on-the-job training. Internships and summer jobs might be considered as VET	School-based training might be funded by the state or by private individuals, while on-the-job training might be funded by the individual and the firm	Schools have control to some extent. Individuals decide on taking part in other forms of VET	Vague link between the general education system and VET, the latter being complementary and mainly taking place at firms
Statist regime	State provides VET. Limited provision of workplace learning provided by firms	State funds VET. Limited contribution of firms in work-based learning	State controls VET and might combine it with other policy areas (e.g. ALMP)	VET included in the general education system as a viable alternative to academic tracks
Segmentalist regime	Firms are willing to provide on-the-job training, while the state provides general education	Firms are willing to invest in training, while the state funds general education	Division between school-based VET controlled by the state and on-the-job training, controlled by firms	No institutional links between VET schools and firms. Individuals make their links and complement school-based VET with on-the-job training
Collective regime	State and firms work collectively to provide VET. Combination of school and firm-based learning	State and firms collectively fund the VET system	Certain degree of monitoring and quality assurance of public actors on the firm-based training. Intermediary associations - such as employers' associations - have an important role in the administration and reform of the VET system	VET is included in the general education system as a viable alternative to academic tracks and in connection with the labour market. Provides portable and certified occupational skills

Source: Authors' own elaboration, based on Busemeyer & Trampusch (2012).

We use this typology as a basis to explore the policy orientations of the actors involved in the regional governance of the skills formation across FRs, as the commitment and involvement of firms and the state with the skills system at the regional level might be especially important for disadvantaged young adults. Furthermore, our focus on the regional arena might bring new elements to the existing four tension points identified by the existent typology of skill formation regimes.

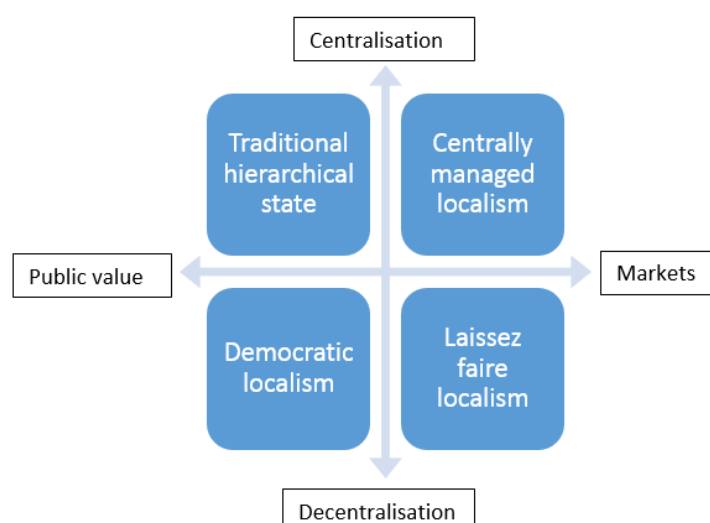
Levels and mechanisms of coordination

Actors involved in the skills system might be more willing to be involved in some activities given their policy orientations. However, the way they collaborate and coordinate their activities with other actors very much influences the regional governance of the skills ecology. Building on previous literature on governance at the local level (Hodgson & Spours, 2012) and mechanisms of coordination (Hall & Soskice, 2001), we focus on different levels, leading actors and mechanisms of coordination relevant to the regional skills systems.

Starting with the different levels of governance involved in the coordination of activities, we are certainly interested in identifying local, regional, national and supranational actors involved in the regional governance of the skills system, as well as the extent to which this coordination implies the promotion of skills as a public or a market good. Building on the three versions of localism identified for the UK (Hodgson & Spours, 2012) and the residual centralised category, the main tension remains in identifying to what extent the decentralisation process is a chance for collaborative and democratic policy- and decision-making at the local and regional level or, alternatively, if it implies a smaller state intervention that leaves more room for privatisation, market efficiency, deregulation and exclusion. As suggested in Figure 4 below, this tension between the degree of centralisation and the public and private lead on the value of skills can translate into four models of localism:

1. **Centrally managed localism:** (e.g. UK New Labour Administration 1997-2007) this refers to a combination of central steering -- via national agencies -- and centrally devised policy levers, such as targets, performance measures, funding, inspection and national initiatives, together with the encouragement of competition between providers in a quasi-market. It implies a top-down managerialism to ensure effectiveness and efficacy in local public services, while citizen involvement is quite limited to customer satisfaction.
2. **Laissez faire localism:** (e.g. UK Conservative/Liberal Democrat Coalition Government) this refers to a reduction in the role of central government and the size of the state; an emphasis on institutional autonomy; the encouragement of more private and third sector providers within a competitive climate; freedom from bureaucracy; empowering citizens and communities as consumers and active participants in public services and the promotion of 'local markets' (e.g. health, education). Funding is used as the principal driver for reform. It is critical of top-down managerialism for involving too much state intervention.
3. **Democratic localism:** (e.g. Wales and Scotland devolved administrations) this promotes the rebalancing of powers and relationships between democratically elected and accountable national, regional and local governments. It also emphasizes popular participation and co-production of services; the promotion of public value; effective, bottom-up feedback loops in policy-making; and the stronger involvement of social partners. It emphasizes the role of the state in addressing wage inequality and inequality of access to public services. It also envisages distinctive roles for regional and local government, with regional formations providing coordination in areas such as labour markets. Devolving power and resources away from central control and towards front-line managers, local democratic structures and local consumers and communities, within an agreed framework of national minimum standards and policy priorities. It usually requires the share of power among regional and national social partners.
4. **Traditional hierarchical state:** this refers to centralised states where none of the previous conditions of decentralisation to local and regional powers are in place, neither to the local/regional authorities nor to the regional market. Hence, no room for "localism".

Figure 4: Framework of analysis of localism



Source: Hodgson and Spours (2012).

Beyond the coordination among different levels of governance and their intentions in terms of education and training policies, the mechanisms of coordination experienced at the regional level -- between the education and training system and the existing firms -- are likely to vary within and/or between countries. Drawing on the main typologies identified in *Varieties of Capitalism* (Hall & Soskice, 2001), we use the main models to understand the coordination mechanisms between the education and training system and the regional labour markets in the FRs under study.

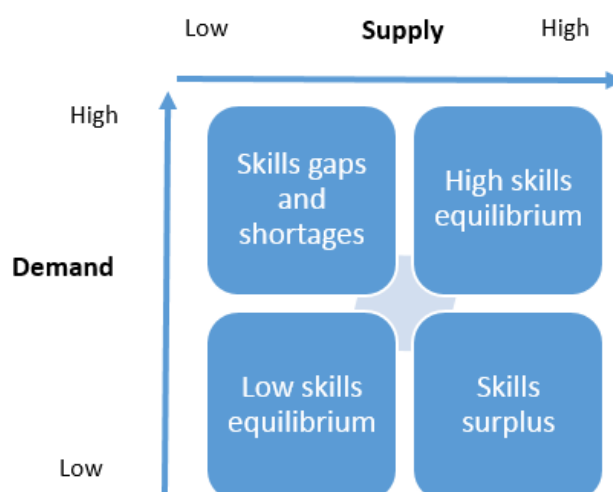
Generally speaking, the coordination between the supply and demand of skills at the regional level can be done either by relying on the market - the Liberal Market Economies (LMEs) – or on the institutions representing education and training authorities and employers - the Coordinated Market Economies (CMEs). Although these are the two contrasting models, regions might present intermediate or mixed characteristics of both. Actually, as argued by Hall and Soskice, there is variation in the types and forms of institutional coordination that takes place across CMEs. Since we are particularly interested in the relationship between firms and the education and training system, the two models can be identified depending on to what extent actors of the education and training system and firms interact in the production of general, occupation, industry and firm-specific skills, and how they coordinate, either based on providing information to the market (LMEs) or on institutional arrangements (CMEs).

Regional socioeconomic context

Beyond the influence of different actors, the skills system might be affected by the regional context and the existing conditions -- in terms of skills levels, types and forms of market failures -- embedded into the regional skills system. One approach is to consider the relationship between the supply and demand of skills in the regional labour market. Depending on the quantity and level of the demanded skills by employers and the quantity and level of available skills at the local level, different types of (mis)matches might take place (Froy, Giguere, & Hofer, 2009; A. Green, Hasluck, Hogarth, & Reynolds, 2003).

As suggested in Figure 5 below, a locality/region could present, for instance, a high percentage of youths with higher education and a local labour market that employs them in jobs that match their education level (*high skills equilibrium*); or it could be that most of the youth population presents a low level of educational attainment, and the local employers employ them in positions at this level of skills (*low skills equilibrium*). In other cases, some localities might be lacking youths with a specific level or type of skill (*skills shortage*) or, conversely, there might be more youths with a specific type and level of skills than is demanded by employers (*skills surplus*). In fact, all these situations (or similar ones) can take place at the same time in the same locality in different sectors.

Figure 5: Skills (mis)match typology



Source: Froy, Giguere & Hofer, 2009.

Beyond these functional skills (mis)matches, there are some further mismatches and possible causes and consequences worth stressing to complement the previous situations (Green, 2013):

- Unemployment: this is one possible consequence of a skills surplus, when some people are willing to work but cannot find a job in which to use their skills.
- Skills underutilisation: this can be another consequence of a skills surplus, when a person is employed in a job for which he/she has more skills than the ones required for the job.
- Workers' training barriers: one of the causes of skills shortage might be workers' training barriers. Workers might be lacking some skills to match the current labour market demands. However, limited information, funding restrictions or time restrictions to attend training during working hours might explain and maintain this mismatch.
- Employers' training barriers: even if in some situations it would be advisable to invest in skills formation, some employers might lack sufficient information, the capacity to assess the benefits of training for the organisation, or skills providers might be unavailable. These might be some of the issues that cause employers to refrain from upgrading workers' skills and productivity.

Some of these mismatches might be affecting specific social groups to a larger extent: promoting, for instance, gender mismatches (e.g. participation in STEM sectors) or ethnic mismatches (e.g. employment in low-skilled jobs, underutilisation of skills).

