Skills anticipation in the Czech Republic

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Table of contents

Summary
Overview of the Czech approach
  Description
  Aims
  Legal framework
  Governance
  The role of stakeholders
  Target groups
  Funding and resources
Methods and tools
  Skills assessments
  Skills forecasts
  Skills foresight
  Other skills anticipation practices
Dissemination and use
  Use of skills anticipation in policy
  Target groups’ use of skills anticipation outputs
Summary

In the Czech Republic there is no cohesive system for producing and interpreting skills intelligence. Although various initiatives have been developed over the years, these have not (yet) grown into a coherent system of skills anticipation, despite a political commitment to do so (first declared in the implementation plan of the Human Resource Development Strategy in the Czech Republic, 2001). (1) Given this lack of formal and systematic skills anticipation, stakeholder engagement and local/regional dialogues between policymakers, employers and education and training providers are key.

Existing skills anticipation initiatives have been developed under the auspices of the Ministry of Labour and Social Affairs (Ministerstvo práce a sociálních věcí, MoLSA) and the Ministry of Education, Youth and Sports (Ministerstvo školství, mládeže a tělovýchovy, MEYS).

At a regional level, the regional assembly and the regional council lead the dialogue with other stakeholders. While most skills intelligence is targeted at policymakers, some initiatives target training providers and students who are trying to make decisions about the type of courses on offer.

There appears to be no budget specifically dedicated to skills anticipation. Some of the resources used for generating skills intelligence have been provided by the European Social Fund (ESF). Using ESF sources, the project ‘KOMPAS’ was launched in early 2017 and aims at developing a coordinated skills anticipation exercise.

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Overview of the Czech approach
### Governance
- Ministry of Education and Ministry of Labour at national level
- Territorial Employment Pacts at regional level

### Stakeholders
- Employers
- Representatives of education and training providers
- Sector councils

### Target groups
- Employers
- Policy makers
- Young people

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### Types of skills anticipation

<table>
<thead>
<tr>
<th>Quantitative forecasting</th>
<th>Various - but KOMPAS may provide core forecasts in future</th>
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<tbody>
<tr>
<td>Skills assessments</td>
<td>None</td>
</tr>
<tr>
<td>Foresight</td>
<td>None</td>
</tr>
<tr>
<td>Other</td>
<td>Employer surveys</td>
</tr>
</tbody>
</table>

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### Dissemination

<table>
<thead>
<tr>
<th>Channels</th>
<th>Results mostly available online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Not monitored</td>
</tr>
</tbody>
</table>

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### Description

Various skills anticipation initiatives have been initiated over the years. These initiatives, however, have not (yet) grown into a connected system of skills anticipation, despite declarations of high-level political commitment. That said, there have been some positive developments, for example, employers...
commitment. That said, there have been some positive developments; for example, employers are becoming more involved in the co-ordination of skills demand and supply in the context of vocational education and training (VET), and sector councils have been successfully established to provide a forum for stakeholder involvement in skills anticipation. Existing activities include ad-hoc regional labour market forecasts, labour market monitoring and skills assessments by sector councils and training providers, and a new tool focusing on the labour market position of recent higher education graduates (at the national level). Some initiatives using comprehensive forecasting methods have also been developed.

**Aims**

The aims of skills anticipation activity is to:

- Inform policymakers and employers;
- Inform decision-making regarding VET provision; and
- Inform future students who are trying to choose secondary and higher education courses.

**Legal framework**

The development of a coherent set of skills anticipation activities is a priority of the 2007 ‘Lifelong Learning Strategy’, with the MoLSA named as responsible for its implementation.

Vocational education and training is governed by the 2004 Education Act (since amended several times), while higher education is regulated by the 2004 Higher Education Act. The MEYS has overall responsibility for education policy, but schools are governed and maintained by the regional authorities.

Training for jobseekers (under the remit of public employment services [PES]) is regulated by the 2004 Employment Act, and the MoLSA holds responsibility for its implementation.

**Governance**

At the national level, there is no representative advisory body concerned with skills that could serve as a platform for information sharing and the coordination of all relevant actors. Existing regular skills anticipation initiatives have been developed under the auspices of the MoLSA and the MEYS. In the EEPO report on the Czech Republic, policy collaboration in this area between the MoLSA (focusing primarily on employment, unemployment and retraining issues) and the MEYS (focusing primarily on formal education) was considered to be generally weak. (2)

At regional level, each regional assembly and regional council (the executive body of the assembly) hold direct responsibility for establishing and maintaining VET institutions at upper secondary level. Regional assemblies have decision-making powers regarding the number, structure, provision, quality and funding of schools, with these decisions supported by regional labour market forecasts (described in section “Methods and tools” in more detail). Regional authorities are not responsible for tertiary level education.

