

# Skills anticipation in Poland

---

04/2017  [Poland, Skills anticipation in countries](#)

---

## Table of contents



Summary

Overview of the Polish 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' uses of skills anticipation outputs

---

## Summary

In Poland, the aim of skills anticipation activities has been to produce improved employment forecasts, at a national and regional level, which can provide skills intelligence to a wide range of users. Funding from the European Social Fund (ESF) has played an important role in the development of skills anticipation activities, notably in the creation of a forecasting tool. Skills anticipation at regional and local levels has historically been more developed than at the national level, but is often undertaken on an ad hoc basis. At the end of 2016, more comprehensive solutions were put into place which provided methodologies to be implemented at the regional or local level. These solutions, however, still do not amount to an integrated system for skills anticipation embedded in national legislation, coordinated at national level, and carried out regularly according to the same methodology.

A range of stakeholders are involved in skills anticipation activities such as employer organisations, education and vocational education and training (VET) institutions, and the public employment service (PES), which is required to diagnose needs for skills and qualifications in regional and local labour markets. In some regions, skills anticipation activities are undertaken by regional labour market observatories. They produce regional forecasts on skills demand, supply and mismatch, as well as sectoral foresight studies. But these are not uniformly undertaken across regions, and the future of the observatories is uncertain.

Skills anticipation in Poland is undergoing changes with a view to developing a more integrated system. This has been supported by government and ESF funding; however, the sustainability of these developments may not be guaranteed once funding ceases.

**Please cite this document as:** Skills Panorama (2017), *Skills anticipation in Poland*. Analytical highlights series. Available at [http://skillspanorama.cedefop.europa.eu/en/analytical\\_highlights/skills-anticipation-poland](http://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skills-anticipation-poland)

---

## Overview of the Polish approach



# Skills anticipation in Poland



## Key actors

### Governance

Ministry of Family, Labour and Social Policy (MPIPS)

### Stakeholders

Polish Agency for Enterprise Development

Ministries (MPIPS; Science and Higher Education; National Education)

Regional and local Labour Offices

Sectoral Skills Councils (in development)

### Target groups

Policy makers/ministries

Local government

Public Employment Service

Social partners

Universities and research institutes



## Types of skills anticipation

### Quantitative forecasting

Employment forecasts (Prognozowanie Zatrudnienia)

Ad-hoc forecasts by regional labour market observatories

### Skills assessments

Study of Human Capital (BKL)

Barometer of Professions (Barometr Zawodów)

### Foresight

Ad-hoc exercises by the Polish Agency for Enterprise Development (PARP) of the Ministry of Development

### Other

Monitoring of shortage and surplus professions (MZDIN)

Ad-hoc exercises by regional authorities



## Dissemination

### Channels

Internet

National and regional conferences

Reports and publications

### Use

Ad-hoc (e.g. to shape VET provision)

## Description

In Poland, skills assessment activities are a core element of the [Study of Human Capital in Poland](#) (Bilans Kapitału Ludzkiego, BKL). In addition, forecasting and foresight activities are also undertaken. A number of institutional bodies take part in producing data and intelligence for skills anticipation in Poland, such as the Central Statistical Office of Poland (Główny Urząd Statystyczny, GUS), [Polish Agency for Enterprise Development](#) (Polska Agencja Rozwoju Przedsiębiorczości, PARP), the [Ministry of Family, Labour and Social Policy](#) (Ministerstwo Rodziny, Pracy i Polityki Społecznej, MPiPS), [Ministry of National Education](#) (Ministerstwo Edukacji Narodowej, MEN), and the [Ministry of Science and Higher Education](#) (Ministerstwo Nauki i Szkolnictwa Wyższego, MNiSW).

## Aims

The aim of skills anticipation in Poland is to support the work of the PES and provide labour market data and intelligence for policymakers at the national, regional and local levels. Results from the skills monitoring activities are also used to inform vocational education and training institutions about skills demand so that they can alter their course provision. Due to the skills shortages and recruitment difficulties they experience, employers are reportedly increasingly interested in skills anticipation findings. In the future the aim is to provide jobseekers with more data to inform their employment choices.