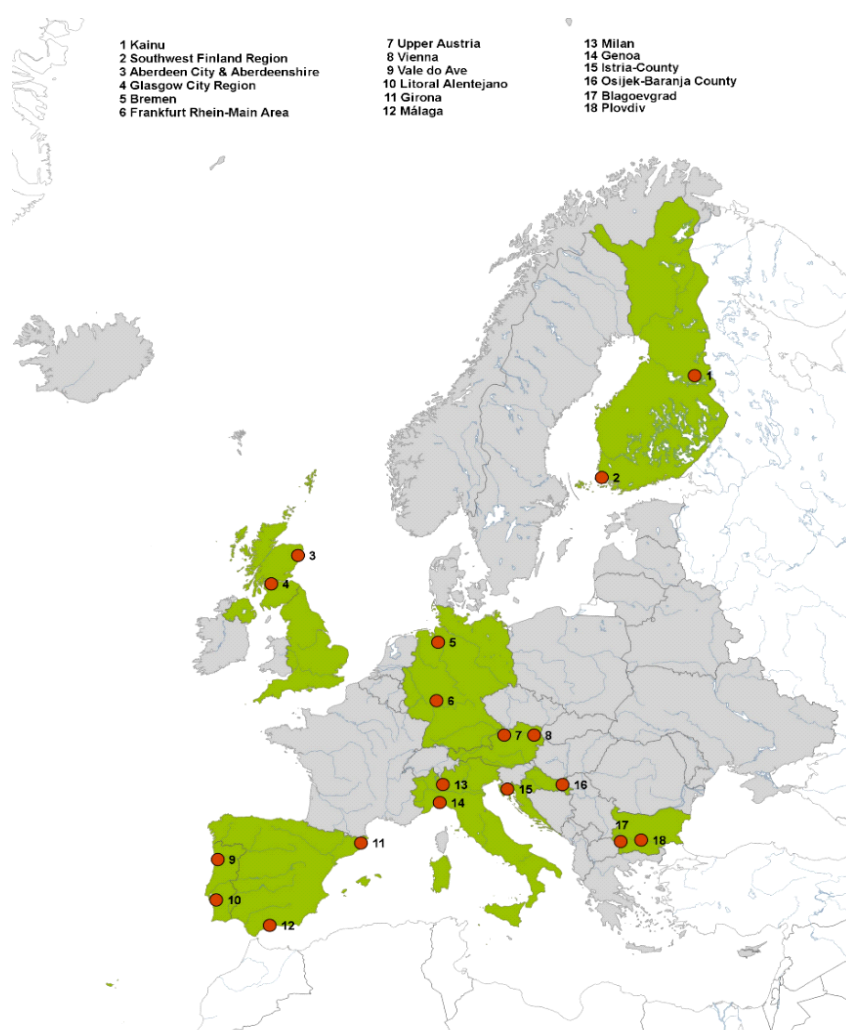
As mentioned above, it must be noted that in the present analysis the approach proposed to the skills (mis)match refers exclusively to the labour market-reductive use, without taking into account the possible use of these skills in non-productive life domains.

2. Approach to work and methodology

The main objective of *WP6 Comparative Analysis Skills Supply and Demand* is to identify the actors involved in the supply and demand of skills at the regional level and to understand how they govern, manage and coordinate their activities, considering the implications it has for young adults. To attain WP6's main aim of describing and understanding the governance of the supply and demand of skills within and across the FRs under study, nine *WP6 National Reports* were produced with information and evidence for each FR (two per country) on the: 1) national skills system; 2) mapping of actors, institutions and structures involved in the regional skills system; 3) actor's policy orientations (interests, frames of reference); 4) levels and forms of coordination of governance activities in the region; and 5) the quality and relevance of the skills developed and deployed by young people in the region.

WP6 International Report builds on the evidence provided by the nine *WP6 National Reports* submitted by the partners of the YA research project. Each national report incorporates information for two FRs (18 in total) which are displayed below in Figure 6. Results provided in the national reports come from two main sources: 1) semi-structured interviews with key regional policymakers and stakeholders; and 2) grey literature used by regional actors in relation to skills policies. On average, between four and five semi-structured interviews were conducted per region with key policymakers and stakeholders (81 semi-structured interviews in total) and between ten and twelve documents per country were reviewed (129 documents in total). The details of the affiliation of the people interviewed and the grey literature reviewed by country and FR are presented in Tables 5 and 6 in the annex.

Figure 6: Overview of selected Functional Regions in YOUNG_ADULLLT



Source: YOUNG_ADULLLT (designed with Stepmap).

In some of the national reports, the quantitative data to contextualize the FRs comes from the WP4 indicators at NUTS II. However, most of the national reports provided contextual data from national statistics offices, as the collection of WP4 quantitative indicators was overlapping with the drafting of *WP6 National Reports*.

Some national reports also include information coming from the WP5 interviews with managers, practitioners and young adults related to the policies studied in the YA research project. However, because of the overlap of the field work for WP5 & WP6, it was not possible to include this information in all cases.

In order to assure the quality and comparability of all *WP6 National Reports*, the WP6 leader organised three milestone activities (March, May and June 2017) with part of the content to be included in the national reports. A first draft of the national report was submitted by each partner in July 2017. The WP6 leader provided individual feedback to these first drafts in August 2017, allowing for a month to introduce suggestions for improvement until the final deadline in September 2017.

As with the rest of the WPs constituting the YA research project, the theoretical frameworks driving the analyses are the Governance framework (GOV), the Cultural Political Economy (CPE) and the Life

Course Research (LCR). Although WP6 includes these three theoretical perspectives, the GOV and the CPE are central to the analytical approach employed.

The GOV framework plays a key role in the task of identifying relevant actors, institutions and networks involved in the regional activities influencing young adults' skills formation and deployment. It also contributes to the understanding of the interplay among actors and institutions involved in different scales of governance (national/supranational/regional). Therefore, the GOV framework is especially relevant in identifying and mapping the actors, institutions, structures and their main activities relevant to the local governance of the skills ecology.

However, the interactions among actors and institutions are not random. The CPE framework helps us understand actors' and institutions' activities by considering the discursive and material factors that influence their decisions and actions. Actors usually detect and consider problems for given targeted groups when some changes are experienced at the local/regional/national/supranational level (Variation). The activities/policies they decide to take part in and promote (Selection) at the regional level are not sustained over time and sometimes their effects are not the expected ones (Retention). In this sense, WP6 takes into account the CPE approach when considering the nature of the activities related to LLL for young adults, the policy orientation (interest, frames, incentives) of the actors/institutions involved, the (in)existence of coordination and their mechanisms, and their desired and undesired effects on the opportunities available to young adults.

Finally, the way in which actors and institutions interact and decide to place some activities/policies for young adults and coordinate them is likely to influence young peoples' lives. Therefore, from a LCR perspective the governance of the regional skills ecology is likely to influence the expectations, opportunities and lives of young adults. The (mis)match between young adults' skills, expectations and ambitions and the ones provided in their regional skills ecology are also likely to influence their lives.

3. National and Regional Skills Ecologies

In this section we compare the countries and FRs under study in the YA research project according to the characteristics and typologies outlined in the analytical framework. We first address the mapping of relevant actors involved in the regional skills system, before continuing with the actors' policy orientations and the levels and mechanisms of coordination in place. Finally, we focus on the regional socioeconomic contexts across the FRs.

National and regional skills systems

There are three main messages that we would like to emphasise from the comparison of the mapping of actors involved in the regional skills system across the FRs: 1) the influence of national institutions in the regional level; 2) the differences between regions in the same country; and 3) the presence and absence of institutions acting as intermediaries between the different parts of the skills system.

One of the main similarities across FRs is the presence and direct influence of national institutions in the region. In all FRs under study the mapping of actors involved in the skills systems includes national actors (i.e. central government or state level actors). Exceptions are the Finnish regions of Southwest Finland and Kainuu and the Spanish regions of Girona and Málaga. While neither in Finland nor in Spain is there a formal presence of the central state or government, in Spain institutions from the autonomous communities are present in the region (i.e. federal state). Therefore, a first remark is that in most countries the regional skills systems are somehow influenced by the national institutions. Even in the Finnish and Spanish cases, not having formal national institutions in the region might not necessarily mean that there is no influence from the central state level. Despite the recent strengthening of regional administration in Finland, the state-level actors still have a major influence on the regional and local actors. For instance, the Ministry of Education and the Ministry of Economic Affairs and Employment are still responsible for public funding and legislation across the country, clearly influencing what regional and local actors can do.

The second point for discussion emerging from the comparison of the mapping are the differences between regions in the same country. In most countries under study (i.e. Croatia, Finland, Italy, Scotland) the formal mapping of actors is practically the same in the two regions, their differences being merely attributed to the naming of the locality and/or region. In an intermediate position, some other countries show similar mapping of actors across FRs, although with some relevant differences (i.e. Austria, Germany and Spain), whereas two countries shows fairly different mappings of actors across FRs (i.e. Bulgaria and Portugal).

Finally, the presence (or absence) of institutions acting as intermediaries between actors in the region is certainly an interesting point to be addressed. In all FRs without exception there is at least one institution acting as an intermediary between the supply and demand of skills formation. Although to different extents and in different forms, the articulation of the Lifelong Learning (LLL) spectrum is addressed in all FRs.

Most of the FRs also present an institution that aims at smoothing the relationship between the supply and demand of skills in the labour market (i.e. skills deployment area). However, in the FR of Plodiv (Bulgaria) and in the Portuguese FRs of Alentejo Litoral and Vale do Ave there is no intermediation in this area.

Most of the FRs under study also present institutions connecting the skills formation and the skills deployment areas of the skills system, aiming to make skills formation in the region relevant to the

regional labour market needs. Again, the region of Plodiv (Bulgaria), the Croatian regions of Istria and Osijek-Baranja Counties and, to some extent, the Genoa FR (Italy) are characterised for lacking a formal institution which addresses this connection. Table 2 below summarises the similarities and differences across countries and FRs with regards to the mapping of actors and institutions.

