

European Semester 2016-2017

Education-related Country Specific Recommendations (CSRs)

The European Commission has published on 18 May the 2016 Country-Specific Recommendations (CSRs) for each Member State for budgetary, economic and social policies, along with a Communication ([EN](#) only) on the priorities Member states will have to focus on to boost investment, to return to growth and jobs. The Recommendations are a central part of the European Semester mechanism of governance. They are based on the priorities identified in the 2016 [Annual Growth Survey](#) (to **consolidate recovery** and to **foster convergence towards the best performers** through: *Re-launching investment, Pursuing structural reforms, Responsible fiscal policies*), the assessment of each Member State's plans for sound public finance (Stability or Convergence Programmes –SCPs) and policy measures to boost growth and jobs (National Reform Programmes –NRPs). In drafting 2016 Country Specific Recommendations the European Commission has taken into big considerations **Member states' country reports** (published in February) which are an assessment made by the European Commission summarising the implementation of previous Country Specific Recommendations, the involvement of stakeholders into negotiations and consultations, as well as priority areas for policy interventions at national level, also on **education, training, research and innovation and investment in human capital**.

At the **end of June - early July**, the Council formally adopts the Country Specific Recommendations previously discussed. Policy advice is thus given to Member States before they start to finalise their draft budgets for the following year.

With a view to coordinate Member States' policies to reach Europe 2020 targets¹, 2016-2017 Country Specific Recommendations (CSRs) are also aiming at improving quality in education and training. 12 EU Member States² received recommendations (CSRs) directly targeting education, 12 EU Member States³ on Skills and life-long learning, and 9 EU Member States⁴ on Research and Innovation. Also this year, CSRs' main focus is on essential issues to tackle unemployment and increase employability in Europe, foster social protection, remove barriers to attract investment, and pursue fiscal sustainability and consolidation. However, CSRs have a broader influence on the education sector and on teachers. [Overview of issues covered in the EU Country-Specific Recommendations by Member State for 2016-2017.](#)

¹ Europe 2020 headline target on education: 1) reducing the rates of early school leaving below 10%, 2) at least 40% of 30-34-year-olds completing third level education

² 12 EU Member states received education-related CSRs for 2016-2017, namely: **AT, BE, BG, CZ, DK, EE, ES, HU, LT, PL, RO, SK**.

³ 12 EU Member states received CSRs for 2016-2017 on skills and life-long learning, namely: **BE, FI, FR, HR, LT, LV, MT, PL, RO, SI, SK, UK**

⁴ 9 EU Member states received CSRs for 2016-2017 on research and innovation, namely: **BE, CZ, EE, ES, FR, LT, LU, LV, NL**

Summary of education-related Country Specific Recommendations 2016

Education and Training CSRs	EU Countries
<p><i>Improve quality of education and educational outcomes, the educational achievement of disadvantaged children, the participation of disadvantaged or minorities and the inclusion of the most disadvantaged (in particular with migrant background) into mainstream education</i></p> <ul style="list-style-type: none"> - AT: Take steps to improve the educational achievements of disadvantaged young people, in particular those from a migrant background. - BE: Provide training support for people with migrant background - CZ: Take measures to increase the inclusion of disadvantaged children, including Roma, in mainstream schools and pre-schools. - BG: Increase the provision of quality education for disadvantaged groups, including Roma. - RO: Take action to prevent early school leaving and increase the provision of quality education, in particular among Roma - HU: Take measures to improve educational outcomes and to increase the participation of disadvantaged groups, in particular Roma, in inclusive mainstream education. - SK: Improve educational outcomes by increasing the participation of Roma children from early childhood in mainstream education. 	AT, BE, CZ, BG, RO, HU, SK
<p><i>Address skills mismatches and skills shortages to improve employability, with a focus on Vocational education and training, apprenticeship systems, life-long and adult learning</i></p> <ul style="list-style-type: none"> - UK: Address skills mismatches and provide for skills progression, including by strengthening the quality of apprenticeships. - BE: Move forward with education and vocational training reform - FR: reform apprenticeship and vocational training, with emphasis on the low-skilled. - LV: Speed up the curricula reform in vocational education, establish with the involvement of social partners a regulatory framework for apprenticeship type schemes and increase their offer. - LT: Pursue more active labour market policies and adult learning. Strengthen the role of social dialogue mechanisms. Address skills shortages - MT: Increase participation of low-skilled persons in lifelong learning. - SI: In consultation with social partners, increase the employability of low-skilled and older workers, including through targeted lifelong learning and activation measures. - ES: Focusing on individualised support (with reference to labour market integration) and strengthen the effectiveness of training measures - HR: Provide appropriate up- and re-skilling measures to enhance the employability - FI: Take measures to reduce skills mismatches 	BE, FR, LV, LT, MT, SI, ES, UK, HR, FI
<p><i>Improve the labour-market relevance of education</i></p> <ul style="list-style-type: none"> - FR: Improve the links between the education sector and the labour market 	FR, LT, PL, ES