## Legal framework

There is no legislation in place specifically regulating skills anticipation. The following can be identified as pertinent legislation to skills anticipation.

According to the Act on the Promotion of Employment and Labour Market Institutions, the obligation to diagnose the demand for skills and qualifications in regional and local labour markets rests with the PES. These assessments are not yet systematic or regular and they do not always follow a uniform methodology. (1) The Monitoring of deficit and surplus occupations undertaken by regional (voivodship) employment offices is a task for regional government defined by the Act on the Promotion of Employment and Labour Market Institutions (Journal of Laws of 2013, pos. 674, as amended). (2)

The national lifelong learning strategy – [Perspective on Lifelong Learning](#) – was adopted by the government in 2013. Its implementation is strongly linked to skills anticipation with its operational aims focused on developing a transparent and coherent national qualification system (and providing education and training tailored to economic needs and changes in the labour market. As such, the strategy forms an important element in developing a skills anticipation system, but it does not create one.

## Governance

The MPiPS is the key authority regarding skills anticipation. It works closely with a range of stakeholders (such as the voivodship employment offices, PARP, and a number of ministries [such as MEN, and MNiSW]). It should be noted that the Ministries and agencies (including the GUS and its relevant

MINISWJ). It should be noted that the ministries and agencies (including the GOS and its relevant analyses) often work independently in a non-coordinated manner.

## The role of stakeholders

A number of stakeholders are involved in skills anticipation activities, including employer organisations, education and VET providers, and the PES (which is required to diagnose needs for skills and qualifications in regional and local labour markets). The labour market policy implemented by public authorities is based on dialogue and cooperation with social partners, in particular the labour market councils, established at a national, regional and local level. Labour market councils are composed of representatives of employers' organisations, trade unions, and non-governmental organisations. Stakeholders' involvement in skills anticipation activities includes discussing findings, as well as applying for funding and implementing projects aimed at skills anticipation in different sectors of the economy (more information on Sectoral Skills Councils is provided in section "Other skills anticipation practices" below). A number of stakeholders are involved in the collection, analysis and dissemination of data and intelligence from skills anticipation activities, including ministries, the PES (regional and local offices), employers, and education and VET providers.

Another example of stakeholder coordination in policymaking includes experts from the BKL study participating in advisory roles on employment and education committees, such as the [Committee of Scientific Policy](#) (Komitet Polityki Naukowej). The new initiatives, such as the BKL study, Sectoral Skills Councils and the [Barometer of Professions](#) (Barometr Zawodów), aim to increase collaboration among relevant institutions in the process of skills monitoring and forecasting.

At regional and local levels, skills anticipation activities are well coordinated, though they rely on imperfect monitoring data. (3) Data and intelligence are disseminated as part of the process of stakeholder engagement that takes place at these levels. Increasingly, methodologies and methods used in skills anticipation at a national level are being shared with, and taken up by, regional stakeholders. Stakeholders also play an important role in sharing methodologies and methods, so activities can be replicated at a regional and local level. The publication of tools and guidance on diagnosing the needs for skills and qualifications in regional and local labour markets by the MPiPS in 2010 is an example of such collaborative efforts. (4)

An overview of collaboration between regional labour offices, employers, and other labour market institutions demonstrated that the MPiPS, the Centre for Human Resources Development (Centrum Rozwoju Zasobów Ludzkich, CRZL), and the Governmental Centre for Strategic Studies (Rządowe Centrum Studiów Strategicznych) were the most active players among the government institutions, though the two latter centres have been abolished. (5) The MPiPS is the main body responsible for skills anticipation, and collaborates with stakeholders through different fora such as intergovernmental task forces, collaborative projects and initiatives, and [Social Dialogue Councils](#) (Rady Dialogu Społecznego) (6). However, there is no structured involvement of stakeholders (particularly the social partners), for example through a committee with decision-making responsibilities on the design/implementation of skills anticipation activities at national level, or the systematic use of relevant intelligence in policymaking. Nonetheless, the role of social partners is more prominent at sectoral level, while the

development of the Sectoral Skills Councils can be expected to further strengthen their role at that level.

