



Work 4.0 - activity of MLSA in the context of 4th industrial revolution

**Mutual Learning Programme
Seminar „Work 4.0 – digitalisation of the labour
market**

28 February 2018



Czech Republic – industry republic



The Czech Republic is highly industrialized country

- The Czech economy is the **48th worldwide economy**.
- The **largest share of industry** in the performance of the economy in EU.
- **Share of industry to total employment - 37 %**
- The **main sectors of the Czech economy are:**
 - manufacture of motor vehicles and their components, production of rubber and plastic goods, manufacture of electronics, and the production of computers, electronic and optical devices and equipment.
- Czech companies mainly **supply industrial components to its neighbouring country** - strong industrial ties to Germany, which is its strategic business partner.

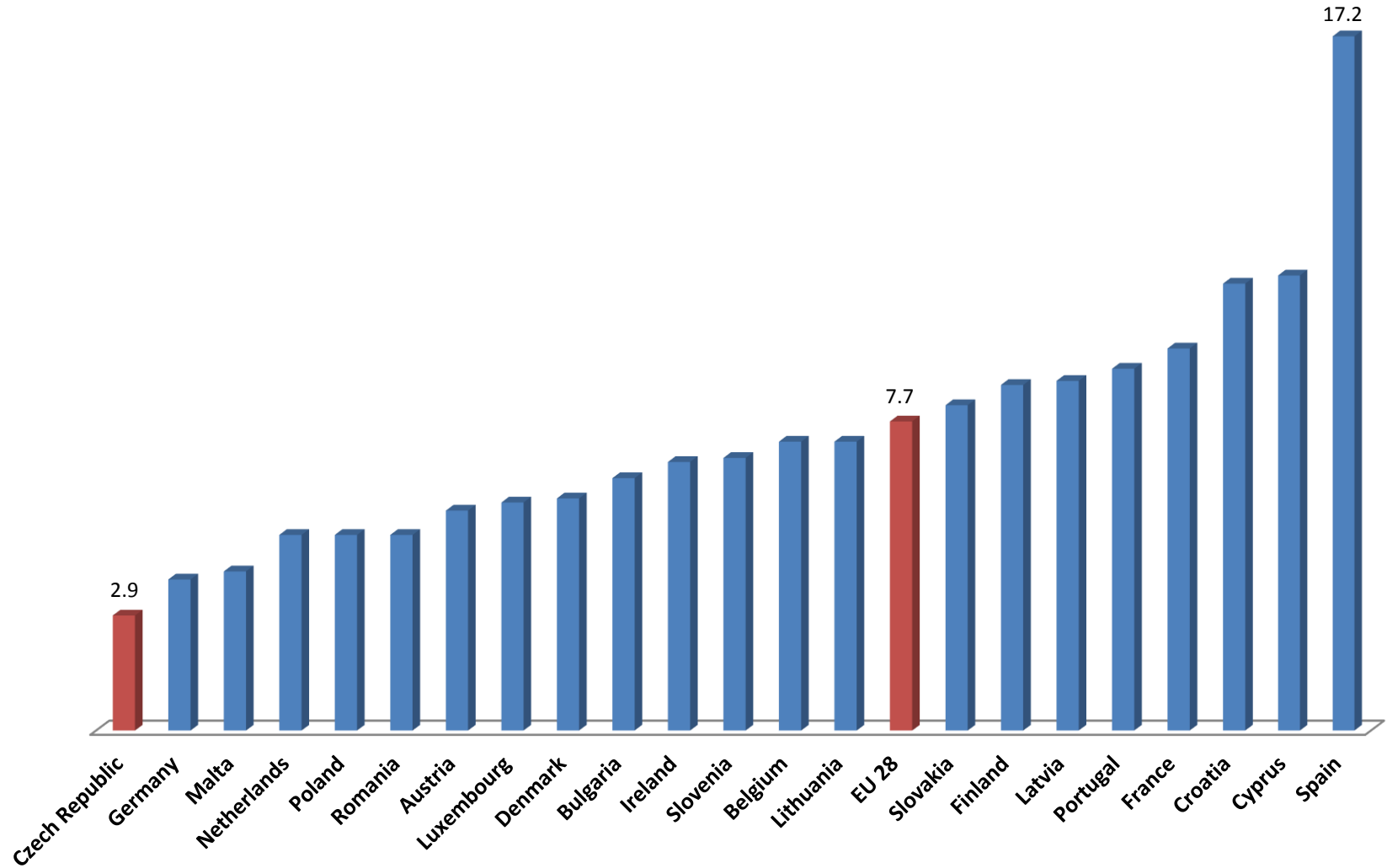
BUT

- **dependence on exports makes economic growth vulnerable** to contractions in external demand.
- **There are six expected main areas** affected by fourth industrial revolution: mechanical engineering, automotive, ICT, electrical equipment, chemical industry, agriculture and forestry.