<ul style="list-style-type: none"> – LT, PL: Improve the labour market relevance of education – ES: Improve the labour market relevance of tertiary education 	
<i>Enhance investment in education and research</i>	<i>BE, DE, IE, LT, NL</i>
<ul style="list-style-type: none"> – BE: Foster investment in knowledge-based capital – DE: Achieve a sustained upward trend in public investment, especially in infrastructure, education, research and innovation – IE: Enhance the quality of expenditure, particularly by increasing cost-effectiveness of healthcare and by prioritising government capital expenditure in research and development and in public infrastructure – LT: Strengthen investment in human capital – NL: Prioritise public expenditure towards supporting more investment in research and development 	
<i>Increase private investment in higher education and research, enhancing the cooperation between businesses and universities and performance-based funding</i>	<i>DK, PT, EE, ES</i>
<ul style="list-style-type: none"> – EE, ES: Promote private investment in research, development and innovation, – DK, EE, PT, ES: Incentivise the cooperation between businesses and universities – ES: Increase performance-based funding of public research bodies and universities 	
<i>Raise the attractiveness of the teaching profession and the quality of teaching</i>	<i>CZ, LT, SK</i>
<ul style="list-style-type: none"> – CZ: Raise the attractiveness of the teaching profession – LT: Raise the quality of teaching – SK: making the teaching profession more attractive 	
<i>Higher education</i>	<i>LV</i>
<ul style="list-style-type: none"> – LV: Pursue the consolidation of research institutions 	

OVERVIEW OF ISSUES COVERED IN THE COUNTRY-SPECIFIC RECOMMENDATIONS FOR 2016-2017

Policy areas	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
Fiscal policy & fiscal governance																											
Long-term sustainability of public finances, inc. pensions																											
Reduce the tax burden on labour																											
Broaden tax bases																											
Reduce the debt bias																											
Fight against tax evasion, improve tax administration & tackle tax avoidance																											
Financial services																											
Housing market																											
Access to finance																											
Private indebtedness																											
Employment protection legislation & framework for labour contracts																											
Unemployment benefits																											
Active labour market policies																											
Incentives to work, job creation, labour market participation																											
Wages & wage setting																											
Childcare																											
Health & long-term care																											
Poverty reduction & social inclusion																											
Education																											
Skills & life-long learning																											
Research & innovation																											
Competition & regulatory framework																											
Competition in services																											
Telecom, postal services & local public services																											
Energy, resources & climate change																											
Transport																											
Business environment																											
Insolvency framework																											
Public administration																											
State-owned enterprises																											
Civil justice																											
Shadow economy & corruption																											

Figure 1: European Commission website - CSRs overview table http://ec.europa.eu/europe2020/pdf/csr2016/csr2016-overview-table_en.pdf

Detailed screening of education-related Country Specific Recommendations and context assessment:

EU country Country-specific Recommendations National documents	Assessment and Context	CSR 2016-2017
<p>Austria</p> <p>Commission Recommendation DE - EN - FR</p> <p>Country Report 2016 DE - EN</p> <p>National Reform Programme: DE - EN</p> <p>Table 1: EN</p> <p>Table 2: EN</p> <p>Table 3: EN</p> <p>Stability Programme: DE</p>	<p>(11) Austria has already exceeded its national Europe 2020 targets for education. In 2015, the early school leaving rate was 7.3 % and the tertiary attainment rate was 38.7 %. However, education outcomes depend heavily on socio-economic background. Inter-generational mobility in education is among the lowest of all OECD countries for which data is available. The drop-out rate of foreign-born pupils is almost three times higher than that of native-born and there is an additional challenge to integrate young refugees and migrants of compulsory school age and above into the education and training system.</p> <p>(14) the medium-term effect on employment and growth hinges on refugees' successful labour market and social integration, including via educational support. This issue is high on the political agenda both at the EU and Member State level and will be monitored and analysed closely, including in the 2017 country report.</p>	<ul style="list-style-type: none"> - Take steps to improve the educational achievements of disadvantaged young people, in particular those from a migrant background.
<p>Belgium</p> <p>Commission Recommendation FR - NL - DE - EN</p> <p>Country Report 2016</p>	<p>(8) Educational inequalities linked to socio-economic background are amongst the highest in the EU and poor educational outcomes partly explain the observed underperformance of people with a migrant background or low-skilled young people. The education</p>	<ul style="list-style-type: none"> - Move forward with education and vocational training reforms and provide training support, notably for people from a migrant background.