Table 2: Main characteristics of mapping of actors across FRs

Country	FR	Presence of national institutions	Mapping of regional actors in the country	Intermediaries: Skills Formation	Intermediaries: Skills Deployment	Intermediaries: Skills Formation-Skills Deployment
Austria	Upper Austria	Yes	Fairly similar	Yes	Yes	Yes
	Vienna	Yes		Yes	Yes	Yes
Bulgaria	Blagoevgrad	Yes	Different	Yes	Yes	Yes
	Plodiv	Yes		Yes	No	No
Croatia	Istria-County	Yes	Similar	Yes	Yes	No
	Osijek-Baranja County	Yes		Yes	Yes	No
Finland	Kainuu	No	Similar	Yes	Yes	Yes
	Southwest Finland	No		Yes	Yes	Yes
Germany	Bremen	Yes	Fairly similar	Yes	Yes	Yes
	Frankfurt Rhein-Main	Yes		Yes	Yes	Yes
Italy	Genoa FR	Yes	Similar	Yes	Yes	No
	Milan FR	Yes		Yes	Yes	Yes
Portugal	Alentejo Litoral	Yes	Different	Yes	No	Yes
	Vale do Ave	Yes		Yes	No	Yes
Scotland	Aberdeen City/shire	Yes	Similar	Yes	Yes	Yes
	Glasgow City Region	Yes		Yes	Yes	Yes
Spain	Girona	No	Fairly similar	Yes	Yes	Yes
	Málaga	No		Yes	Yes	Yes

Source: Authors' own elaboration, based on national reports.

Actors' policy orientations

Following the framework proposed by Busemeyer and Trampusch (2012) it becomes quite obvious that the skills formation systems are established at the national level and that it remains fairly homogenous across regions within a country. Based on the evidence provided by the academic literature, not all countries included in the YA research project have been classified in one of the existing categories of the typology of skills formation regimes. Austria and Germany are well-established cases of the collective skills formation regime, while the United Kingdom has been classified in the liberal skills formation regime (Busemeyer & Trampusch, 2012), without assessing internal differences across the nations integrated in the UK with recently devolved powers in education (e.g. Scotland and Wales). More limited evidence is presented for the remaining countries

included in the YA research project. While Finland has usually been included in the Scandinavian group of statist skills formation regimes, the rest of the countries remain unclassified with regards to the four category typology, as they do not completely fit into any of those. Southern European countries such as Italy, Portugal and Spain have been associated with some of the characteristics of the liberal model, although with less dynamic labour markets offering more limited employment opportunities. Bulgaria and Croatia remain unexplored with regards to the typology, like most of the Eastern and former communist countries in Europe.

In an attempt to contribute to the existing typology, the national reports have described the main characteristics deemed relevant for comparing skills formation regimes across Western European countries, Japan and the United States. Based on the comparison of the information gathered in the national reports, there are three points to be raised: 1) the homogeneity of skills formation regimes across regions in the same country; 2) the general high public commitment to skills formation; and 3) the variation of employers' involvement across sectors.

As argued above, one of the main results is that skills formation regimes do not vary across regions within countries. Most of the institutions and coordination mechanisms with regards to the VET system are established at the national level and enacted at the regional one. Among the FRs studied, only relevant differences have been detected between the two Italian FRs: while the degree of employers' involvement in the skills formation system is quite limited in Genoa it is currently increasing in Milan due to an above average investment in skills formation and the recent introduction of a dual apprenticeship system combining school and workplace training.

Most countries have stressed the high public commitment to skills formation, mainly based on the provision and funding of VET. It is worth pointing out at this point that several countries (i.e. Bulgaria, Italy, Portugal, Spain) have highlighted the relevance of European Social Funding (ESF) to fund VET and other employability courses in their regions, and it has even been mentioned as the only source of public funding of VET in Croatia, where the public commitment to skills formation can be considered the lowest, in comparison to the rest of the countries under study.

Finally, the degree of employers' involvement in VET is low in most countries, Austria and Germany being the exceptions. In most cases employers only contribute to the provision of VET if no extra direct costs are to be assumed on their part. However, some countries have stressed the variation of employers' involvement across sectors (i.e. Bulgaria, Portugal, and Spain).

Table 3 below summarises the main characteristics of each FR that justifies their classification in the corresponding skills formation regime.

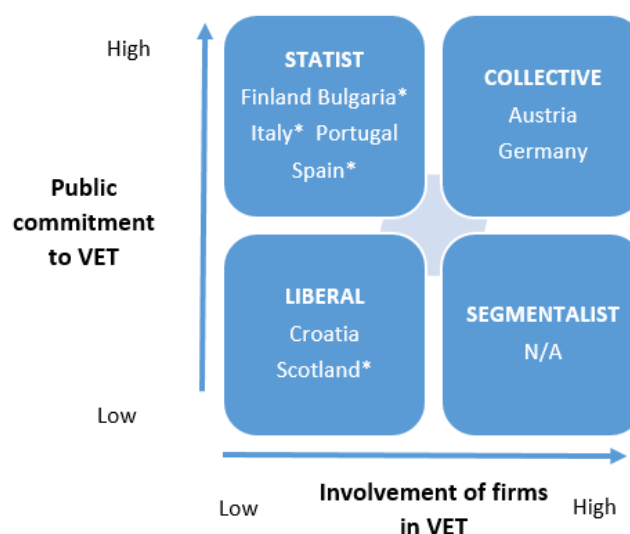
Table 3: Main characteristics of skills formation regimes across countries and FRs

Country	FR	Who provides VET	Who funds VET	Who controls VET	Links VET-ES	Skills Formation Regime
Austria	Upper Austria	Public + employer	Public + employer	Social partners	Early tracking, dual apprenticeship as a dead-end track, lower prestige	Collective
	Vienna					
Bulgaria	Blagoevgrad	Public	Public + ESF	Public	VET is part of the ES	Towards Statist
	Plodiv					
Croatia	Istria-County	Public	Public + Students	Public	VET is a second order option	Liberal
	Osijek-Baranja County					
Finland	Kainuu	Public + employer	Public	Public	VET is part of the ES	Statist
	Southwest Finland					
Germany	Bremen	Public + employer	Public + employer	Social partners	Early tracking, VET as a dead-end track, lower prestige	Collective
	Frankfurt Rhein-Main					
Italy	Genoa FR	Public	Public + ESF	Public	VET is in the ES, but less prestigious route	Towards Statist
	Milan FR	Public + employer	Public + employer + ESF	Public	VET is in the ES, but less prestigious route	Statist towards Collective
Portugal	Alentejo Litoral	Public	Public + ESF	Public	VET is in the ES and certifies for FE (no dead-end)	Statist
	Vale do Ave					
Scotland	Aberdeen City/shire	Public + employers	Public + employers (limited)	Public	Flexible VET system, with lots of options	Liberal towards Statist
	Glasgow City Region					
Spain	Girona	Public + employers	Public	Public	VET is partly in the ES and in the employment services	Towards Statist
	Málaga					

Source: Authors' own elaboration, based on national reports.

As suggested in Figure 7 below, countries considered in the YA research project can be classified in three of the skills formation regimes: Austria and Germany lie under the Collective regime, Croatia and Scotland under the liberal one, and Bulgaria, Finland, Italy, Portugal and Spain under the statist one. However, some of them (marked with * in Figure 7 below) are at the edge of the liberal and the statist regime (i.e. Italy, Scotland, Spain) given their different level of public commitment to VET. Therefore, it can be argued that there is heterogeneity in the countries integrating the liberal and the statist regimes, as there is in the ones included in the collective skills regime, extensively discussed in Bussemeyer and Trampusch's work (2012).

Figure 7: Classification of countries according to the degree of public commitments and private involvement in VET



Source: Authors' own elaboration, based on national reports.

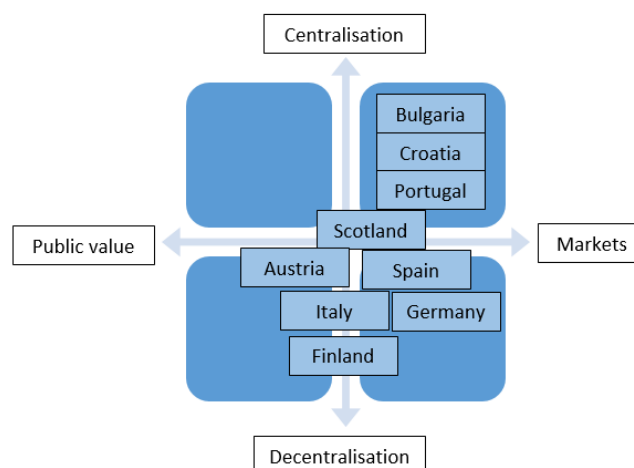
Levels and mechanisms of coordination

Once the actors and institutions involved in the regional skills system have been identified, outlining their degree of commitment and involvement with regional skills formation, it is time to address the levels and mechanisms of coordination in place to govern the skills system. We first classify the FRs based on their degree of (de)centralisation and public or private lead on the value of skills in the region, as suggested by Hodgson and Spours (2012). Afterwards, we identify the mechanisms of coordination between the education and training system and firms across FRs, based on the two contrasting cases of LMEs and CMEs suggested by Hall and Soskice (2001).

The different types of localism suggested by Hodgson and Spours (2012) are based on the UK experience. Although it is a useful initial framework to identify the degree of centralisation across FRs, the classification based on the value of skills and the steering to either the public value or the market one has been a little more problematic. In Bulgaria, Croatia, Portugal and, to a lesser extent, Scotland (in reference to Scotland, not the UK) the degree of centralisation is high. In Germany, Finland and Italy the degree of decentralisation is higher, while Austria and Spain exist in a more intermediate position. The extent to which the steering and value of skills comes from a public or market perspective is more controversial. While Bulgaria, Croatia and Portugal could more easily fit into the centrally managed localism category, Austria and Scotland find themselves in a middle

position between it and the democratic localism category. Finland and Italy are in a mid-position between the democratic localism and the laissez-faire market approach, whereas Spain might similarly fit into this intermediate position, but with a higher degree of centralisation. Germany has been located more towards the market value approach. Thus, all countries present similar levels of regional governance.

Figure 8: Main characteristics of levels of coordination across FRs



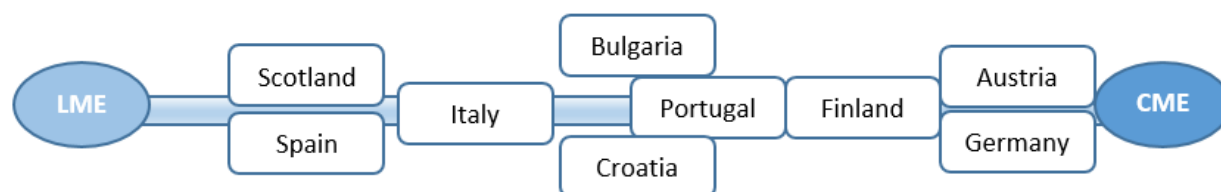
Source: Authors' own elaboration, based on national reports.