Recently, Territorial Employment Pacts (Teritoriální nákty zaměstnanosti, TFPs) have been established in
Recently, Territorial Employment Pacts (Teritoriální pakty zaměstnanosti, TEPs) have been established in most Czech regions. Obligatory members of the TEPs are the regional authorities, regional employment services and regional employers’ representatives (usually via the Chamber of Commerce), in addition to other bodies and institutions responsible for VET and employment. They will be incorporated into the future regional skills forecasting system (see the ‘Labour Market Barometer’ under the ‘KOMPAS’ project in subsection “Skills forecasts”).

The role of stakeholders

The main stakeholders are employers and education and training institutions. So far the stakeholder involvement tends to be ad hoc (for example, social partners occasionally commission skills anticipation exercises). Stakeholders are also involved in skills anticipation indirectly through their participation in discussions about VET and higher education.

To encourage stakeholder participation in decision-making on labour market issues, 29 sector councils have been established. The main activities of the sector councils are: labour market monitoring; sectoral skills assessments; and supporting and cooperating with schools and training institutions. The councils include representatives of employers, education and training providers and the government.

Coordination of skills anticipation activity is currently limited, although the introduction of a project, called ‘KOMPAS’, which will collate skills anticipation information, may change this somewhat (see subsection “Skills forecasts”).

Regional governments involve employers in their ‘Councils for Human Resource Development’ and rely on their input in identifying local labour market needs when making decisions about the provision of secondary education. These dialogues, however, are likely to include only selected groups of employers, and the outcomes are neither systematically monitored nor assessed. Given these limitations, it is difficult to assess the extent to which these analyses are used, for example, where regional governments make decisions on which schools to downsize or close in face of the ongoing decline of student populations.

In sum, there are channels for stakeholder involvement around skills anticipation activities, especially in the context of VET. Nonetheless, it is unclear how these channels help to improve policy decisions given the lack of formal evaluation.

Target groups

Existing skills anticipation initiatives primarily target policymakers and employers at a national and regional level. One of the new skills assessment tools, the ‘Information System on the Situation of Graduates in the Labour Market’ (described in section “Methods and tools”) is targeted at young people who are in the process of selecting a higher education course, and at public authorities, which may use the information for improving the provision of secondary education.

Funding and resources

There is little information available on expenditure for skills anticipation exercises. While there appears
There is little information available on expenditure for skills anticipation exercises. While there appears to be no budget specifically dedicated to them, some resources for such activities (especially in the development of new tools) come from the European Social Fund (ESF).

Methods and tools

Skills anticipation activities in the Czech Republic are fragmented. There are a number of forecasting projects and research initiatives but these tend not to be interlinked (described further in subsection “Skills forecasts”). There are few other activities that support this national forecasting system. It is unlikely that this system will change or become more coherent over the short to medium term.

Skills assessments

There is no information available on current skills assessment practices in the Czech Republic.

Skills forecasts

Since the mid-2000s, various research initiatives have been developed (commissioned by the government), but these individual projects have not developed into a regular source of skills intelligence as they have not been followed up beyond their initial implementation.

Thus far, outcomes from various forecasting projects have been presented in long reports, which are often unsuitable for the target audiences or end users such as education policymakers at both national and regional levels, those in the training and re-training system, employers, and career advisors. Although some of these studies produce useful data and findings, they have had a minimal impact on influencing labour market behaviour. Furthermore, users find it difficult to locate relevant data, and there is a certain degree of distrust around the reliability of the data where they are available.

Formal macroeconomic models are not used for skills needs forecasts in the Czech Republic. Researchers have traditionally used existing macroeconomic tools, such as the national version of the Hermin model, combined with expert sectoral employment forecasts and other data inputs, and the E3ME skills forecasting model (the latter through CEDEFOP’s Skillsnet network). Sectoral forecasts, data from the Czech Labour Force Survey (LFS), and data from graduate forecasts are used by the ROA-CERGE model, which estimates the friction in the labour market between the demand for and supply of skilled labour for defined educational groups for the next five years. This is a model developed by the Research Centre for Education and the Labour Market (ROA) of the Maastricht University School of Business and Economics, which has been adopted for the Czech Labour market by the Center for Economic Research and Graduate Education – Economics Institute (CERGE-EI).

The EEPO report notes that the aforementioned macroeconomic tools have methodological limitations: none provide predictions of demand by sector; disaggregated data mean that sample sizes are too small to be robust; and information on wages is missing. (3)
The National Training Fund – National Observatory of Employment and Training (Národní vzdělávací fond – Národní observatoř zaměstnanosti a vzdělávání, NVF-NOZV), CERGE-EI and the Research Institute of Labour and Social Affairs (Výzkumný ústav práce a sociálních věcí, VÚPSV) are the most experienced institutions with respect to forecasting. Their long-term co-operation in carrying out forecasts and developing methodologies constitutes a good foundation for the construction of a coherent skills anticipation process.

There have been a number of individual projects and activities undertaken to assess future skills matches / mismatches. There are two skills anticipation exercises being carried out in this regard: the first by the Education Policy Centre (Středisko vzdělávací politiky at the Faculty of Education at Charles University, EPC); and the second by CERGE-EI, VÚPSV and the National Training Fund (NTF). Both exercises use data from the Czech Labour Force Survey, plus data on skill level and field of study from education enrolment data. As of 2016/17, these exercises have not been developed further. Efforts to build a stable national system of skills forecasting based on an existing ROA-CERGE forecasting tool have been in development since 2010.