<p>FR - NL - EN National Reform Programme: FR - NL - EN Stability Programme: FR - NL</p>	<p>reforms currently being introduced are particularly designed to tackle early school leaving, early childhood care and education. They also seek to improve the quality and relevance of the vocational system. These reforms could facilitate a smoother transition towards a knowledge-intensive and increasingly service-oriented economy and alleviate skills mismatches and persistent labour shortages in certain occupations.</p> <p>To safeguard and enhance current welfare levels, more emphasis should be placed on productivity gains and investment in knowledge-based capital. This requires a sustained push towards products and associated services higher up the value chain, on the basis of stronger performance in innovation and utilising the results of R&D. Despite its high-quality public research system, Belgium has relatively few fast-growing firms in innovative sectors.</p>	<ul style="list-style-type: none"> - Boost the capacity to innovate, notably by fostering investment in knowledge-based capital.
<p>Bulgaria Commission Recommendation BG - EN - FR - DE Country Report 2016 BG - EN National Reform Programme: BG Convergence Programme: BG</p>	<p>(11) The education system has limited capacity to include vulnerable groups and equip learners with relevant skills. Vulnerable groups such as Roma and pupils from poor families continue to face significant obstacles in accessing and completing education. The level of enrolment among Roma at all levels of education is significantly lower than for non-Roma. The early school leaving rate continues to increase and is particularly high in rural areas and less developed regions. Removing barriers to the participation in early childhood education of disadvantaged children is essential to increase educational outcomes and prevent dropouts. A new Pre-school and School Education Act adopted by the parliament in September 2015 is an important step towards a comprehensive reform of the school system. The implementation of this legislation,</p>	<ul style="list-style-type: none"> - Increase the provision of quality education for disadvantaged groups, including Roma.

	<p>together with targeted measures to overcome non-legislative barriers to the full participation of disadvantaged groups in education, should contribute to improving the Bulgarian economy's growth potential and social cohesiveness in the long term. Enrolment and graduation rates in tertiary education are on the rise</p>	
<p><u>Croatia</u> Commission Recommendation HR - EN - FR - DE Country Report 2016 HR - EN National Reform Programme: HR - EN Convergence Programme: HR</p>	<p>(12) Youth unemployment remains a key concern, pointing to weaknesses in the education system, and there is still room to improve the effectiveness, monitoring and evaluation of the Youth Guarantee. Participation in lifelong learning remains very low, due to an underdeveloped adult education system.</p>	<ul style="list-style-type: none"> - Provide appropriate up- and re-skilling measures to enhance the employability of the working-age population, with a focus on the low-skilled and the long-term unemployed.
<p><u>Cyprus</u> Commission Recommendation EN - FR - EL - DE Country Report 2016 EL - EN National Reform Programme: EN Stability Programme: EN</p>	<p>(13) Participation of young people in vocational education and training remains low and is characterised by a lack of employer engagement in the education of students. However, measures are currently being implemented, in line with the strategy on vocational education and training.</p>	None
<p><u>Czech Republic</u> Commission Recommendation CS - EN - FR - DE Country Report 2016 CS - EN National Reform Programme: CS - EN Convergence Programme: CS - EN</p>	<p>(10) There has been a significant increase in R&D investment in recent years but outcomes remain weak and there are concerns about the sustainability of R&D infrastructure. The Czech research system is currently in the process of implementing long-delayed but substantial governance reforms, particularly on evaluation and funding. The existing funding mechanism is fragmented, with insufficient coordination between relevant bodies and an unclear</p>	<ul style="list-style-type: none"> - Raise the attractiveness of the teaching profession and take measures to increase the inclusion of disadvantaged children, including Roma, in mainstream schools and pre-schools.