With regards to the mechanisms of coordination, there are some countries that are well established by the initial categorisation of Hall and Soskice (2001); Austria and Germany are clearly identified as CMEs and the UK as an LME. However, the rest of the countries under study in the YA research project have usually been identified as showing characteristics of both types of coordination. Based on the information collected in the nine national reports, we have located the different countries in the continuum between the LMEs and the CMEs. We understand that while LME and CME are extreme cases, there are a range of possible intermediate and mixed forms of coordinating the education and training systems with the firms. Figure 9 below shows the relative position of the countries under study in relation to this continuum and among them. This relative classification helps us understand the variety of mechanisms of coordination.

Austria and Germany are certainly classed as CMEs given their institutional arrangements between the social partners (administration, employers, and trade unions) and this is similar across regions, including federal or state level actors. Finland also presents a CME model based on institutional arrangements at the regional level, the regional institutions being the ones actually establishing the coordination. Portugal and, to a lesser extent, Bulgaria and Croatia present project- or initiative-based institutional arrangements of coordination, which do not address the coordination of the whole system, but a specific part. Similarly, Italy presents a pragmatic project- or initiative-based approach to coordination based on information sharing. Scotland is certainly closer to the LME model, as the coordination among actors is based on the information available on the labour market. In Scotland, some of the information gaps are covered by public agencies, aiming to address the market failure of asymmetric information. Beyond that, there are a series of soft institutional arrangements, based on regional groups or policy-directed boards that facilitate the exchange of information and collaboration when required. Spain also presents a mixed model, although in a different way to Scotland. In Spain the attempt to establish formal institutional arrangements is

stronger, but the flow of information and cooperation between the education and employment spheres is not smooth.

Figure 9: Relative position in the continuum between the LME and CME forms of coordination



Source: Authors' own elaboration, based on national reports.

In most countries with a limited development of institutional arrangements to coordinate the education and training system with the firms, the claim is that they should be further developed or established where non-existent. However, in countries where these are well established and present a long-run trajectory, the challenges focus on avoiding overlaps, redundancies and having a clear idea of the responsibilities of each actor. Further mechanisms to provide systematic information, to establish transparent communications and to allocate responsibilities are some of the suggested solutions to address these challenges. Nevertheless, these challenges seem to be less prominent in countries situated in an intermediate position, where the coordination is project- or initiative-based and the objectives on the allocation of tasks and responsibilities is usually clearer. Most of these projects and initiatives that address this specific type of coordination are funded by the ESF, suggesting that the monitoring and accountability process might be part of the explanation to encourage this type of strategic and effective coordination model.

Table 4 below summarises the classification of countries and FRs based on their levels and forms of coordination.

Table 4: Main characteristics of levels and mechanisms of coordination across FRs

Country	FR	Levels of coordination (type of localism)	Mechanisms of coordination
Austria	Upper Austria	Centrally managed – Democratic localism	CME, institutional coordination
	Vienna		
Bulgaria	Blagoevgrad	Centrally managed localism	Towards CME, project/task based coordination
	Plodiv		
Croatia	Istria-County	Centrally managed localism	Towards CME, project/task based coordination
	Osijek-Baranja County		
Finland	Kainuu	Democratic – laissez faire localism	CME, institutional coordination at the regional level
	Southwest Finland		
Germany	Bremen	Laissez faire localism	CME, institutional coordination
	Frankfurt Rhein-Main		
Italy	Genoa FR	Centrally managed – Democratic localism	LME, public-private partnerships and coordination based on information
	Milan FR	Laissez faire localism – Democratic localism	
Portugal	Alentejo Litoral	Centrally managed localism	Limited CME, institutional coordination
	Vale do Ave		
Scotland	Aberdeen City/shire	Centrally managed– Democratic localism	LME with ongoing institutional coordination
	Glasgow City Region		
Spain	Girona	Centrally managed – laissez faire localism	LME with attempts to address institutional coordination
	Málaga		

Source: Authors' own elaboration, based on national reports.

Skills (mis)matches

Finally, we focus the attention to the socioeconomic context across FRs and, especially, to the skills (mis)matches that might pose some challenges to the governance of the regional skills ecology. As argued in the analytical framework, beyond the skills (mis)matches from a functional perspective (i.e. high/low-equilibrium, shortages, surplus) we also consider other types of mismatches and their consequences, such as unemployment, skills underutilisation/overqualification, barriers to training and social mismatches.

Starting with the functional approach of skills (mis)matches, as suggested in Figure 10 below, most FRs experience some kind of skills shortage or gap in the region. While some of these shortages are related to specific sectors (e.g. oil and gas in Aberdeen, ICT in Plodiv and Glasgow, seasonal workers in Alentejo Litoral, textile and agriculture in Vale do Ave, metal and wood in Kainuu, marine and automobile in South West Finland, tourism and shipbuilding in Istria) in other cases it is related to the educational level (e.g. shortage of high-skilled workers in Vienna).

Most FRs experiencing skills shortages in a specific industry argue that young people do not find them attractive and interesting from a career perspective, mainly because of poor working conditions (i.e. temporary contracts, hard work, low-skilled) and/or low salaries. Hence, it poses the question of to what extent the cause of this skills shortage is more related to youths' employability or the aforementioned precarious working conditions. In the case of Vienna (Austria), the shortage of high-skilled people with higher education is partly related to the overall structure of the Austrian education system, which promotes middle level skilled education (i.e. VET), but limits the number of

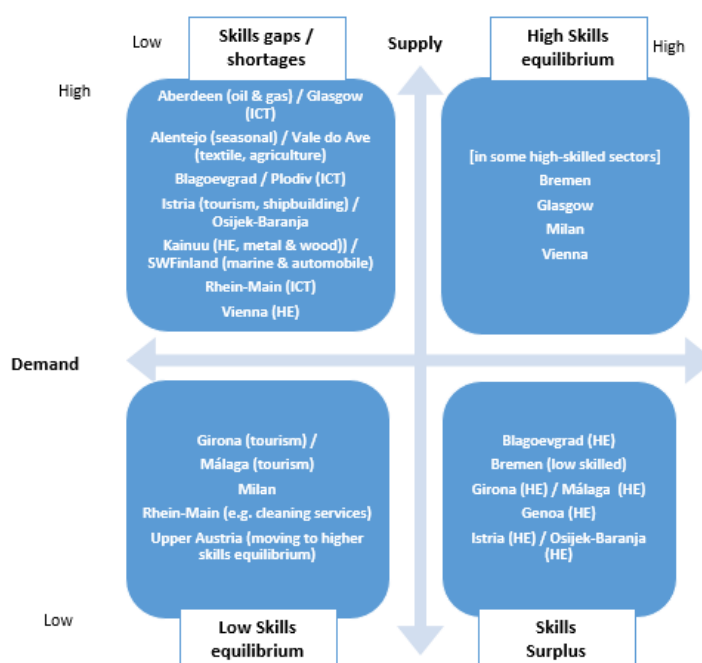
students and graduates in higher education to cover the labour market demands. The STEM sectors of the labour market are especially affected by this shortage, which is also partly influenced by the decreasing number of young people.

The other main type of mismatch experienced by some FRs is the skills surplus. Most of the FRs with skills surpluses are related to an excess of higher educated graduates (e.g. Blagoevgrad in Bulgaria, Genoa in Italy, Istria and Osijek-Baranja in Croatia, Girona and Málaga in Spain) which translates in some cases into overqualification among higher educated graduates (i.e. Blagoevgrad, Genoa, Girona and Málaga) or unemployment (i.e. Istria and Osijek-Baranja). Only the FR of Bremen (Germany) shows a skills surplus of low-skilled people in a region that is increasingly attracting more highly-skilled people.

Some of the FRs experiencing skills surpluses of higher educated people also experience low skills equilibrium (i.e. Girona and Málaga in Spain), suggesting that the prevalence of the low-skilled sector has enough room to include low-skilled people and those with higher levels of skills who might be overqualified for the job. In the FRs of Milan and Rhein-Main the low skills equilibrium does not seem particularly related to specific industries of the economy but to the services sector in general terms, while in Upper Austria what used to be a low skills equilibrium seems to be upgrading to a middle-high skills equilibrium.

Only the FR of Milan has explicitly mentioned in the national report a high skills equilibrium. However, it seems that the skills polarisation experienced in some urban FRs such as Bremen (Germany), Glasgow (Scotland) or Vienna (Austria), might also be experiencing high skills equilibriums in some specific high-skilled industries.

Figure 10: Functional approach to skills (mis)matches across FRs



Source: Authors' own elaboration, based on national reports.

The skills (mis)matches suggested by the functionalistic approach are also related to some social mismatches. For instance, the skills polarisation experienced in urban poles mentioned above are posing further challenges for low-skilled youths. While the number of young people with low skills levels might remain quite stable in these FRs, the difficulties they face are increasing due to the skills polarisation and the barriers to education and employment faced by the most disadvantaged. An example is the difficulty experienced to find an apprenticeship position in Bremen (Germany). Social background also seems to be a relevant indicator of limited chances in both Austrian FRs, as the early tracking of the education system promotes social stratification and the dual apprenticeships leads to a dead-end path. In Istria (Croatia) the difficulties faced by young people from disadvantaged backgrounds are more related to the limited public funding to enrol into VET in order to upgrade their skills. Thus, it suggests that barriers to education and training are a type of mismatch to be addressed to improve young peoples' skills.

Another social group affected to a larger extent by skills mismatches -- such as the low skilled equilibrium, unemployment or overqualification -- are youth with immigrant backgrounds, ethnic minorities and refugees. In Plodiv (Bulgaria) and Osjek-Baranja (Croatia) youths from the Roma community are more likely to experience the consequences of low-skilled (mis)matches, while in Bremen and Rhein-Main (Germany) and Vienna (Austria) non-EU migrants and refugees are more affected by these mismatches, while non-EU migrants experience similar situations in Girona (Spain) and Kainuu (Finland).