Situation on the labour market (January 2018)

- **289 ths. jobseekers** was registered at the the Labour Office, their number decreased year-on-year by 100 thousand.
 - **The number of vacancies declared at the Labor Office is 230 thousand** (about 95 ths. more than in January 2017).
 - The **share of unemployed increase to 3.9%** (2.3% by Eurostat)
 - To 1 job vacancy was 1.3 job seekers on average.
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- ⇒ A very positive development, expressed by the decline in unemployment and the growth in the number of vacancies.
 - ⇒ The main problem is mismatch between supply and demand in the labor market and lack of skilled labour force.

Unemployment rate- annual average 2017 (Eurostat)



Employment policy strategy

Adopted in October 2014 (by Government Resolution no. 835)

Employment policy strategy has identified four main priorities:

1. Promoting access to employment, especially for groups at risk in the labour market;
2. Promoting gender equality on the labour market;
3. Promoting adaptation of businesses and employees to changing labour market needs;
4. Development of public employment services.

Priority 3.

- Responds to the need for greater harmonization between supply and demand in the labour market, especially in terms of skills and competences.
- Reflects the fact that initial education is no longer capable, in the light of the dynamic development of technology and economy, to prepare a workforce for the entire working life.

Emphasis is therefore placed on the development of employment policy in the following areas:

- Forecasting labour market needs
- support for further education



The Digital Literacy Strategy of the Czech Republic for the period 2015 to 2020

Created and approved on the basis of Government Resolution no. 203 in March 2013 on an updated of the State Policy in Electronic Communications - Digital Czech Republic v 2.0 - The Way to the Digital Economy.

The **strategy was adopted of 1 July 2015** (by Government Resolution No. 523).

The Resolution requires the MoLSA to prepare an Action Plan for the implementation of this strategy by 31 March 2016

Action Plan of the Digital Literacy Strategy of the Czech Republic for the period 2015 to 2020 - approved on 7 July 2016 by Government Resolution No. 616.

The resolution requires the MoLSA to submit to the Government every June 30 of each calendar year of the evaluation of the action plan.





Action Plan of the Digital Literacy Strategy (AP DLS)

The measures of AP DLS are divided into six strategic objectives:

1. Employment
2. Competitiveness
3. Social Inclusion
4. Family support
5. Public Sector Electronic Services
6. Support of the system of education and learning through digital technologies

The development of digital competencies is very important not only in terms of preparedness of the workforce for the consequences of the 4th Industrial Revolution but also has a positive impact on:

- ✓ Increase of skills and qualifications of Czech citizens,
- ✓ Increase of the competitiveness of the Czech Republic in the international context,
- ✓ Personal development and increasing of active involvement of citizens in civil society and the overall raising of the living standard of citizens of the Czech Republic.



Projects linked to the implementation of AP DLS

Project „Developing of system support for digital literacy“ - „DigiStrategie 2020”

- Started in September 2016
- The main task of the project is to **ensure the successful implementation of the Strategy and AP DLS**, mainly through:
 - Creating a Work and Communication Platform (Strategy Panel) for the preparation and creation of system support elements.
 - Creating an online Digital Strategy platform (DIGI portal), whose main goal is to create not only a unified work environment for implementation but the place for presentation of implementation outputs (information, educational materials, etc.) as well.
 - Provide additional specific data and analyzes in the field of digital literacy.
 - Implementation of an information campaign promoting the topic of digital literacy.



Projects linked to the implementation of AP DLS

Project „Development of the System of Further Education of Employers and Employees in Digital Skills“ - „DigiKatalog“

- The aim of the project is to create a system tool to support the development of digital skills through the Smart Online System tool (SOS) .
- SOS consists of the following 4 components:
 - **DK - SOS** - catalog of transferable digital skills for 500 selected jobs,
 - **Q - SOS** - self-evaluation tool setting the level of transferable digital skills according to the European framework DIGCOMP 2,
 - **MET - SOS** - an interactive tool containing methodological recommendations for implementing the selected measures of the AP DLS,
 - **EDU - SOS** - online tool that recommends relevant training programs for the development of specific transferable digital skills (based on Q-SOS results evaluation)

The Labour Market and the 4th Industrial Revolution



New opportunities in the labour market:

- Individualization of working forms
- Flexibilization of work
- New possibilities in terms of place of work (homeworking, distance work, ...)
- Work experience within a shared economy
- Reducing working time (increase in leisure time)
- Reconciling work and family life.