## Target groups

Where intelligence and data from skills anticipation is gathered, it is widely disseminated and publicly available on the web. It is mainly targeted at regional and local stakeholders who are considered to have the capacity to influence change. Data from national studies, such as the employment forecasts ([Prognozowanie Zatrudnienia](#)), are intended for government ministries, local government, the PES, employers' organisations, trade unions, universities and research institutes. Anonymised micro-data from the BKL are publicly available so others are able to undertake secondary data analysis.

## Funding and resources

Skills anticipation in Poland is undergoing substantial changes designed to improve employment forecasts at national and regional levels. These changes are implemented with significant support from the ESF, which introduced a number of projects described below.

The [Monitoring of deficit and surplus professions and occupations](#) (Monitoring zawodów deficytowych i nadwyżkowych, MZDIN) is a statutory task of regional and local government, and is funded by them.

In Poland, skills anticipation activities are funded by the government and the ESF, for example:

- The project, 'Analysis of processes on the Polish labour market and in the area of social integration in the context of the economic policy' (Analiza procesów zachodzących na polskim rynku pracy i obszarze integracji społecznej w kontekście prowadzonej polityki gospodarczej), was jointly run by the CRZL and the [Institute of Labour and Social Affairs](#) (Instytut Pracy i Spraw Socjalnych, IPiSS). In addition, between 2009 and 2014, a new employment forecast tool was developed for employment forecasting. In 2014 [employment forecasts to 2022](#) disaggregated by occupation, sector and region were released. These initiatives received ESF support; (7)
- The ESF has also provided funding for BKL, which over the period 2010-2015 informed education and training providers on the demand for skills (see section 2.4). BKL is co-funded by the ESF with a grant for the period 2010-2015; a second grant for 2016-2023 has been awarded.
- The Barometr Zawodów is funded by the MPiPS and information is disseminated with support from the ESF;

A high reliance on European funding places a question mark over the sustainability of some of these changes. Some ESF funded developments may be discontinued once the funding comes to an end. For instance, the sustainability of the forecasting tool, the [Prognozowanie Zatrudnienia](#), and the forecasts beyond 2022 remain uncertain. Nonetheless, there is evidence of further integration of activities taking place at national, regional, and local levels.

---

## Methods and tools

A number of skills anticipation exercises take place in Poland. However, there is a lack of a uniform

A number of skills anticipation exercises take place in Poland. However, there is a lack of a uniform methodology for carrying them out. (8)

## Skills assessments

In Poland, the PES undertakes skills assessment and anticipation exercises to inform its policies and programmes. MPiPS has developed a range of tools and guidance on diagnosing the needs for skills and qualifications in regional and local labour markets. (9)

There is an annual and nation-wide study, the Barometr Zawodów. This qualitative study uses expert panels to predict changes in labour demand. It is carried out by labour offices under the auspices of MPiPS and it is co-ordinated by the regional Labour Office in Kraków.

Qualitative skills assessments are undertaken by employer associations on an ad hoc basis (10) Skills assessment is also one of the core elements of the BKL.

## Skills forecasts

Skills forecasts, the Prognozowanie Zatrudnienia, have run since 2014 and are derived from an econometric model projecting employment demand to 2022. The econometric forecasting tool was developed as part of an ESF funded project. (11) The tool provides forecasts by occupational group (according to the Classification of Occupations of the Ministry of Family, Labour and Social Policy) (12), economic sector, and regions (NUTS II statistical areas). The aim of the project is to support labour market institutions (such as the PES, employment agencies, and training institutions) with labour market analysis, monitoring and forecasting. The level of take-up and use of the forecasts by these institutions is unclear. In the future, it is hoped the forecasts will be used by jobseekers, if the project is continued.

Forecasting is also undertaken at the regional level. An example is the forecasting undertaken by the [Pomeranian Labour Market Observatory](#) (Pomorskie Obserwatorium Rynku Pracy, PORP), which includes forecasts by occupation. It aims to identify the occupations expected to be in shortage, in balance, or in surplus over the next 12 months.