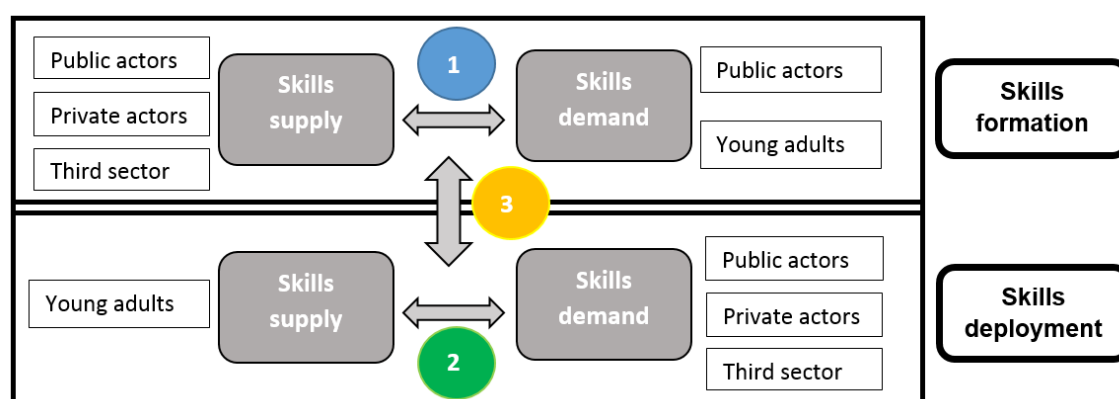
Finally, unemployment is also a consequence of some of the skills mismatches that affect some social groups to a larger extent than others, and this has a varying pattern across FRs. For instance, in Istria and Osjek-Baranja (Croatia) and in Genoa (Italy) unemployment hits higher educated youth harder, while in Girona (Spain) the prevalence of unemployment is larger among low-skilled women. Therefore, the same phenomenon seems to be affecting different social groups across FRs.

4. Regional Challenges and Responses across Skills Ecologies

The formal enactment of the national structures at the regional level can be considered fairly stable across FRs. As discussed in the previous section, the national and regional institutional arrangements of the skills formation systems and their levels and forms of coordination do not vary greatly, neither within nor between countries. However, the actual functioning of these institutions, the relationship between actors involved in the skills system and the influence of these interactions on young adults' lives are very much affected by structural and contextual regional factors.

Across the FRs studied in the YA research project, we identify a set of regional challenges perceived by key regional actors interviewed that can be classified into three groups. These three groups refer to the key transitions presented in the mapping of actors. As shown in Figure 11 below, the *first* transition concerns the governance of the LLL system, referring to the educational and learning pathways available and previewed and available in the regional system; the *second* transition tackles the governance of the transition from the education system to the labour market, which can take place in different educational stages; while the *third* transition highlights the relevance of the skills formation for the regional labour market needs, how this (mis)match is governed and if there are any institutional actors dealing with it.

Figure 11: Skills system and key transition challenges



Source: Authors' elaboration, based on Green, F. (2013).

In the following subsections we classify the regional challenges identified by key regional actors into these three transitions. Regardless of the similar institutional setting across regions, the way FRs address these challenges varies depending on their socioeconomic structure, the policy orientations of regional actors, the regional governance in vertical (centralisation/decentralisation) and horizontal (public/private) terms and the mechanisms they have in place. Similarities and differences across regions facing similar challenges, and the solutions proposed, are discussed in the forthcoming sections on the basis of socioeconomic, political and governance factors.

4.1. Lifelong Learning system: educational and learning pathways

Education and training systems are well established institutions in all countries under study. As discussed earlier, there are very limited differences between the regional education and training systems of the same country, suggesting that institutional arrangements are mainly directed at the national/federal/central level. Although all countries and FRs have stated that there is some kind of intermediary institution between the supply and demand for skills formation, this does not assure that all challenges are successfully addressed. A number of issues mentioned by key regional actors refer to the transitions in the skills formation area. While some of them relate to the structure of the system, others allude to the funding of education and training.

Starting with the structure of the education system, the early tracking of the Austria education system pose some restrictions for the FR of Vienna. One of the challenges of the region is to enable young adults to continue into the education system to attain medium- and high-level qualifications. Young people from more disadvantaged backgrounds are usually sorted into VET tracks or in dual apprenticeships, which in the latter case direct to a dead-end once completed, with limited possibilities to upgrade their knowledge and skills. Similarly, in the FR of Bremen the trend towards the academisation of education to meet the increasing demand for high skills in the region is posing challenges to those young adults who are non-academic with low skills levels. However, this is not what youths experience in the corresponding national partner FR of Upper Austria and Rhein-Main. Thus, it suggests that the Austrian and German LLL systems struggle in providing second opportunities for skills upgrading in dynamic urban regions with a higher demand for high skills. However, it is worth pointing out that responses to this challenge can be addressed, such as the Olov Strategy in Rhein-Main FR, which supports youths in their educational and career choices. In Scotland, the educational pathways are more flexible. One of the current policies in place - Developing the Young Workforce (DYW) - aims at ensuring that all youths experience at least one

learning component in their daily activities once they leave compulsory education, either in school- or work-based learning.

In the Portuguese region of Alentejo Litoral the absence of higher education institutions somewhat limits the possibilities of young adults to enrol in this educational level. Youths who are willing to go to university have to move to other regions, this being a constraint for the most disadvantaged young adults. Although the regional labour market needs do not concentrate on the high tier of the skills hierarchy, the absence of higher education institutions in the region might be slowing down the development of the region and the educational opportunities of youths, in contrast with the corresponding Portuguese FR of Vale do Ave.

Finally, another of the challenges pointed out in several regions for different reasons is the funding of the VET system. In the Croatian FR of Istria the very limited public funding of VET makes youths dependent on their private funding to undergo VET, creating a huge barrier for financially disadvantaged youths. In the Vienna FR the sharing of existing funding with newcomers to the system (i.e. non-EU migrants and refugees) is creating some tensions among groups, while in the Spanish FR of Málaga since 2011 the funding of some of the VET programmes stopped due to management, monitoring and accountability problems with national and ESF funding for these courses. A number of FRs have mentioned the relevance of ESF for the regional VET system (e.g. Blagoevgrad in Bulgaria), without which youth opportunities in the region would have been scarce or non-existent.

4.2. Education to work transitions

In contrast to the LLL system, the transition from education to the labour market is less dependent on state/federal/central institutional arrangements and there is room for regional and local flexibility to target regional needs. Most FRs under study have recognised the presence of institutions mediating and/or supporting youths in their transition from education to the labour market, but a series of challenges remain in this complex transition, with the exception of the Bulgarian FR of Plodiv and the Portuguese FRs of Alentejo Litoral and Vale do Ave. Policymakers interviewed in some FRs (e.g. Istria in Croatia or Girona in Spain) have clearly stated that there is a clear lack of coordination and connection between the educational and labour spheres. The main challenges regarding this transition refer to two main topics: 1) the apprenticeship system as a way to smooth the transition from education to work; and 2) the tension between improving youth employability and dealing with the existent labour demand.

Starting with the apprenticeship system, some FRs with an underdeveloped VET and/or apprenticeship system recognise it as the main cause of the struggle for disadvantaged youths to get a job in the region (e.g. Blagoevgrad in Bulgaria, Genoa more than Milan in Italy, Osijek-Baranja in Croatia). The assumption is that a more developed VET system which includes apprenticeships will improve youths' work-related skills and function as a screening process for employers to later hire them on a full-time and permanent basis. However, the limitations of this system are not usually taken into consideration. FRs with a more developed VET and apprenticeship scheme in place face a series of challenges that are worth sharing with the rest. For instance, in the case of Bremen (Germany) or Vienna (Austria) there are not enough vacancies available to place all students. In the Aberdeen FR (Scotland) one of the consequences of the recent oil and gas crisis has been the scarcity of available apprenticeships vacancies for all youths. The result is that the most socially disadvantaged young adults with lower skills levels are left without a placement. In contexts where the apprenticeship system is the norm, employers consider the successful attainment of the

apprenticeship as a basic requirement to be considered for a job. Therefore, the system establishes some barriers that affect to a larger extent the most disadvantaged youth. Concerns have also been directed towards the quality assurance of the VET system (e.g. Vienna) and how to monitor the process.

The second challenge mentioned in several FRs is the existing tension between the employability skills of youths and the existing labour market demands. While in some cases efforts are directed to improve youths' employability skills to meet labour market demands (e.g. Girona in Spain, Genoa in Italy, Istria in Croatia) in others the main claims are directed to the limited, or absence of, labour market opportunities in the region (e.g. Aberdeen in Scotland, Blagoevgrad in Bulgaria, Kainuu in Finland). Even if in the latter FRs employability initiatives targeted to youths are also in place, they place more weight on the demand rather than the supply side of the problematic transition from school to work. Although it is obvious that employability measures are more feasible from a public authority perspective than a regional labour market intervention, it is worth pointing out that the challenge for the school to work transition does not only remain on actions on the supply side, but also on the demand one.

In some cases the labour demand struggles to fill some vacancies which are considered hard to fill. One of the good practices mentioned to address this mismatch is the "Dote Unica" policy in the Milan FR (Italy), which aims at retraining and supporting people to get ready for these vacancies. It also considers active labour market activities, supporting people throughout their working lives. Instead of funding training courses, funds are directly allocated to the workers who can choose to spend it in a range of services, including training courses. Another example is the Vienna Employment Promotion Fund (WAFF), which funds education and training for employed people, trying to further align employees' skills with the ones demanded in the labour market.

Regional data systems providing information on current skills supply and demand are in place and have been deemed useful in several regions (e.g. Aberdeen and Glasgow in Scotland, Kainuu and Southwest Finland, Rhein-Main in Germany). However, the limitations of these labour intelligence systems have also been stressed, as their slow pace do not display or respond to rapid socioeconomic and labour shocks, and struggles with the forecasting of future skills needs.

4.3. Relevance of education and skills for the labour market

One of the main problems concerning the regional skills ecologies is to what extent what is taught and learnt in the skills formation system is relevant to the regional labour market demands. Although all FRs – with the exception of the Croatian ones – have referred to institutions working towards the relevance of education and skills to meet the labour market needs, the main tension remains between the interests of public institutions promoting and funding general skills formation and the employers' needs for occupation, industry and firm-specific skills. To what extent public funding should be used to serve private employers' interests is one of the questions raised in some national reports (i.e. Vienna and Finnish regions).

A cross-cutting topic mentioned in some form in all FRs is the perceived relevance of the so-called soft, transversal, communication and discipline skills among employers. Beyond technical knowledge and skills, employers appreciate and require youths who can effectively communicate, behave and follow orders, as well as commit and have positive attitudes towards work. Nevertheless, the debate continues in terms of who is responsible for promoting these skills, what exactly is the reasonable degree of "maturity" to be required of a young adult, and what would be the appropriate degree of commitment to precarious jobs (e.g. low wage, fix-term contracts, unskilled, seasonal).