	<p>division of responsibilities and priorities. A comprehensive evaluation framework for R&D, with links to funding, is being developed but progress is slow. There have been limited efforts to increase links between academia and the business community. These links are weakened by an evaluation framework for public research institutions that does not take into account the level of cooperation with enterprises.</p> <p>(11) The higher education reform was adopted by the parliament in January 2016. The attractiveness of the teaching profession remains a challenge, with relatively low pay being seen as one of the causes, while at the same time the teacher population is ageing. A new career system for teachers and pedagogical staff is being developed to increase the attractiveness of the profession, but its implementation has been postponed. Educational outcomes are generally good, but they are strongly influenced by students' socioeconomic backgrounds. The low educational outcomes of disadvantaged groups, in particular the Roma community, are a clear concern. It is estimated that a very large proportion of Roma children leave school early. Numerous Roma children receive education outside mainstream schools and as a result face lower learning standards than children from the rest of the population. Training opportunities for teachers to help them deal with this issue are underdeveloped, with a low proportion of teachers taking part in professional development activities related to teaching mixed groups and inclusive education.</p> <p>A significant number of legislative and administrative measures towards inclusive education have been taken and are beginning to</p>	
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	<p>be implemented. These are expected to contribute to reducing the gap in educational attainment and achievement between Roma and non-Roma children.</p> <p>The parliament adopted amendments to the Education Act in March 2016, extending compulsory education to the last year of pre-school education and ensuring that younger children are entitled to a place in a kindergarten. Nevertheless, inequalities in the education system represent a barrier to improving the quality of human capital and also hamper labour market outcomes later in life.</p>	
<p><u>Denmark</u></p> <p>Commission Recommendation DA - EN - FR - DE</p> <p>Country Report 2016 DA - EN</p> <p>National Reform Programme: EN - DA</p> <p>Convergence Programme: DA</p> <p>Annex 1 EN</p>	<p>(8) Boosting investment would help Denmark strengthen economic growth and increase productivity. Barriers to investment have been identified in the services sector and research. Efforts to turn university research results into business innovations could be strengthened.</p>	<ul style="list-style-type: none"> - Incentivise the cooperation between businesses and universities
<p><u>Estonia</u></p> <p>Commission Recommendation ET - EN - FR - DE</p> <p>Country Report 2016 ET - EN</p> <p>Stability Programme ET</p> <p>National Reform Programme 2016 EN</p> <p>Estonia Action Plan EN</p>	<p>(7) Estonia has taken action to improve work incentives by reducing the tax burden on labour for all income groups, including low-income earners. This may have contributed to Estonia having a lower unemployment rate and a higher employment rate for low-skilled workers than the EU average.</p> <p>(8) Implementation of the Lifelong Learning Strategy 2020, together with the Vocational Education and Training programme for 2015-2018, helped increase participation in vocational education and</p>	<ul style="list-style-type: none"> - Ensure the provision and accessibility of high quality public services, especially social services, at local level, inter alia by adopting and implementing the proposed local government reform. - Promote private investment in research, development and innovation, including by

	<p>training, and its labour market relevance. The proportion of vocational education and training students in apprenticeships is expected to increase but the drop out rates in vocational education and training remain a matter for concern.</p> <p>(9) There are still some shortages in early childhood education and care places for 0-3 year-olds, but the situation is improving, with additional places created each year.</p> <p>(11) In Estonia, access to public services is not guaranteed in all municipalities and the local provision of quality services in areas such as transport, education, long-term care for the elderly and other social services at local level remains a challenge.</p>	<p>strengthening cooperation between academia and businesses.</p>
<p><u>Finland</u></p> <p>Commission Recommendation FI - SV - EN - FR - DE</p> <p>Country Report 2016 FI - SV - EN</p> <p>National Reform Programme: EN - FI - SV</p> <p>Stability Programme: EN FI - SV</p>	<p>(9) The low-skilled are affected most by the poor performance of the labour market. The arrival of a comparatively large number of migrants and refugees in Finland in 2015 could serve to counter the effects of population ageing, but only if they are successfully integrated into the labour market and the education system. [...] effective policies to help people update their skills and find work are needed.</p>	<ul style="list-style-type: none"> - Take measures to reduce regional and skills mismatches.
<p><u>France</u></p> <p>Commission Recommendation FR - EN - DE</p> <p>Country Report 2016 FR - EN</p> <p>National Reform Programme: EN FR</p> <p>NRP Annex 1 FR</p>	<p>(12) The structure of the labour market is increasingly polarised, with highly educated workers hired on openended contracts and a constant proportion of low-skilled jobs becoming more and more precarious.</p>	<ul style="list-style-type: none"> - Improve the links between the education sector and the labour market, in particular by reforming apprenticeship and vocational training, with emphasis on the lowskilled.