It is important to note that regional labour market observatories are also funded from ESF and some of them appear to have ceased their operations. The future of these institutions is uncertain after ESF funding comes to an end. (13)

## Skills foresight

National skills foresight work is undertaken on an ad hoc basis by PARP, which operates under the [Ministry of Development](#) (Ministerstwo Rozwoju). For example, the [Foresight of personnel in a modern economy](#) (Foresight kadr nowoczesnej gospodarki) project was implemented in 2008-2009 using a mixed methodology. (14) The results were used at the time to identify future skills needs.

At a regional level, labour market observatories undertake a range of skills anticipation activities including sectoral foresight studies. However, many of these activities are outdated. (15)

## Other skills anticipation practices

Poland undertakes establishment/employer surveys to inform their technical and vocational education and training provision. For example, the BKL study was implemented by PARP in collaboration with the [Jagiellonian University](#) to inform education and training providers on the demand for skills.<sup>(16)</sup> The sixth wave of the BKL study is due to start in 2017. The study provides data and intelligence on skills gaps in the economy, sectoral and occupational skills, professional knowledge development and adult learning. The sectoral perspective is a new feature of the 2016-2023 study. <sup>(17)</sup> The aim of the study is to increase understanding of the current needs in various sectors and enable anticipation of the demand for skills and qualifications in the future.

There is also an aim to increase skills anticipation exercises at the sectoral level in the future. The intention is to establish [Sectoral Skills Councils](#) (Sektorowe Rady ds. Kompetencji) which would be responsible for the provision of more accurate information on the demand for skills. A few Sectoral Skills Councils <sup>(18)</sup> have already been developed with support from the ESF.

At a local level, the BKL may be used to produce local data. Between 2012 and 2015 the Municipality of Kraków commissioned the [Study of Competences in Business Process Outsourcing and Information Technology Outsourcing in Kraków](#) (Bilans kompetencji Branż BPO i ITO w Krakowie Raport Końcowy z Przeprowadzonych Badań) in order to better match the supply of graduates at local universities to the demand for highly skilled/educated employees in the Kraków area. <sup>(19)</sup>

Regional labour market observatories also produce regional data on skills imbalances and labour demand.

The monitoring of deficit and surplus professions and occupations through MZDIN has been undertaken since 2005 at national, regional and local levels. <sup>(20)</sup> Monitoring reports are regularly produced and are based on statistical data collected by the labour offices from those registering as unemployed. Data are collected on the characteristics of those seeking employment, vacancies, etc. The annual reports are supplemented by data from the [Centre for Education Information](#) (Centrum Informatyczne Edukacji) of the Ministry of National Education and the Central Statistical Office on the educational characteristics of current students and graduates from secondary and higher education.

---

## Dissemination and use

Data and intelligence from the skills anticipation system in Poland, particularly from the BKL study and the new forecasts, are widely disseminated, and aimed at engaging users. For example, the available forecasts from the [Prognozowanie Zatrudnienia](#) web portal provide a graphical interface through which the user can visualise the results of the forecast.

The BKL study has a clear dissemination strategy and budget with outputs and activity published on the website. These include annual reports; national annual and thematic conferences; and regional seminars targeting regional labour market actors, employers' representatives, training and education providers,



policy-makers, and local government.

The reports, which indicate the occupations that are likely to be in surplus, balance, or shortage over the 12 months ahead, are also disseminated at the national and local levels to upper secondary schools, training institutions, local and regional authorities. Data are available on the Monitoring zawodów website. Users can select regional and local areas to find out which occupations are in high or low demand. There is, however, still some room for improving the consistency and availability of information on skills demand by labour offices.

## **Use of skills anticipation in policy**

In Poland intelligence from skills anticipation activities feeds into strategic policymaking only on an ad hoc basis. Overall, whilst publications of skills anticipation results and other relevant outputs are targeted at, and made available to, a range of stakeholders, the extent to which these data influence policy or are used by career guidance counsellors or staff in the PES is unclear.

The BKL study is shared with MNiSW, MEN, MPiPS, local government, PES, employers' organisations, trade unions, universities and research institutes. Results have been used to support the national lifelong learning strategy, Perspective on Lifelong Learning. BKL results were integrated into programming documents, which outlined the socio-economic challenges ahead and the role that European funds might play in meeting them. For example, the Operational Programme Knowledge, Education, Development (2014-2020) points to the BKL study as a basis for [tailoring future training supply to meet labour market demand](#).