Possible threats in the labour market:

- Replace human work with robots and automation
- Polarization of work
- Precarization of work

+ Negative social impacts

The Labour Market and the 4th Industrial Revolution

- Changes in the labour market and social spheres associated with the fourth industrial revolution brings certain threats, but also a number of positive and challenges to that we need to react quickly.
- In the context of digitization and the emergence of new forms of work, the current setting of working conditions and the relationship between employers and employees will need to be significantly revised.
- The main aim of the MLSA in this area is to detail the current situation and future trends in the labour market and to prepare possible scenarios (measures) to respond adequately to these changes.

Action Plan Work 4.0

- In 2016, the MLSA commissioned the study **Initiative Work 4.0**.
- Based on the study the MLSA prepared an "**Action Plan Work 4.0**"
- Based on an agreement with the Office of the Government, the measures of AP Work 4.0 were incorporated into the Action Plan for Society 4.0

- The Action Plan is a follow-up to the Initiative Industry 4.0 and proposes broad-based concrete measures linked to the expected impacts of digitization on employment, the labor market and on selected, socially related areas. Considerable attention is also paid to issues of further education.

- **The Action Plan contains 24 measures, broken down into four strategic objectives:**
 1. Regulating the impact of technological change on labour demand
 2. Support for further education
 3. Setting the conditions in the labor market in connection with technological changes
 4. Regulating the impact of technological change on selected social aspects

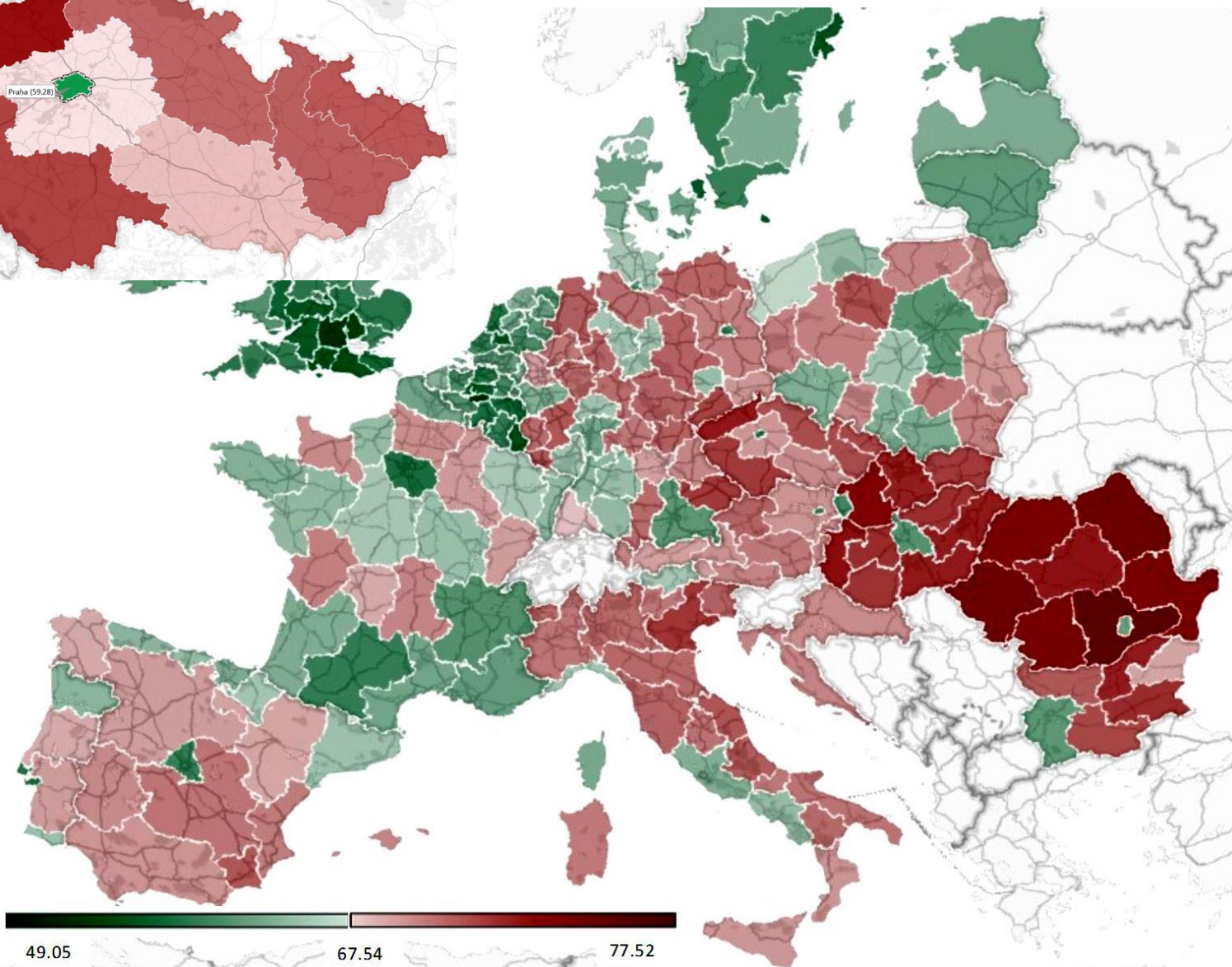
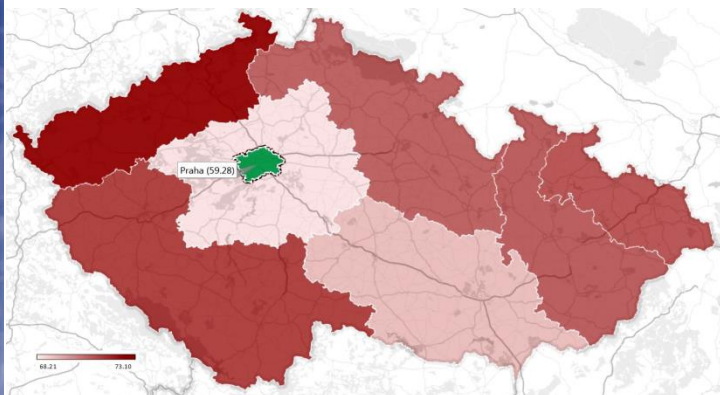
- MLSA also founded the Committee on the Social Impact of Industry 4.0