<p>Statistical complement on employment (Annex 2) FR</p> <p>Contribution from stakeholders FR</p> <p>Stability Programme FR</p> <p>Monitoring report on excessive deficit correction and compliance with Recommendation FR</p>	<p>(13) The transition from school to work remains challenging and the least qualified young people are the most affected. Recourse to apprenticeship is decreasing among low qualified categories in a context of differentiated regional strategies and a limited capacity of the system to adapt to new economic needs. The offer of training for the unemployed, less qualified workers and SME employees remains insufficient, despite the ongoing vocational training reforms, including on governance, incentives and counselling and the new targeted unemployed training plan. The unsatisfactory cooperation between the various actors involved in continuous vocational training prevents an efficient allocation of resources. The upcoming personal activity account may help to rebalance access.</p>	
<p>Germany</p> <p>Commission Recommendation DE - EN - FR</p> <p>Country Report 2016 DE - EN</p> <p>National Reform Programme: DE</p> <p>Stability Programme: EN - DE</p>	<p>(6) Overall education and research expenditure has increased only slightly in recent years and may have fallen short of the national target of 10 % of GDP in 2015. Continued investment in education, research and innovation is essential for securing Germany's competitive position in the future. As the budget is expected to remain balanced in headline and structural terms in 2016-2017, there continues to be sufficient fiscal space for higher public investment, without breaching the rules of the Stability and Growth Pact and the national debt brake.</p> <p>(10) Although the overall labour market performance is very strong, in particular with unemployment at historically low levels, ageing-related labour and skills shortages are looming, calling for full use of the existing labour force.</p>	<ul style="list-style-type: none"> - Achieve a sustained upward trend in public investment, especially in infrastructure, education, research and innovation, by using the available fiscal space and prioritising expenditure.

	<p>(12) The high influx of refugees experienced in the past year has a number of social and economic consequences for Germany. the medium-term effect on employment and growth hinges on refugees' successful labour market and social integration, including via educational support.</p>	
<p style="text-align: center;">Greece</p> <p>To avoid duplication with measures set out in the Macroeconomic Adjustment Programme, there are no additional recommendations for Greece.</p> <p>National Reform Programme: EN - EL</p>		
<p><u>Hungary</u></p> <p>Commission Recommendation HU - EN - FR - DE</p> <p>Country Report 2016 HU - EN</p> <p>Implementation of the CSRs: HU</p> <p>National Reform Programme: EN</p> <p>Convergence Programme: HU</p>	<p>(11) The average performance of Hungarian students in basic skills was below the EU average in the 2012 OECD Programme for International Student Assessment (PISA) and the proportion of low-achievers increased between 2009 and 2012. The influence of the socioeconomic background and school location on educational performance is among the strongest in the EU. The selectivity of the education system deepens performance gaps among students in different school types and these gaps widen over time. The lack of equal access to quality mainstream education is particularly acute for Roma. With the exception of early childhood education, where there has been significant improvement in recent years, gaps remain wide between completion rates of Roma and non-Roma on all other educational levels, i.e. primary, secondary and tertiary education. Early school leaving remains high among Roma.</p> <p>A systemic approach to promoting inclusive mainstream education has yet to be developed. The announced implementation plan for the early school leaving strategy has yet to be published. The</p>	<ul style="list-style-type: none"> - Take measures to improve educational outcomes and to increase the participation of disadvantaged groups, in particular Roma, in inclusive mainstream education.

	<p>transition between different forms and stages of education remains difficult and recent reforms in vocational education might further hinder transitions.</p>	
<p>Ireland</p> <p>Commission Recommendation EN - FR - DE</p> <p>Country Report 2016 EN</p> <p>National Reform Programme: EN Stability Programme: EN</p>	<p>(10) in 2014 the percentage of graduates working in the early childhood education and care sector (15%) remained well below the recommended level. Skills mismatches remain and skills shortages have emerged in certain areas, while upskilling and reskilling opportunities remain insufficient, and the decrease in education expenditure could have a negative impact on educational outcomes in the future.</p>	<ul style="list-style-type: none"> - Enhance the quality of expenditure, particularly by increasing cost-effectiveness of healthcare and by prioritising government capital expenditure in R&D and in public infrastructure, in particular transport, water services and housing.
<p>Italy</p> <p>Commission Recommendation IT - EN - FR - DE</p> <p>Country Report 2016 IT - FR - EN</p> <p>National Reform Programme: IT Annex 1: IT Annex 2: IT Stability Programme IT</p>	<p>(7) The areas of reform put forward in the programme as having an impact on public finance sustainability include: (i) public administration and simplification; (ii) product and service markets; (iii) the labour market; (iv) civil justice; (v) education;</p> <p>(16) The apprenticeships system has been reformed to include adults made redundant, but implementation is still under way.</p>	<p>None</p>
<p>Latvia</p> <p>Commission Recommendation LV - EN - FR - DE</p> <p>Country Report 2016 LV - EN</p> <p>National Reform Programme: LV - EN Stability Programme: LV</p>	<p>(11) While Latvia has made progress in reforming the higher education system, namely by providing incentives that reward quality and establishing an independent accreditation system, improvements of vocational education and training are necessary, particularly with respect to reforming curricula and setting up a regulatory framework for apprenticeship-type schemes, in order to improve their quality and availability. Social partners can play a</p>	<ul style="list-style-type: none"> - Speed up the curricula reform in vocational education, establish with the involvement of social partners a regulatory framework for apprenticeship-type schemes and increase their offer. - Pursue the consolidation of research institutions

	<p>role in the development of apprenticeship-type schemes, as outlined in the Vocational Education Law.</p> <p>(12) Poor innovation drive and a fragmented research base hamper Latvia's rapid and efficient transition towards higher value-added and more knowledge-intensive activities.</p> <p>(13) The government has taken steps to reduce the current fragmentation of the public research base, improve its quality and enhance the business sector's innovation capacity. Despite progress, both public and business investments in research and innovation remain very low compared with the EU average. The consolidation of the research base needs to be continued, along with increasing the number of reserchers and the quality of research. Full implementation of reforms based on the Smart Specialisation Strategy and the full use of all existing policy tools would incentivise private investments in innovation.</p>	
<p>Lithuania</p> <p>Commission Recommendation LT - EN - FR - DE</p> <p>Country Report 2016 LT - EN</p> <p>National Reform Programme: LT</p> <p>Stability Programme: LT</p>	<p>(10) It is important that Lithuania strengthens investment in human capital. Although educational attainment has increased, the proportion of pupils with insufficient basic skills is high. Efforts should be pursued to ensure high quality teaching, which is crucial to tackling underachievement and educational shortcomings. Furthermore, there are weaknesses in the quality of teaching in higher education and its ability to foster innovation. The persistently low level of participation in adult learning is undermining efforts to improve the quality of human capital and increase productivity. There are signs of emerging skills shortages in certain sectors of the economy. Those skills shortages are expected to become more acute in the future. It is therefore important to improve the labour market</p>	<ul style="list-style-type: none"> - Strengthen investment in human capital and address skills shortages, by improving the labour market relevance of education, raising the quality of teaching and pursuing more active labour market policies and adult learning. Strengthen the role of social dialogue mechanisms.

	<p>relevance of education, streamline the structure and funding of the educational system, develop life-long learning and improve the targeting and effectiveness of active labour market policies.</p> <p>(12) Investment has recovered slowly since the onset of the economic crisis and will be supported by EU structural and investment funds in the coming years. Nevertheless, the adoption and absorption of new technology has not spread across the economy and innovation is low, hampering productivity growth. Private investment in research and innovation has also been low, perhaps due to the insufficiency of incentives for business research and innovation and public-private cooperation. Strengthening private investment could mitigate the risks relating to the dependency of Lithuania's public investment in research and innovation on EU structural and investment funds. The tertiary education system shows weaknesses in quality and innovation outcomes, with limited levels of cooperation with foreign universities and research centres. The research and innovation system is fragmented and characterised by overlaps and duplication. This prevents Lithuania from reaching the critical mass of research and development capacity needed to increase innovative knowledge. Incentives for innovation and cooperation between academia and business need to be increased, inter alia by developing and investing in human capital, which could increase the level of technology transfers to the real economy. Improving the limited capacity of Lithuanian companies to absorb external knowledge and apply it to commercial ends would raise the level of innovation.</p>	
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<p>Luxembourg</p> <p>Commission Recommendation FR - EN - DE CSRs 2015-2016, Annex 2: FR</p> <p>Country Report 2016 FR - EN National Reform Programme: FR - EN Annex 1: FR Stability Programme: FR</p>	<p>(8) That prospect is all the more likely as the economy depends largely on the input of high-skilled workers from the neighbouring countries, who represent around one-third of overall employment.</p> <p>(10) A real strategy on age policy to keep older workers longer in employment and provide incentives and skills to get them back to work is still missing.</p>	<p>None</p>
<p>Malta</p> <p>Commission Recommendation MT - EN - FR - DE</p> <p>Country Report 2016 MT - EN National Reform Programme: EN Table 1: EN Table 2: EN Table 3: EN Stability Programme: EN</p>	<p>(7) Significant investments have been made, but education and training outcomes are still below target. The educational attainment of Malta's workforce is still among the lowest in the EU. Malta is implementing a comprehensive strategy for lifelong learning, but participation in lifelong learning programmes is still limited, particularly among those with low educational attainment. Challenges in this area include targeted outreach, improved access to training and partnerships between education and training institutions and employers. A legal notice establishing an institute for the continuous professional development of teachers (the Institute for Education) was approved in 2015. The Institute's main objectives are to: (i) provide teachers with skills needed in their daily professional activities; (ii) act as a hub for educators to meet and share their experiences and (iii) promote educational leadership. The Institute is now becoming operational and is expected to become the main driver in addressing teachers' professional development needs. Progress in this area will need to be monitored.</p>	<ul style="list-style-type: none"> - Take measures to strengthen labour supply, notably through increased participation of low-skilled persons in lifelong learning.