There are a number of examples of skills anticipation activities, which have been undertaken to shape vocational education and training provision. For instance, changes to the core curriculum for vocational education and training were made as a result of the study entitled Improvement of core curricula as the key for the modernisation of vocational education undertaken by the [National Centre for Supporting Vocational and Continuing Education](#) (Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej, KOWEŻIU). The project assessed the professional, personal and social skills required in a variety of occupations and qualifications. The aim of the changes was to increase the labour market relevance of education and training provision.

## **Target groups' uses of skills anticipation outputs**

Outputs from skills anticipation activities are disseminated and used by a wide range of stakeholders including ministries, education and training providers, local (powiat) and voivodship employment offices, regional labour market observatories, and representatives from trade unions and businesses. The use, however, of these data is not systematic and occurs on an ad hoc basis.

Whilst a number of reports providing information from the BKL and MZDIN studies as well as the foresight studies are publicly available, data and intelligence are increasingly becoming available from web portals, such as the Prognozowanie Zatrudnienia web portal, the PES portal, and the Monitoring zawodów. This means that key stakeholders such as labour market intermediaries working with learners

and jobseekers (such as careers guidance counsellors) have an important role in ensuring data are used, disseminated, and understood. Only the PES portal is aimed at jobseekers.

*Please cite this document as: Skills Panorama (2017), Skills anticipation in Poland. Analytical highlights series.*

Available at [http://skillspanorama.cedefop.europa.eu/en/analytical\\_highlights/skills-anticipation-poland](http://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skills-anticipation-poland)

---

## Bibliography

The following sources have been drawn upon in preparing this report.

[Act on the Promotion of Employment and Labour Market Institutions](#) (Journal of Laws of 2013, pos. 674, as amended). As of 9 March 2017.

<http://www.mpips.gov.pl/download/gfx/mpips/en/defaultopisy/28/6/1/5.emppromotion.pdf>

Batóg, J., Batóg, B., Mojsiewicz, M. & Rozkrut, M. 2016. [Wsparcie monitorowania i prognozowania rynku pracy przez statystykę publiczną](#) (Support of the monitoring and forecasting labour market by official statistics). The Central European Journal of Social Sciences and Humanities. pp 12-26. As of 9 March 2017. <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-ed79ecfc-f937-4287-a368-6c5028358a90>

CEDEFOP. 2011. [Vocational education and training in Poland – Short description](#) Luxembourg: Publications Office of the European Union. As of 9 March 2017. <http://ec.europa.eu/social/BlobServlet?docId=9363&langId=en>

CEDEFOP/OECD/ETF/ILO. 2014. Survey on Anticipating and Responding to Changing Skill Needs.

[Centre for Education Information](#). 2017. As of 9 March 2017. <https://cie.men.gov.pl/index.php/sio.html>

[Directorate General for Employment, Social Affairs & Inclusion](#). 2016. News. European Commission. As of 9 March 2017. <http://ec.europa.eu/social/main.jsp>

catId=1070&langId=en&newsId=2567&furtherNews=yes

EEPO. 2015. Country fiches on skills governance in the Member States – Poland. Developed by the European Employment Policy Observatory for the European Commission. Brussels: European Commission.

Górniak, J., Kocór, M., Czarnik, S., Magierowski, M., Kasperek, K., Jelonek, M., Turek, K. & Worek, B. 2015. Polski rynek pracy – wyzwania i kierunki działań. [Policy paper na podstawie badań Bilans Kapitału Ludzkiego 2010-2015](#). Warszawa/Kraków: Agencja Rozwoju Przedsiębiorczości. As of 9 March 2017. <https://bkl.parp.gov.pl/publikacje-148-artykul.html>

Hawley-Woodall, J., Duell, N., Scott, D., Finlay-Walker, L., Arora, L. & Carta, E. 2015. [Skills Governance in the EU Member States. Synthesis Report for the EEPO](#). Brussels: European Commission. As of 9 March 2017. <http://ec.europa.eu/social/BlobServlet?docId=15587&langId=en>