Some of the commonalities detected across FRs is that cities are poles of attraction for high-skilled demand -- especially in the business and ICT sectors -- but these also inevitably coexist with a contrasting share of low-skilled demand – especially in the service sector (e.g. Bremen in Germany, Glasgow in Scotland, Milan in Italy, Vienna in Austria). How desirable it is from a public perspective to meet the regional labour demands of low-skilled jobs remains debatable, as from a short-term perspective it might raise youths' employment figures, but also trap them in low-skilled jobs in the long-term perspective.

Common challenges also emerge among FRs that have a predominant employment sector: the oil and gas industry in Aberdeen FR (Scotland), agriculture and tourism in Alentejo Litoral (Portugal), tourism in Girona and Málaga (Spain), shipbuilding and tourism in Istria (Croatia), metal and wood in Kainuu and automobile and marine industries in Southwest Finland are the predominant sectors identified among the FRs under study. The challenge faced by all these regions is that the regional labour needs are concentrated in this sector. Tailoring the skills formation system to meet the needs of these specific sectors facilitates employment in the region. Further development of the VET system at the regional level might help to meet the regional labour market demands. Nevertheless, the employment dependence on specific industries and sectors is also accompanied by their negative characteristics, such as the seasonality of agriculture, the low-skilled equilibrium of tourism or the hard conditions of the metal and wood industries. Moreover, the dependence on a single regional industry or sector of the economy makes youths more vulnerable to exogenous changes (e.g. oil and gas crisis in Aberdeen) and might promote unbalanced demographic structures in terms of gender and age (e.g. oil and gas crisis in Aberdeen, metal and wood industry in Kainuu).

5. Conclusions

The intention of this *WP6 International Report* is to bring together and compare the descriptions and understandings of the regional governance of the skills supply and demand across the FRs under study. Based on the information gathered in the nine national reports - including two FRs per country - we identify patterns of similarities and differences across the FRs that help us describe and understand different forms of regional governance of skills ecologies. We pay attention to the mapping of actors involved in the skills system, their policy orientations and the levels and mechanism of coordination among them in a range of regional socioeconomic contexts.

One of the main conclusions that we can draw from the analysis is that the formal institutional arrangements are not particularly different across countries and that they are certainly very similar (or the same) in FRs within the same country. However, the enactment of policies, initiatives and the governance at the regional level are very much influenced by the socioeconomic context of the region. Skills formation systems are quite similar within countries, but regional labour markets and skills mismatches experienced differ in many cases. Therefore, it seems plausible that regions in the same country face different challenges or that they address them in a different way.

The role of the regions in the overall governance remains under debate. It seems that the underlying assumption in most countries is that regional and local authorities will adapt the national mechanisms and institutional directions to the regional labour market needs. But how they should do it and with which resources remains undiscussed.

The challenges FRs are facing in relation to the regional governance of their skills ecologies have been differentiated based on three key transitions identified in the mapping of actors. The first refers to the articulation of the LLL system in the region and the barriers it poses to young adults. The skills formation systems are mainly constructed on a national basis and similarities between FRs in the same country are the common norm. This is where less overall challenges and less within-country differences have been encountered. In some countries the main threat is the rigid educational pathways leading to dead-ends or to educational tracks with limited possibilities to move forward, which become a trap for skills upgrading for the most disadvantaged youths. The role of the ESF has also been discussed, as it has been mentioned as a very relevant source of funding for several FRs, but the question remains as to what extent regions should depend on European funding or be able to sustain themselves in the long term.

The second key transition where challenges have been identified is the education to work transition experienced by youths in the regions. The education and labour market spheres are largely disconnected in several regions. While in countries with less developed VET systems and apprenticeship schemes its development is regarded as the only way to smooth youth transition to the labour market, those regions where VET and apprenticeships have a long-standing record struggle with the scarcity of vacancies to place students and the quality of the training. Unsurprisingly, the most socially disadvantaged youths are the most affected ones.

The other discussion with regards to the education to work transition has focused on the tension between youths' employability skills and the scale and quality of the labour market demands. While in some regions the solution proposed is to improve youths' skills to meet the labour market demands, it is not always clear if this will improve their chances to get a job, or if the problem is in the limited number of jobs available in some regions or the precarious working conditions offered in the predominant sectors, which youths do not find attractive.

Finally, the discussion has focused on the relevance of the content and type of skills formation for the regional labour market needs. In most regions the tension identified is to what extent the publicly-funded skills formation system should serve the needs of the private employers, even if it promotes youth employment. While most public authorities would provide general skills, employers are more interested in occupation, industry and firm-specific skills. The tension is even stronger in those regions where there is a predominant industry or sector (e.g. oil and gas, tourism, metal industry) as it might be the only feasible source of employment opportunity. However, the dependence of employment in a single industry or sector makes youths also more vulnerable to its negative characteristics, such as poor working conditions or the vulnerability caused by exogenous shocks.

A cross-cutting issue across regions and countries is the employers' wish list with regards to youths' transversal and soft skills, as well as their positive attitudes and commitment to work. The debate remains open and unsolved as to what extent public institutions have to consider transversal and soft skills in skills formation systems and to what extent employers' claims might realistically fit with the standard level of maturity among youths at that life stage and the working conditions offered to them.

We believe this exercise has shed some light on the scarce evidence and analysis on regional governance of skills supply and demand. The similarities and differences detected across regions from the same and different countries suggests that policy borrowing is not to be taken for granted even within the same country and policy learning is to be stressed from similar regions across countries.

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Annex

Table 5: Affiliations corresponding to people interviewed by country and FR

Country	Functional Region	Semi-structured Interviews
Austria	Upper Austria	<ul style="list-style-type: none"> - Upper Austrian Administration (Amt der oberösterreichischen Landesregierung) - Upper Austrian Forum for Adult Education (Erwachsenenbildungsforum Oberösterreich) - Upper Austrian Public Employment Service (Arbeitsmarktservice Oberösterreich) - Upper Austrian Chamber of Labour (Arbeiterkammer Oberösterreich) - Institute for Business Development (Wirtschaftsförderungsinstitut, WIFI)
	Vienna	<ul style="list-style-type: none"> - Municipality of Vienna (Stadt Wien) - Vienna Employment Promotion Fund (Wiener Arbeitnehmerförderungsfond, WAFF) - Vienna Public Employment Service (Arbeitsmarktservice, AMS) - Federal/Vienna Chamber of Labour (Kammer für Arbeiter und Angestellte, AK) - Vienna Chamber of Commerce (Wirtschaftskammer Wien, WK)
Bulgaria	Blagoevgrad	<ul style="list-style-type: none"> - Employment Agency Directorate, Blagoevgrad - Agency for Social Assistance, Blagoevgrad - Municipality of Petrich; - Directorate for Education, Blagoevgrad - Trade Union of South-West University
	Plovdiv	<ul style="list-style-type: none"> - Municipality of Plovdiv - Plovdiv Labour Office - Land Source of Income Foundation - Center "Education for Democracy"
Croatia	Istria	<ul style="list-style-type: none"> - Croatian Employment Service – Regional Office Pula - Administrative Department for Education, Sport and Technical Culture (Pula) - Open Public University - Istrian Chamber of Trades and Crafts
	Osijek-Baranja	<ul style="list-style-type: none"> - Croatian Employment Service – Regional Office Osijek - Open Public University - Administrative Department for Education, Sport and Technical Culture of Osijek-Baranja County - Chamber of Trades and Crafts of the Osijek-Baranja County
Finland	National	<ul style="list-style-type: none"> Finnish National Agency for Education Ministry of Economic Affairs and Employment Ministry of Education and Culture
	Kainuu	<ul style="list-style-type: none"> Regional Council of Kainuu Employment and Economic Development Services (TE Office) Centre for Economic Development, Transport and the Environment (ELY Centre)
	Southwest Finland	<ul style="list-style-type: none"> Regional Council of Southwest Finland Employment and Economic Development Services (TE Office) Centre for Economic Development, Transport and the Environment (ELY Centre)
Germany	Bremen	<ul style="list-style-type: none"> - State Government of Education in Bremen - German Trade Union Confederation office Bremen - Chamber of Crafts in Bremen - Jobcentre office Bremen
	Rhein-Main	<ul style="list-style-type: none"> - Chamber of Industry and Commerce office Frankfurt - Hessian Strategy for Employment OloV - Hessian Industry's education organization - Federal Employment Agency office Frankfurt
Italy	Genoa	<ul style="list-style-type: none"> -Regional Assessor for the Vocational Training and Youth policies, Regione Liguria -Regional Assessor for Employment policies, Regione Liguria - Municipal Assessor for Economic Development Programming and Labour Policies - Director of strategic planning, smart city, innovation of business and statistics sector, Genoa Municipality - Manager of Job Centre, Institution supervised by the Genoa Municipality - General Secretary of Chamber of Commerce of Genoa - Manager of Confindustria Liguria and Confindustria Genoa

		- The Labor Union CISL Liguria
	Milan	- Regional Councillor for Education, Training and Employment, Regione Lombardia - Vice President ARIFL Regional Agency of Education, Training and Employment, Regione Lombardia - Councillor for Labour policies, Productive Activities, Commerce and Human Resources Municipality of Milan - President of Chamber of Commerce of Metropolitan area of Milan - President of Assolombarda, Lombardy Employers Federation - Secretary General of CGIL Milano metropolitan area
Portugal	Alentejo Litoral	- CCDR Alentejo – Coordination Commission of the Regional Development in Alentejo - Alentejo Regional Delegation of the IEFP – Employment and Professional Training Institute - Alentejo Litoral Employment Centre and Training Centre of the IEFP
	Vale do Ave	- North Regional Delegation of the Institute of Employment and Professional Training (IEFP) - Agency for Regional Development (ADRAVE) - Vale do Ave Intermunicipal Community (CIM-AVE)
Scotland	Aberdeen City & Aberdeenshire Region	- Employability, Skills and Community Enterprise Officer, Aberdeen City Council - North East Region, Skills Development Scotland - Regional Skills Planning, Skills Development Scotland - Aberdeen & Grampian Chamber of Commerce, Developing the Young Workforce North East Region - Scottish Learning Union
	Glasgow City Region	- Employment and Skills Officer, Glasgow City Council - Regional Skills Planning, Skills Development Scotland - Developing the Young Workforce, Glasgow Chamber of Commerce - Glasgow Colleges' Regional Board - Glasgow Kelvin College - Scottish Learning Union
Spain	Girona	- Employment Service of Catalonia - Comissions Obreres Catalunya (Trade Union) - Chamber of Commerce of Girona - Salt City Council
	Málaga	- Department of Education, Andalusian Government. - Andalusian Employment Service of Málaga. - Intermediation and Labour Insertion Service of the provincial management of Andalusian Employment Service of Málaga. - Promotion of Employment of the provincial management of Andalusian employment Service of Málaga. - FOREM-Andalusia. Málaga (Comisiones Obreras) - Businesses owner

Source: Authors' own elaboration, based on WP6 National Reports.