<p>Netherlands Commission Recommendation NL - EN - FR - DE Country Report 2016 NL - EN National Reform Programme: NL - EN Contribution of the social partners: NL - EN Stability Programme: EN - NL</p>	<p>(9) Public and private expenditure on R&D is low in relation to the level of educational attainment, academic achievement and economic development.</p>	<ul style="list-style-type: none"> - Prioritise public expenditure towards supporting more investment in research and development.
<p>Poland Commission Recommendation PL - EN - FR - DE Country Report 2016 PL - EN National Reform Programme: PL - EN Convergence Programme: PL</p>	<p>(9) Although the education system has improved significantly in recent years, it still fails to equip pupils sufficiently with the transversal skills needed for the rapidly changing labour market and innovation. The relatively low average standing of Polish higher education and science has a negative effect on the quality of provision. The degree of internationalisation of Polish higher education is very limited, both in terms of the number of foreign students and participation in international scientific collaboration. The financing model of higher education does not promote quality sufficiently, as it largely uses past university standings and quantity variables, such as the number of students and academic staff. According to employers, graduates lack transversal skills such as problem solving, critical thinking, or teamwork. Participation in lifelong learning is low, and vocational education and training do not correspond to market needs</p> <p>(10) While the availability and take-up of pre-school education has increased significantly in recent years, the availability of early childcare services remains among the lowest in the EU. Raising the obligatory school starting age to the age of seven years, and removing the obligation for five year olds to attend the pre-school,</p>	<ul style="list-style-type: none"> - improving the labour market-relevance of education and training.

	<p>combined with the new child benefit, may have further negative effects on labour market participation, especially of women.</p>	
<p><u>Portugal</u> Commission Recommendation PT - EN - FR - DE Country Report 2016 PT - EN National Reform Programme: PT Summary of NRP: PT Information on measures: PT Stability Programme: PT</p>	<p>(13) Portugal is underperforming in science-business cooperation and in the commercialisation of knowledge. The barriers to cooperation between universities and the business sector are high, due to both regulatory and bureaucratic obstacles and the lack of incentives for cooperation in the academic system. This is detrimental to the employability of graduates and to innovation. The launch of the new shortcycle higher technical courses (TeSPs) has provided new opportunities for cooperation between the polytechnics and regional economic actors, but university programmes remain outside the modernisation process.</p>	<ul style="list-style-type: none"> - Incentivise cooperation between universities and the business sector.
<p><u>Romania</u> Commission Recommendation RO - EN - FR - DE Country Report 2016 RO - EN National Reform Programme: RO Convergence Programme: RO</p>	<p>(13) several measures in the government's 'anti-poverty package' aim at tackling this issue, using an integrative approach (education, health, housing, social protection, transport).</p> <p>(14) Romania still faces education challenges. Several strategies cover lifelong learning, vocational education and training, tertiary education and early school leaving. However, the early school leaving rate remains well above the EU average, in part due to significant implementation delays of the strategy approved in 2015. Prevention and remedial programmes are limited. Vulnerable groups such as Roma and children from poor families continue to face obstacles in accessing and completing quality education, especially in rural areas. In early childhood education and care, Romania has taken action to support the participation of disadvantaged pupils in kindergarten (4-6 year-olds). Participation in</p>	<ul style="list-style-type: none"> - Take action to prevent early school leaving and increase the provision of quality education, in particular among Roma. - Improve access to integrated public services, extend basic infrastructure and foster economic diversification, in particular in rural areas. Strengthen public investment project prioritisation and preparation.

	<p>upper secondary vocational education and training is above the EU average, but the dropout rates remain high. The tertiary attainment rate is increasing, but the quality and labour market relevance of higher education is limited. Participation in adult education is very low.</p> <p>(17) Romania's key development disparities are between urban and rural areas. Employment, social, health-care and educational outcomes are lower in the latter and people face much lower access to education, medical services, basic utilities, and public services due to low and fragmented local administrative capacity.</p>	
<p>Slovakia Commission Recommendation SK - EN - FR - DE Country Report 2016 SK - EN National Reform Programme: SK - EN Stability Programme: SK</p>	<p>(7) Measures to address unemployment have been taken in the area of vocational education and training, subsidised jobs and job counselling. Low levels of education and skills and discrimination are factors influencing their poor labour market participation.</p> <p>(8) The education system is insufficiently geared to increasing Slovakia's economic potential. Educational outcomes are low by international standards and have deteriorated further. This is largely linked to the inadequacy of teachers' education and the low attractiveness of the teaching profession. Despite the 4% salary increase for teachers in 2016, low pay and insufficient practical training are among the factors making the profession unattractive to young people. Recently adopted antisegregation legislation has yet to be implemented to bring about positive change and increase Roma participation in mainstream education, including pre-school education.</p>	<ul style="list-style-type: none"> - Improve activation measures for the long-term unemployed and other disadvantaged groups, including individualised services and targeted training. Improve educational outcomes by making the teaching profession more attractive and by increasing the participation of Roma children from early childhood in mainstream education.