ILO. 2015. [Anticipating and Matching Skills and Jobs](#)(Guidance note). Geneva: International Labour Organization. As 9 March 2017. <http://www.skillsforemployment.org/KSP/en/Details/?dn=WCMSTEST4155653>

Institute of Labour and Social Affairs. n.d. As of 9 March 2017. <https://www.ipiss.com.pl/?lang=en>

Instytut Turystyki Wkrakowie. n.d. Sektorowa Rada Ds. Turystyki (Tourism Sector Competence Council). As of March 2017. <http://www.itk.krakow.pl/srt/>

Inter-Ministerial Team for Lifelong Learning (2013) Perspektywa Uczenia Się Przez Całe Życie. Załącznik do uchwały Nr 160/2013 Rady Ministrów z dnia 10 września 2013 r.

Jagiellonian University. 2017. As of 9 March 2017. [http://www.en.uj.edu.pl/en\\_GB/start](http://www.en.uj.edu.pl/en_GB/start)

Kryńska, E. 2010. Podręcznik użytkownika metod, narzędzi i procedur diagnozowania zapotrzebowania na kwalifikacje i umiejętności na regionalnym i lokalnym rynku pracy. Podręcznik dla urzędów pracy.

———. 2012. [Study of Competences in Business Process Outsourcing and Information Technology Outsourcing in Krakow](#). As of 9 March 2017. <http://krakow.pl/zalacznik/4243>

Kukulak-Dolata, I., Poliwczak, I., Mirosław, J. & Sobocka-Szczapa, H. 2013. [Projekty rządowe i samorządowe w zakresie prognozowania zatrudnienia według zawodów w polsce](#). Instytut Pracy i Spraw Socjalnych and Centrum Rozwoju Zasobów Ludzkich. As of 9 March 2017. [https://www.prognozowaniezatrudnienia.pl/g2/oryginal/2014\\_02/810a35bde4b37bf5bf0a27bdc00a98e2.pdf](https://www.prognozowaniezatrudnienia.pl/g2/oryginal/2014_02/810a35bde4b37bf5bf0a27bdc00a98e2.pdf)

Magiczny Krakow. 2013. [Balance of Competences](#). As of 9 March 2017. [http://www.krakow.pl/english/business/39141,artykul,balance\\_of\\_competences.html](http://www.krakow.pl/english/business/39141,artykul,balance_of_competences.html)

Matusiak, K.B., Kucinski, J. and Gryzik, A. (Eds). 2009. *Foresight kaar nowoczesnej gospodarki* [Foresight of personnel of modern economy]. Warsaw: Wydawca: Polska Agencja Rozwoju Przedsiębiorczości. As of 9 March 2017. <http://www.parp.gov.pl/files/74/81/305/5266.pdf>

Ministry of Development. n.d. As of 9 March 2017. <https://www.mr.gov.pl/>

Ministry of Family, Labour and Social Policy. n.d. As of 9 March 2017. <http://www.mpips.gov.pl/>

———. 2017a. *Rada Dialogu Społecznego*. Dialog Społeczny. As of 9 March 2017. <http://www.dialog.gov.pl/dialog-krajowy/rada-dialogu-spolecznego/rada-dialogu-spolecznego/>

———. 2017b. *Zawody deficytowe i nadwyżkowe*. As of 9 March 2017. <http://www.mpips.gov.pl/analizy-i-raporty/raporty-sprawozdania/rynek-pracy/zawody-deficytowe-i-nadwyzkowe/>

———. 2009. *Diagnozowanie zapotrzebowania na kwalifikacje i umiejętności na lokalnych i regionalnych rynkach pracy*. Warsaw. As of 9 March 2017. [http://psz.praca.gov.pl/documents/10828/176694/100406\\_diagnozowanie\\_zapotrzebowania.pdf?version=1.0&t=1403708348138](http://psz.praca.gov.pl/documents/10828/176694/100406_diagnozowanie_zapotrzebowania.pdf?version=1.0&t=1403708348138)