Table 6: Grey literature reviewed by country and FR

Country	Functional Region	Grey literature
Austria	National	<ul style="list-style-type: none"> - Schmid, Kurt; Winkler, Birgit; Gruber, Benjamin (2016b) Skills for the Future. Zukünftiger Qualifizierungsbedarf aufgrund erwarteter Megatrends. Analysen und Befunde auf Basis der IV-Qualifikationsbedarfserhebung 2016. ibw-Forschungsbericht Nr. 187, Institut für Bildungsforschung der Wirtschaft (ibw), Wien. - Schmid, Kurt; Winkler, Birgit; Gruber, Benjamin (2016a) Skills for Today. Aktueller Qualifikationsbedarf und Rekrutierungsschwierigkeiten. Analysen und Befunde auf Basis der IV-Qualifikationsbedarfserhebung 2016. ibw-Forschungsbericht Nr. 185, Institut für Bildungsforschung der Wirtschaft (ibw), Wien. - Lassnigg, Lorenz; Skriner, Edith; Bock-Schappelwein, Julia; Horvath, Thomas (2013) Analyse der Datengrundlage zum künftigen Qualifikationsangebot und –bedarf in Österreich. Projektbericht. Im Auftrag der Kammer für Arbeiter und Angestellte für Wien. AK Wien, Wien.
	Upper Austria	<ul style="list-style-type: none"> - Arbeitsmarktservice Österreich (2017b) AMS-Qualifikationsstrukturbericht 2015 für das Bundesland Oberösterreich. Arbeitsmarktservice Österreich, Wien. - Schneeberger, Arthur; Dornmayr, Helmut; Petanovitsch, Alexander; Nowak, Sabine (2012) Fachkräftebedarf der Wirtschaft in Oberösterreich. Trends und Perspektiven. ibw-Forschungsbericht Nr. 168, Institut für Bildungsforschung der Wirtschaft (ibw), Wien.
	Vienna	<ul style="list-style-type: none"> - Arbeitsmarktservice Österreich (2017a) AMS-Qualifikationsstrukturbericht 2015 für das Bundesland Wien. Arbeitsmarktservice Österreich, Wien. - Schneeberger, Arthur; Petanovitsch, Alexander (2010) Bildungsstruktur und Qualifikationsbedarf in Wien. Trendanalysen und Zukunftsperspektiven. ibw-Forschungsbericht Nr. 159, Institut für Bildungsforschung der Wirtschaft (ibw), Wien.
Bulgaria	Blagoevgrad	<ul style="list-style-type: none"> - Regional Skills Assessment, Blagoevgrad Region, Survey, 2014, SWU. - Study on Employers' support for staff training, 2015, Institute for Market Economics. - Survey on Qualification of employees, Bulgarian Industrial Association, 2016. - International Survey for skills, 2016, Institute for Market Economics.
	Plovdiv	<ul style="list-style-type: none"> - Internal information, Directorate Labour Office - Plovdiv, 2017. - Assessment of the competences of the labour force by branches and regions, Project "MyCompetence", 2015. - Paper "The Importance of Skills for the Work Realisation in Bulgaria", the World Bank 20016. - Indicators of the efficiency of the professional education in Bulgaria, OP "Development of Human Resources" 2007-2013. - Year Review of the Active Policy Performance on the Labour Market in the Plovdiv Region, Regional Employment Agency Directorate, 2016.
Croatia	National	<ul style="list-style-type: none"> - Croatia skill supply and demand up to 2025. (2015). CEDEFOP. - Monthly Statistics Bulletin (12, 2016), Croatian Employment Service. - Statistical Yearbook of the Republic of Croatia. (2016). Croatian Bureau of Statistics. [Scientific articles] - Bejaković, P. and Mrnjavac, Ž. (2014). Skill Mismatches and Anticipation of the Future Labour Market Need: Case of Croatia. Zagreb International Review of Economics & Business. 17 (1), pp. 47 -68. - Bejaković, P. and Mrnjavac, Ž. (2016). Nezaposlenost mladih i mjere za njezino ublažavanje u Hrvatskoj. Političke analize, 7(27), pp. 32 – 38. - Tomić, I. (2015). Zaposlenost i nezaposlenost u Hrvatskoj – stanje, trendovi i kontekst. Zagreb: Hrvatska gospodarska komora. pp. 21 – 38.
	Istria	<ul style="list-style-type: none"> - County development strategy of Istria County until 2020. - Monthly Statistics Bulletin (12, 2016), Croatian Employment Service: Regional Office Pula.
	Osijek-Baranja	<ul style="list-style-type: none"> - Draft of Human resources development strategy of the Osijek-Baranja County (2011 – 2013) - Monthly Statistics Bulletin (12, 2016), Croatian Employment Service: Regional Office Osijek
Finland	National	<ul style="list-style-type: none"> - ETLA. Research Institute of Finnish Economic Research Projects. https://www.etla.fi/en/ - Finnish Ministry of Education and Culture http://minedu.fi/en/frontpage - Finnish National Board of Education, www.oph.fi/english - Hanhijoki, I., Katajisto, J., Kinnari, M. & Savioja, H. (2011) Koulutus ja työvoiman kysyntä 2025 – Ennakointiloksia tulevaisuuden työpaikoista ja koulutustarpeista. Helsinki: Opetushallitus. - MEAE. Ministry of Economic Affairs and Employment (https://tem.fi/en). - MEAE (2016) Annual Labour Market Training Statistics for 2015. Helsinki: The Ministry of Economic Affairs and Employment. - Tuomaala, Mika (2016) Kysynnän ja tarjonnan kohtaanto nykyisillä ja tulevilla työmarkkinoilla.

		<p>Tilannetta ja näkymiä keväällä 2016. Helsinki: Ministry of Employment and Economy - VATT institute of economic research and national audit office of Finland www.vatt.fi/e.</p>
	Kainuu	<p>- Kainuu Social Welfare and Health Care Joint Authority (2014) The Child and Youth Welfare Plan of Kainuu 2014-2015. - Centre for Economic Development, Transport and the Environment of Kainuu. http://www.ely-keskus.fi/en/web/ely-en/ - Oulu Chamber of Commerce https://www.oulunkauppakamari.fi/?id=74&lang_id=1 - Regional Council of Kainuu. https://www.kainuunliitto.fi/en/regional-council-of-kainuu - Regional Council of Kainuu (2015) Kainuu Programme. Regional Plan 2035, Regional Programme 2014-2017. - Regional Council of Kainuu (2016) The strengths, weaknesses and challenges of Youth Services in Kainuu. Report 03/2016.</p>
	Southwest Finland	<p>- Centre for Economic Development, Transport and the Environment of Southwest Finland http://www.ely-keskus.fi/en/web/ely-en/ - Centre for Economic Development, Transport and the Environment of Southwest Finland (2013) Education Strategy of Southwest Finland 2015. Reports 51/2013. - Occupational barometers of Southwest Finland. - Regional Council of Southwest Finland. http://www.varsinais-suomi.fi/en/ - Regional Council of Southwest Finland (2010) Compass to the future. Regional plan of Southwest Finland 2030. Regional Programme 2011-2014. - Regional Council of Southwest Finland 2014. Regional Strategy of Southwest Finland. - Regional plan 2035+. Regional Programme 2014–2017. (Varsinais-Suomen maakuntastrategia.) http://www.varsinais-suomi.fi/fi/tehtavaet-jatoiminta/maakuntastrategia - Turku Chambers of Commerce https://turunkauppakamari.fi/en/front-page/</p>
Germany	National	<p>- Autorengruppe Bildungsberichterstattung (2016). Bildung in Deutschland 2016. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration. - Bundesagentur für Arbeit (2017c) Arbeitslose nach Personengruppen - Arbeitslose insgesamt (Monatszahlen). - Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR) (ed.) (2016). Indikatoren und Karten zur Raum- und Stadtentwicklung. INKAR. Ausgabe 2017, Bonn. © 2017 Bundesamt für Bauwesen und Raumordnung, Bonn. - Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR) (ed.) (2016). Indikatoren und Karten zur Raum- und Stadtentwicklung. INKAR. Ausgabe 2017, Bonn. - Bundesinstitut für Berufsbildung (BiBB) (2017a). Über das BiBB. - Bundesinstitut für Berufsbildung (BiBB) (2017b). Verzeichnis der anerkannten Ausbildungsberufe. - Bundesministerium für Arbeit und Soziales (BMAS) (2017). Arbeitsrecht. Informationen für Arbeitnehmer und Arbeitgeber, Bonn. - Bundesministerium für Bildung und Forschung (BMBF) (2016). Berufsbildungsbericht 2016. - Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung (BLK) (2004). Strategie für Lebenslanges Lernen in der Bundesrepublik Deutschland. Bonn. - Deutscher Industrie- und Handelskammertag (DIHK) (2017). Ausbildung. Ergebnisse einer DIHK-Online-Unternehmensbefragung. - Eurydice (2017). Description of National Education Systems: Germany. - Organisation for Economic Co-operation and Development (OECD) (2010). OECD Economic Surveys: Germany 2010, Volume 2010/09, March 2010. - Organisation for Economic Co-operation and Development (OECD) (2017). OECD Indicators of Employment Protection.</p>
	Bremen	<p>- Agentur für Arbeit Bremen – Bremerhafen, Jobcenter Bremen & Jobcenter Bremerhafen (ed.) (2016). Bildungszielplanung 2017, Bremen. Agentur für Arbeit Bremen-Bremerhafen. - Arbeitnehmerkammer Bremen (Ed.) (2015). Dranbleiben! Prävention und Intervention zur Vermeidung von Ausbildungsabbrüchen im Land Bremen. - Deutscher Gewerkschaftsbund-Jugend Niedersachsen – Bremen – Sachsen-Anhalt (ed.) (2016). Ausbildungsreport Niedersachsen – Bremen 2016, Hannover. - Deutscher Gewerkschaftsbund-Jugend Niedersachsen – Bremen – Sachsen-Anhalt (ed.) (2016). Ausbildungsreport Niedersachsen – Bremen 2016, Hannover. - Jobcenter Bremen (2016). Arbeitsmarkt- und Integrationsprogramm 2016, Bremen. - Metropolregion Nordwest (2017). Regionalmonitoring.</p>
	Rhein-Main	<p>- Bundesagentur für Arbeit (2017a) Bewerber für Berufsausbildungsstellen (Monatszahlen).</p>