In 2015, the NTF completed a new employment prognosis to 2033 for eight industries, including, for example: agriculture; construction; mining and textiles; plus libraries and archives. (4) This exercise combined forecasts of gross value added (GVA) and employment to 2025 – derived from the CEDEFOP forecast. These forecast data were then amended by local experts taking into account the expected effects of pension reforms and the age profile of the Czech labour force. The forecast was commissioned by the main employers’ association of the Czech Republic (Konfederace zaměstnavatelských a podnikatelských svazů České republiky) and is not available for public use.

Forecasting at a national level is undertaken as part of the ‘Anticipation of Qualification Needs’ (Predvidání kvalifikacních potřeb, PREKVAP) project, which was carried out by the MoLSA under the leadership of the Further Education Fund (Fond dalšího vzdělávání) in 2015. The final study reports on the current labour market and projections to 2025 for 40 occupational groups and 25 sectors. A new structure for a system of monitoring and projections of the labour market is proposed.

All the forecasting efforts described so far focus on the national level. Regional forecasts suffer from various drawbacks, which is why between 2010 and 2012 the VÚPSV embarked on a research project aimed at developing a more reliable regional forecasting model and a general regional forecasting methodology. An innovative pilot research project which aims to adapt the national forecasting model to regional needs is underway in Ústí nad Labem. It is the only region to date where forecasting has been disaggregated to the regional level. Since 2009, the Ústí nad Labem Regional Authority has used regional forecasts provided by the VÚPSV, disseminating information on current and future employment prospects to students choosing their tertiary education and career paths.

In 2016, MoLSA began to design a project called ‘KOMPAS’ based upon the results from the above-mentioned project ‘Prekvap’ and discussions with key stakeholders, such as representatives from the employment services and regional authorities. The aim of this project is to create a ‘Labour Market Barometer,’ which is expected to establish a sustainable structure for labour market data collection,
collating forecasts and other labour market information at both national and regional levels. The project is expected to be launched in early 2017.

**Skills foresight**

No foresight activities are currently undertaken in the Czech Republic.

**Other skills anticipation practices**

Employer surveys focus on current and predicted skills demand and occupational requirements. These surveys are suitable for identifying the needs in the immediate future (up to two years ahead). They have a regional focus and are typically carried out on an ad hoc basis. The National Institute for Education (Národní ústav pro vzdělávání, NIE) publishes reports based on employers’ opinions about skills gaps.

Regular regional labour market forecasts are produced by regional PES branches (Urad prace, UP), though these analyses are only short term (usually a six-month forecast) and based on interviews with local employers.

The Vacancy monitor of the MoLSA provides **detailed information** about the structure and trends of vacancies and jobseekers. This is based on information provided by local PES offices.

The NIE has developed the **Information System on the Situation of Graduates in the Labour Market** (ISA). This web portal uses national data to offer information to prospective students on the unemployment rates of recent graduates broken down by education level and field of study. Data are also available on how well the qualifications and jobs of employees are matched (or mismatched).

In addition, the NIE also conducts robust tracer studies which focus on the labour market outcomes of graduates upon completion of upper secondary education.

**Dissemination and use**

**Use of skills anticipation in policy**

The production of skills intelligence in the Czech Republic is ad hoc. Furthermore, there is no mechanism in place to ensure that any skills intelligence produced is used to inform policy. Various stakeholders are free to use the information provided to them, but how the intelligence is ultimately used depends on the motivation of final users.

**Target groups’ use of skills anticipation outputs**

The ISA (see subsection “Other skills anticipation practices”), which provides information on the employment and unemployment rates of recent graduates, is aimed at prospective students who are choosing courses. This information is particularly important for students as there are no forecasting data to support decision making.
It is hoped that the new structures established by the KOMPAS project and resulting skills anticipation outputs will help to overcome existing limitations and missing mechanisms in the skills anticipation process.

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For a description of the development of the Strategy and the Implementation Plan, see National Training Fund (n.d.b).

(2) EEPO (2015)

(3) Most of the ‘hard input data’ for modelling and predictions in the Czech Republic is based on the LFS (Vyberove setreni pracovnich sil, VSPS), which has significant limitations. Some other data sources or providers have been identified as useful and more relevant, but are not being exploited for various reasons. In terms of employment, there are relevant national data on employment in different sectors (but with lower credibility at the regional level), but the distributions by occupation, qualification or age are less reliable and are based fully on the LFS. Job creation and number of vacancies are measured through PES data, but these do not provide an overall picture (and employers are not mandated to provide such data to the PES). The projected number of secondary and vocational graduates by type of education is compiled by regional authorities or the Ministry of Education, but the data for university/college graduates are publicly available only by type of school or faculty and include only
University/college graduates are publicly available only by type of school or faculty and include only limited information on field of education. (4) For an overview of the NTF’s skills forecast see National Training Fund (2015a and b).