- The measures of AP Work 4.0 develop the measures outlined in the Action Plan DLS. Both of these Action Plans are complementary.

Action Plan Work 4.0

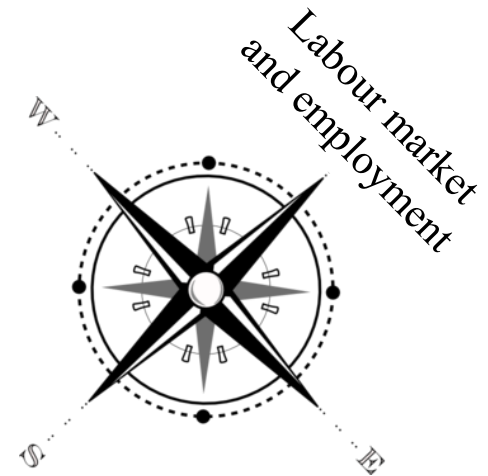
- 1. Regulating the impact of technological change on labor demand** – e.g. processing sectoral and thematic predictions, taking account of new digital competences in the National Occupational Classification and CDC, Preventing long-term unemployment and promoting new employment for disadvantaged groups; Promoting self-employment and small business start-ups; Research and preparation of possible solutions in the field of tax and insurance system.
- 2. Promotion of adult education** – e.g. Extension of demand of adult education (AE) and retraining; Development of new models and individualization in AE, information support and promotion of AE, Design of elements of non-financial stimulation demand for AE; promoting system approach and tripartite dialogue at national and regional level.
- 3. Setting the conditions in the labor market in connection with technological changes** – e.g. Increasing the minimum wage; Employee right to non-availability in leisure time; definition and regulation of work via online platforms within the shared economy and methodological support.
- 4. Regulation of impacts of technological change on selected social aspects** – e.g. Changes in the social and pension system; Creating conditions for increasing labor market flexibility and reconciling family and working life; Developing a methodology for monitoring and evaluating the impact of changes in the nature of work on mental and physical health of workers.

European Union according to the index of threats to digitization of professions



Labour Market Predictions Project (Compass)

- From January 2017, the MLSA implements the Labour Market Predictions Project (KOMPAS), which should set the system of predictions in the Czech Republic at national and, above all, regional level.



- **These predictions will be a very important basis for anticipating further potential developments and needs (not just of the labour market) associated with the 4th Industrial Revolution.** Forecasting future needs and labour market trends should then be the basis for setting up, or updating or correcting, the measures already taken.

Aims of the project Compass

The aim of the project is, in connection with the current state of the solution of the problem of labour market prediction, especially:

- ✓ Identify the needs and expectations of relevant labour market actors and map out current and emerging labour market trends that are related, in particular, to the 4th Industrial Revolution.
- ✓ Ensure data in the long term with the necessary predictive value, respecting the principle of efficiency and sustainability.
- ✓ Improve the existing form of labour market monitoring implemented by the Labour Office of the Czech Republic among employers so that they can be used to improve the outputs of the labor market projections.
- ✓ Create a web application that will be available to a wide group of users, containing information pertaining to the current situation and predicted labour market developments from the perspective of each occupational group and level of education.
- ✓ Extend the Office for labour market monitoring and forecasting the at the Ministry of Labour and Social Affairs.

Thank you for your attention!

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PRÁCE 4.0