		<ul style="list-style-type: none"> - Bundesagentur für Arbeit (2017d). Statistik nach Regionen. Arbeitsmarkt im Überblick - Berichtsmonat August 2017 - Frankfurt am Main, Stadt. - Deutscher Gewerkschaftsbund-Jugend Hessen-Thüringen (ed.) (2013). Ausbildungsreport Hessen 2013, Frankfurt am Main. Fachkräftemonitor Hessen. - Industrie- und Handelskammern Darmstadt Rhein Main Neckar, Frankfurt am Main, Fulda, Gießen-Friedberg, Hanau-Gelnhausen-Schlüchtern, Kassel-Marburg, Lahn-Dill, Limburg a. d. Lahn, Offenbach am Main & Wirtschaftsforschungsinstitut WifOR (eds.) (2017). Fachkräftemonitor Hessen. - Initiative Wissensregion FrankfurtRheinMain (WiR) c/o Industrie- und Handelskammer Frankfurt am Main (2016). Wissensbilanz 2016. Benchmark-Studie: FrankfurtRheinMain und die deutschen Metropolregionen, Frankfurt am Main. - Jobcenter Frankfurt am Main (2016). Arbeitsmarkt- und Integrationsprogramm sowie geschäftspolitische Zielsetzung 2016, Frankfurt am Main. - Regionalverband FrankfurtRheinMain (2016). Regionales Monitoring 2016. Daten und Fakten – Regionalverband FrankfurtRheinMain, Frankfurt am Main. © 2016 Regionalverband FrankfurtRheinMain. - Stadt Frankfurt am Main (2017a). Berufliche Schulen – eine Übersicht. Website of City of Frankfurt. - Stadt Frankfurt am Main (2017b). Studium. Website of City of Frankfurt.
Italy	Genoa	<ul style="list-style-type: none"> - The job demand in Liguria for youth, The employment outcomes of Triennali courses from 2009 to 2013, Liguria Region - Labor Market Observatory and Monitoring and Analysis Service, October, 2015. - The occupational and educational needs of Italian companies in industry and services sectors. Excelsior Informative System. Summary of the main results. Liguria Region. Unioncamere, Roma, 2016. - The employment after the studies. The demand for graduates and graduates in 2016. Unioncamere, Roma, 2016. - Excelsior Informative System. Professional and educational needs for 2016. Commercial and Tourist sector. Unioncamere, Roma, 2016. - Excelsior Informative System. Professional and educational needs for 2016. ICT sector. Unioncamere, Roma, 2016. - I NEET in Liguria (years 2004-2016). ALFA, Labor Market Observatory, May, 2017.
	Milan	<ul style="list-style-type: none"> - Open data Job Market Lombardia – Regione Lombardia – CRISP Banca d'Italia: Regional Economics. Lombardy. 2017. - The occupational and educational needs of Italian companies in industry and services sectors. Excelsior Informative System. Summary of the main results. Liguria Region. Unioncamere, Roma, 2016. - The employment after the studies. The demand for graduates and graduates in 2016. Unioncamere, Roma, 2016. - Excelsior Informative System. Professional and educational needs for 2016. Commercial and Tourist sector. Unioncamere, Roma, 2016. - Excelsior Informative System. Professional and educational needs for 2016. ICT sector. Unioncamere, Roma, 2016. - Eupolis Lombardy Report 2016. - Assolombarda: Industry 4.0 and educational system, 2017.
Portugal	Alentejo Litoral	<ul style="list-style-type: none"> - Análise prospetiva da evolução sectorial em Portugal (Prospective analysis of sectorial development in Portugal), ANESPO & ANQ (Nacional Agency for Qualification), 2016 - Zooms Territoriais – práticas de gestão da oferta e da procura de Qualificação de Adultos (Territorial Zooms - supply and demand management practices for Adult Qualification), Observatório do QREN, 2012 - laws regulating entities like the IEF, SANQ, CIMAL and Human Capital ESF funding: <ul style="list-style-type: none"> . Circular nº 1/ANQEP/2015 . Decreto-Lei nº 37/2015 de 10 de março . IEF. Lista de Áreas Prioritárias (Priority Areas's list) . Portaria nº 319/2012 of 12 of October . Portaria nº 60-A/2015, of 2nd of March . Lei nº 75/2013, of 12 of September . Portaria nº 60-C/2015 de 2 of March . Sistema de Antecipação das Necessidades de Qualificações (SANQ) (System of Qualification's Needs Forecast) - DGEST 2015. Relatório de escola do questionário estudantes à entrada do secundário

		2013/14 (School Report of the Student's Survey at the entrance of the Secondary Education) - INE. 2013. Destaque Conta Satélite da Economia Social. (Feature on the Satellite Account on Social Economy)
	Vale do Ave	- Relevância Regional das Qualificações de Nível 4 (regional relevance of level 4 qualifications for Vale do Ave), CIM Ave (Vale do Ave Intermunicipal Community) 2016. - Análise prospetiva da evolução sectorial em Portugal (Prospective analysis of sectorial developments in Portugal), ANESPO & ANQ (Nacional Agency for Qualification), 2016. - Zooms Territoriais – práticas de gestão da oferta e da procura de Qualificação de Adultos (Territorial Zooms - supply and demand management practices for Adult Qualification), Observatório do QREN, 2012.
Scotland	Aberdeen City & Aberdeenshire Region	- Regional Skills Assessment, Aberdeen City & Shire Region, November 2014, SDS (Skills Development Scotland, 2014). - Aberdeen City Council Sector Skill Needs Audit, January 2015, Aberdeen City Council (Farquhar, 2015). - Employers Skills Survey 2015, Scotland Slide Pack, May 2016, UKCES (UK Commission for Employment and Skills, 2016).
	Glasgow City Region	- Regional Skills Assessment, Glasgow Region, November 2014, SDS (Skills Development Scotland, 2014). - Employers Skills Survey 2015, Scotland Slide Pack, May 2016, UKCES. - Improving Skills Utilisation in the UK – Some Reflections on What, Who and How?, August 2016, SKOPE (Keep, 2016). - Modern Apprenticeships Case Studies, Practical Workplace examples, April 2014, SUL-STUC (Scottish Union Learning -STUC, 2014).
Spain	Girona	- Pla Nacional de Joventut, Catalonia, 2010, Generalitat de Catalunya. - Plans Locals de Joventut (Girona, 2016; Salt, 2016; Roses, 2016; Lloret de Mar, 2016 and Banyoles, 2012). - El acceso de la juventud en situación de exclusión a los Programas de Empleo Juvenil, Spain, June 2017, EAPN. - Desenvolupament de la Garantia Juvenil a Catalunya: Caracterització de la població i disseny de l'avaluació d'impacte, Barcelona, November 2016, SOC. - Situació i necessitats de la joventut a les Comarques Gironines, Barcelona, December 2014, Institut d'Anàlisi Social i Polítiques Públiques - Fundació Ferrer i Guàrdia, Observatori Català de la Joventut. - Inserció Laboral de les Persones Graduades dels Ensenyaments Professionals 2016 (GIRONA), Catalunya, 2016, Generalitat de Catalunya i Consell General de Cambres de Comerç de Catalunya.
	Málaga	- Confederación de Empresarios de Málaga (2017). Informe socioeconómico de la provincia de Málaga y propuestas empresariales para la reactivación económica. 2015/16. Málaga: CEM y Unicaja. - Consejería de Vivienda y Ordenación del Territorio (2009). Plan de Ordenación del Territorio de la Aglomeración urbana de Málaga. - Consejería de Obras Públicas y Transportes (2007). Plan de Ordenación del territorio de Andalucía. Sevilla: Junta de Andalucía. - España. Real Decreto 751/2014, de 5 de septiembre, por el que se aprueba la Estrategia Española de Activación para el Empleo 2014-2016. Boletín Oficial del Estado, 23 de septiembre de 2014, núm. 231, pp. 73996-74023. - Fundación CIEDES (2016). II Plan Estratégico de Málaga. Cuaderno, 16: Clústeres productivos en Málaga. Hacia una especialización inteligente. Málaga: Fundación CIEDES, Unicaja y Ayuntamiento de Málaga. - Fundación CIEDES (2015). II Plan Estratégico de Málaga. Cuaderno, 15: Capital humano y mercado de trabajo. Málaga: Fundación CIEDES, Unicaja y Ayuntamiento de Málaga. - Fundación Málaga Desarrollo y Calidad (MADECA) (2017). Informe. Claves del Mercado de Trabajo, Primer Trimestre, 2016. Málaga: PRISMA (Plataforma de Red de Indicadores Socioeconómicos de Málaga). - Instituto Nacional de la Juventud (2011). Desmontando a los 'nini': Un estereotipo juvenil en tiempos de crisis. Madrid: Instituto de la Juventud de España. - Junta de Andalucía (2015). Estrategia de innovación de Andalucía 2020 (RIS3 Andalucía). - Observatorio de las Ocupaciones (2016). Informe del Mercado de Trabajo de Málaga. Datos 2015. Madrid: Servicio público de empleo estatal. - Observatorio de las Ocupaciones (2017). Informe del Mercado de Trabajo de Málaga. Datos 2016. Madrid: Servicio público de empleo estatal.

		<ul style="list-style-type: none">- PRISMA (Plataforma de Red de Indicadores Socioeconómicos de Málaga) (2017). Barómetro Provincial.- Red Europea de Lucha contra la Pobreza y la Exclusión Social en el Estado Español (2016). VI Informe. El estado de la pobreza. Seguimiento del indicador de riesgo de pobreza y exclusión social en España. 2009-2015.- Servicio Andaluz de Empleo (2017). Estudio de la situación laboral de las personas egresadas en Formación Profesional reglada en Andalucía. Promoción 2014-2015. Sevilla: Observatorio Argos.
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Source: Authors' own elaboration, based on WP6 National Reports.