———. 2012. *Study of Competences in Business Process Outsourcing and Information Technology Outsourcing in Krakow*. As of 9 March 2017. [http://psz.praca.gov.pl/documents/10828/174426/100806\\_podrecznik\\_uzytkownika.pdf/8ccf9e32-e109-4b33-ab25-c44f98b73af6?t=1403698167000](http://psz.praca.gov.pl/documents/10828/174426/100806_podrecznik_uzytkownika.pdf/8ccf9e32-e109-4b33-ab25-c44f98b73af6?t=1403698167000)

Ministry of Infrastructure and Development (Ministerstwo Infrastruktury i Rozwoju). 2014. *Program Operacyjny Wiedza Edukacja Rozwój 2014-2020 PO WER 2014-2020*. As of 9 March 2017. [https://www.power.gov.pl/media/943/POWER\\_zatwierdzony\\_przez\\_KE\\_171214.pdf](https://www.power.gov.pl/media/943/POWER_zatwierdzony_przez_KE_171214.pdf)

Ministry of National Education (Ministerstwo Edukacji Narodowej). 2013. *Perspektywa Uczenia się przez całe życie*. As of 9 March 2017. [https://men.gov.pl/wp-content/uploads/2014/01/plll\\_2013\\_09\\_10zal\\_do\\_uchwaly\\_rm.pdf](https://men.gov.pl/wp-content/uploads/2014/01/plll_2013_09_10zal_do_uchwaly_rm.pdf)

Ministry of Science and Higher Education. 2017a. As of 9 March 2017. <http://www.nauka.gov.pl/en/>

———. 2017b. *Komitet Polityki Naukowej* (Committee of Scientific Policy). As of 9 March 2017. <http://www.nauka.gov.pl/komitet-polityki-naukowej-nauka/>

National Centre for Supporting Vocational and Continuing Education. n.d. As of 9 March 2017. <http://www.koweziu.edu.pl/english>

Nazarko, J. (ed.) 2012. *Badanie ewaluacyjne projektów realizowanych w Polsce* Ministerstwo Nauki i Szkolnictwa Wyższego. As of 9 March 2017. [https://depot.ceon.pl/bitstream/handle/123456789/7509/Badanie\\_ewaluacyjne\\_projektow\\_foresight\\_realizowanych\\_w\\_Polsce.pdf;sequence=1](https://depot.ceon.pl/bitstream/handle/123456789/7509/Badanie_ewaluacyjne_projektow_foresight_realizowanych_w_Polsce.pdf;sequence=1)

OECD. 2016. [Getting Skills Right. Assessing and Anticipating Changing Skill Needs](#) Paris: OECD Publishing. As of 9 March 2017. <http://dx.doi.org/10.1787/9789264252073-en>

Pieniążek, W., Przybył, C., Pacuska, M., Chojecki, J., Huras, P., Pałka, S., Ratajczak, J. & Rudolf, A. 2014. [Analiza kwalifikacji i kompetencji kluczowych dla zwiększenia szans absolwentów na rynku pracy](#) Warsaw: Agrotec Polska. As of 9 March 2017. [http://www.ncbr.gov.pl/gfx/ncbir/userfiles/\\_public/fundusze\\_europejskie/kapital\\_ludzki/ewaluacja/raport\\_koncowy\\_ncbir\\_kompetencje\\_final.pdf](http://www.ncbr.gov.pl/gfx/ncbir/userfiles/_public/fundusze_europejskie/kapital_ludzki/ewaluacja/raport_koncowy_ncbir_kompetencje_final.pdf)

Polish Agency for Enterprise Development (Polska Agencja Rozwoju Przedsiębiorczości). n.d.a. As of 9 March 2017. <http://www.parp.gov.pl/>

———. n.d.b. [Europejska Strategia Zatrudnienia - doświadczenia międzynarodowe](#). As of 9 March 2017. <https://bkl.parp.gov.pl/>

———. 2016. [Raporty](#). As of 9 March 2017. <https://bkl.parp.gov.pl/raporty.html>

Pomorskie Obserwatorium Rynku Pracy. n.d. [Pomorski Rynek Racy w Liczbach](#) As of 9 March 2017. <http://www.porp.pl/>

Pracodawcy RP. 2016. [Aktualności](#). As of 9 March 2017. <http://www.pracodawcyrp.pl/aktualnosci/art,2607,wystartowal-projekt-sektorowa-rada-ds-kompetencji-opieka-zdrowotna-i-pomoc-spooleczna.html>