<p>Slovenia</p> <p>Commission Recommendation SL - EN - FR - DE</p> <p>Country Report 2016 SL - EN</p> <p>National Reform Programme: SL - EN</p> <p>Stability Programme: SL - EN</p> <p>Annex NRP: EN</p>	<p>(10) Long-term unemployment still represents more than half of all unemployed with a significant share of the long-term unemployed being low-skilled or older than 50 years of age.</p>	<ul style="list-style-type: none"> - In consultation with social partners, increase the employability of low-skilled and older workers, including through targeted lifelong learning and activation measures.
<p>Spain</p> <p>Commission Recommendation ES - EN - FR - DE</p> <p>Country Report 2016 ES - EN</p> <p>National Reform Programme: ES</p> <p>Stability Programme: ES</p>	<p>(2) ...further action is needed on innovation and skills and on compliance with the Stability and Growth Pact.</p> <p>(10) Nearly 60% of the long-term unemployed are low-skilled, which calls for appropriate active and passive labour market and training policies to tackle pervasive skills mismatches and prevent skills depreciation among this group. Interaction with employers in the design of training programmes is still weak.</p> <p>(12) The low overall skills level constrains the transition towards higher value-added activities and hampers productivity growth. Despite a high level of tertiary education attainment, skills supply is not sufficiently aligned with labour market needs and employability rates for recent tertiary graduates are among the lowest in Europe, with a significant proportion employed in jobs that do not require a university degree. Furthermore, despite a slight improvement over the past five years, partly supported by initiatives to increase business representation on university governing boards, cooperation between universities and businesses remains weak. The reduced mobility of academics, the rigidity of the university governance system and the administrative barriers faced by the</p>	<ul style="list-style-type: none"> - Take further measures to improve labour market integration, by focusing on individualised support and strengthening the effectiveness of training measures. - Take further measures to improve the labour market relevance of tertiary education, including by providing incentives for cooperation between universities, firms and research. Increase performance-based funding of public research bodies and universities and foster R&I investment by the private sector.

	<p>Offices for the Transfer of Research outcomes compound obstacles to closer cooperation.</p> <p>(13) Research and innovation policy in Spain faces several challenges. Interaction between public and private research is weak. Spain's R&D intensity (spending on R&D relative to GDP) and innovation performance keeps declining, against the backdrop of a relatively low number of innovative firms and limited incentives for collaboration between public research and business.</p> <p>In this context, the allocation of public funding for R&D activities in universities and public research bodies is usually not based on performance, thus reducing the incentives to improve the quality and relevance of scientific outputs.</p>	
<p>Sweden</p> <p>Commission Recommendation</p> <p>SV - EN - FR - DE</p> <p>Country Report 2016</p> <p>SV - EN</p> <p>National Reform Programme: SV</p> <p>NRP Annex 1: SV</p> <p>NRP Annex 3: SV</p> <p>Convergence Programme: SV - EN</p>	<p>(9) Sweden experienced the sharpest decline in the educational performance of 15-yearolds of any OECD country over the past decade in the PISA survey, and is now performing below both the EU and OECD averages. Deteriorating outcomes of school education risk putting pressure on Sweden's competitiveness and innovation capacity in the long run. An important performance gap between students with and without a migrant background adds to the education challenge. This gap deserves particular attention in light of the large number of newly arrived young migrants to be integrated into the education system. Unclear school funding mechanisms paired with unsystematic monitoring of the use of funding at different levels of the school system hinder the efficient use of resources. The government has made additional funding available to improve school outcomes and equity, and it is taking steps to integrate the newly arrived migrants in education.</p>	<p>None</p>

<p>United Kingdom</p> <p>Commission Recommendation EN - FR - DE</p> <p>Country Report 2016 EN</p> <p>National Reform Programme: EN</p> <p>Convergence Programme: EN</p>	<p>(6) In view of certain barriers to investment that still exist and the low level of public and private investment in the United Kingdom, the government's policy actions to boost skill levels, innovation and infrastructure investment are timely although effective implementation will be important.</p> <p>(7) Better labour market progression prospects and clearer routes to upskilling would assist those who find themselves confined to low-wage and/or lowhours of work. It would also address the skills shortages that are apparent in some parts of the economy, such as construction. Successful deployment of the resources arising from the apprenticeship levy will require careful attention.</p>	<ul style="list-style-type: none"> - Address skills mismatches and provide for skills progression, including by strengthening the quality of apprenticeships.
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