———. 2014. [Obserwatorium Regionalnych Rynków Pracy \(Observatory of Regional Labour Markets\)](#). As of 9 March 2017. <http://www.pracodawcyrp.pl/projekty-europejskie/projekty-zrealizowane/obserwatorium-regionalnych-rynkow-pracy/>

[Prognozowanie Zatrudnienia](#). n.d.a. As of 9 March 2017. <https://www.prognozowaniezatrudnienia.pl/>

———. n.d.b. [Narzędzie Progностyczne](#). As of 9 March 2017. <https://www.prognozowaniezatrudnienia.pl/narzedzie-prognostyczne/demo-narzedzia-prognostycznego.html>

Public Employment Services Portal (Wortal publicznych służb zatrudnienia). n.d. As of 9 March 2017. <http://psz.praca.gov.pl/>

Rada ds. Kompetencji: Sektor IT. n.d. [Aktualności](#). As of 9 March 2017. <http://radasektorowa.pl/index.php>

Ratajczak, J., Cichowicz-Major, M., Lew-Starowicz, R., Chojecki, J., Nasiłowska, E. & Pacuska, M. 2012. [Analiza zapotrzebowania gospodarki na absolwentów kierunków kluczowych w kontekście realizacji strategii Europa 2020](#). Agrotec Polska. Warsaw. As of 9 March 2017. [http://www.ncbr.gov.pl/gfx/ncbir/userfiles/\\_public/fundusze\\_europejskie/kapital\\_ludzki/ewaluacja/raport\\_koncowy\\_eu\\_2020\\_agrotec.pdf](http://www.ncbr.gov.pl/gfx/ncbir/userfiles/_public/fundusze_europejskie/kapital_ludzki/ewaluacja/raport_koncowy_eu_2020_agrotec.pdf)



competitiveness of the Polish economy and social cohesion, (2) to improve social solidarity within the framework of employment relations; (3) to support the development and implementation of socio-economic policies and strategies, and building social understanding around it.

(7) 21 050 809 PLN

(8) Batóg et al. 2016.

(9) Kryńska 2010.

(10) For example: “[Observatory of Regional Labour Markets](#)” or evaluation studies in which employer associations were involved, focusing on graduates’ competencies/qualifications expectations. Reports can be found at Pieniążek et al. 2014 and Ratajczak et al. 2012.

(11) The project replaced the Demand Forecasting System (SPPP) which was in operation until 2006 and presented forecasting intelligence and data online. It produced national quarterly labour demand forecasts by occupation, gender, education, economic sector, and region/province using econometric modelling techniques. From 2006 to 2014 there was no “system” available so data were not accessible.

(12) This is the Polish Classification of Occupations and Specializations for the labour market needs (2010), which is coherent and comparable with the ISCO-08 classification at the level of minor groups (three-digit codes).

(13) Tarkowski n.d.

(14) The methodology included expert panels, SWOT and PEST analysis, Delphi survey, and scenarios to identify future skills needs. Expert panels were convened for four industries (information and telecommunications technologies, energy, mechanical engineering, and the chemical industry) and one horizontal group (the future of human resources) to analyse and prepare three scenarios for the future.

(15) Nazarko 2012.

(16) For examples of the reports produced between 2010–2015, see the Polish Agency for Enterprise Development (Polska Agencja Rozwoju Przedsiębiorczości) 2016.

(17) Directorate General for Employment, Social Affairs & Inclusion 2016.

(18) Six Councils have been established now (with the plan to establish 3 more in 2018):

Construction Sector Competence Council, [Financial Sector Competence Council](#), [Healthcare and Social Care Competence Council](#), [IT Sectoral Competence Council](#), [Fashion and Innovative Textiles Industry Competence Council](#) and [Tourism Sector Competence Council](#).

(19) All of the reports are publicly available, see Magiczny Krakow 2013.

(20) For the latest Monitoring of deficit and surplus professions and occupations report and data (2015), see Ministry of Family, Labour & Social Policy n.d.b.

---

© CEDEFOP 2019

POWERED BY:

