

**NATIONAL STRATEGY
FOR LIFELONG LEARNING
FOR THE PERIOD 2014 – 2020**

**As adopted with DCM No 12 of January 10,
2014**

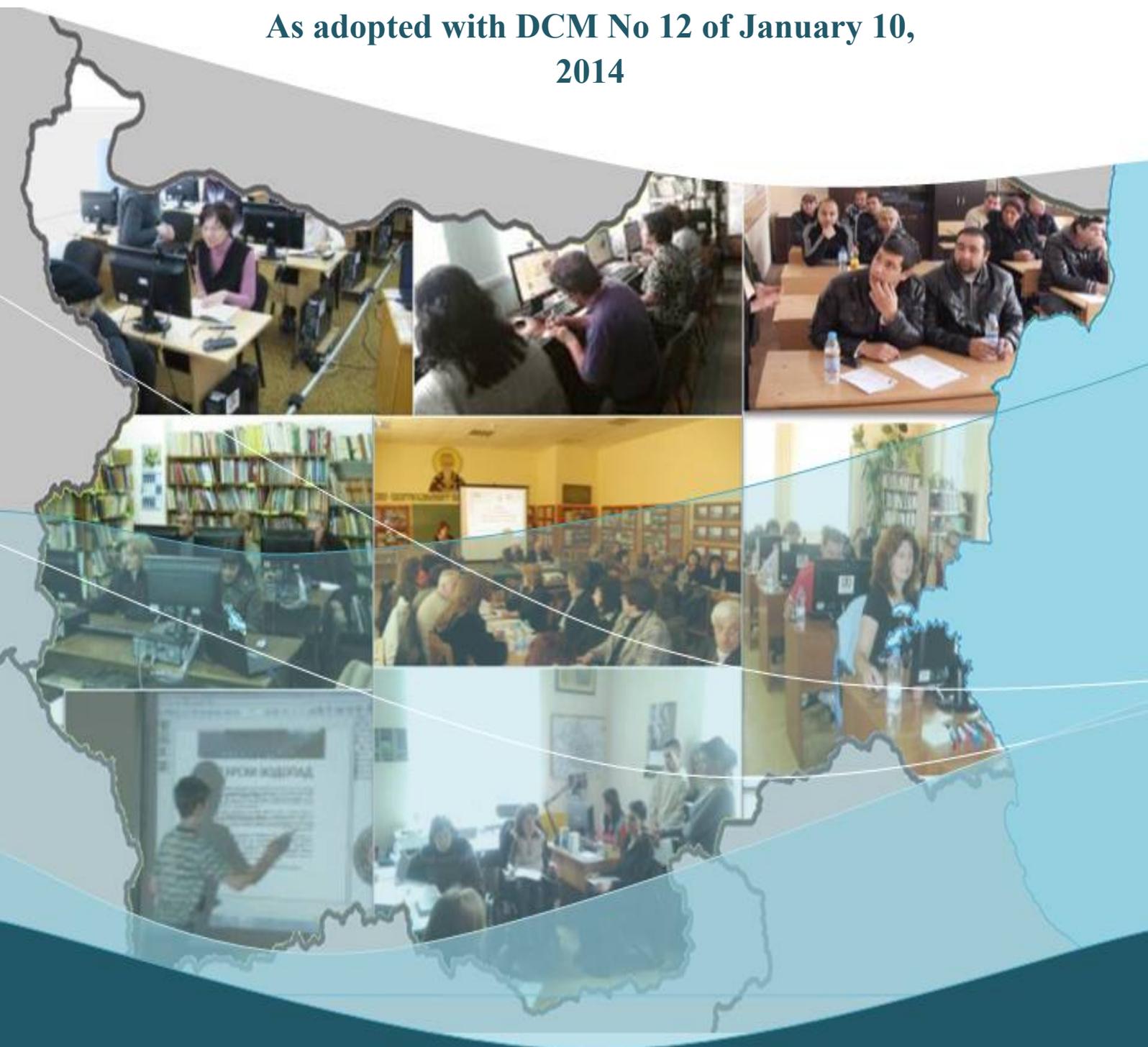


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INTRODUCTION

The National Strategy for Lifelong Learning (NSLLL) sets out the strategic framework of the state policy in education and training during the period, which aims at achieving the European goal for smart, sustainable and inclusive growth.

The Strategy has been elaborated in response to challenges, which on one hand have to do with our country's need to overcome the consequences of the financial crisis in Europe and worldwide, and on the other – to preserve the national identity and cultural diversity in the course of implementation of the cohesion policies.

The long Bulgarian transition to democracy and market economy is yet to lead to the establishment of consistent qualifications systems, which would match the new economic processes. Amid conditions of high unemployment, the enterprises experience an ever increasing deficit of workers having the necessary qualifications, which, in parallel with the aging population and slow pace of the reforms in education, is seen as a significant impediment to economic growth and attraction of new investments into Bulgaria.

Quick dissemination of modern-era technologies served to further swell the gap between supply and demand on the labour market. This reflects on the quality supplied, which makes the need for reforms in the education and training system an even more urgent one.

At the same time, albeit at a slow pace, the national economy is beginning to find its own direction of development and formulate its own demands in regards to the levels of knowledge and key competences.

From this perspective, the time is ripe for measures to be taken in regards to the need for new skills through changes in the education and training system, which would ensure building up the mentality for lifelong learning.

This Strategy for Lifelong Learning is expected to be perceived as a response to all emerging challenges in regards to the social inclusion and economic growth.

The Strategy applies the definition of lifelong learning, as used in the EC Memorandum on LLL (2000), namely: “*all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence*”.

The document covers all forms of education, training, and learning – formal, non-formal, and informal – which one undergoes throughout life, and also provides recommendations for the following seven years, which would serve as basis in the preparation of annual plans, based on which progress in the implementation of LLL in Bulgaria would be traced.

This Strategy outlines the content, forms, environment, and interactions among all players in the lifelong learning process, that is:

- **learners** – all persons within the country, who are engaged in learning in the area of education, the formal and non-formal training or informal learning;
- **training providers** – the institutions carrying out training, (whether private or state kindergartens, schools, universities, training centres, culture institutions, etc.), which meets society’s needs and the labour market’s requirements;
- **the employers, trade organizations, labour unions, civil society organizations, and other partners** are those, which set forth and meet the above requirements, which deal with the needs for education and training;
- **the regions, municipalities, and local communities** have an important part to play in the process of asserting their position of „learning regions”;
- **government bodies – ministries and agencies** – set out the national policies in the area of education and training, as well as the relevant tools and measures required to ensure the efficiency of demand and supply of LLL.

The goals of the National Development Programme Bulgaria 2020 include, inter alia, high level of skills, opportunities for innovations, adaptability to the changes in the character of work, and full social inclusion.

This Strategy’s context takes into account the new goals and the new scope of learning, the learner groups, the providers, the learning/teaching methods, the initiatives for demand and supply of learning, the supporting measures, the transparency and comparability, as well as quality assurance.

A distinctive feature of Bulgaria’s lifelong learning strategy is the comprehensive approach, thus encompassing all areas of learning. The document addresses preschool education and training, general school education, vocational education and training, higher education, continuing adult training, validation of outcomes from non-formal training and informal learning.

The strategy works towards the expectation that lifelong learning will be recognized and supported by the government's policy and by all stakeholders as a guiding principle in the supply of education and training in a national context.

1. LIFELONG LEARNING IN BULGARIA – STATE OF PLAY AND CHALLENGES

1.1. Progress in the accomplishment of the major objectives of the National Strategy for Lifelong Learning for the period 2008-2013

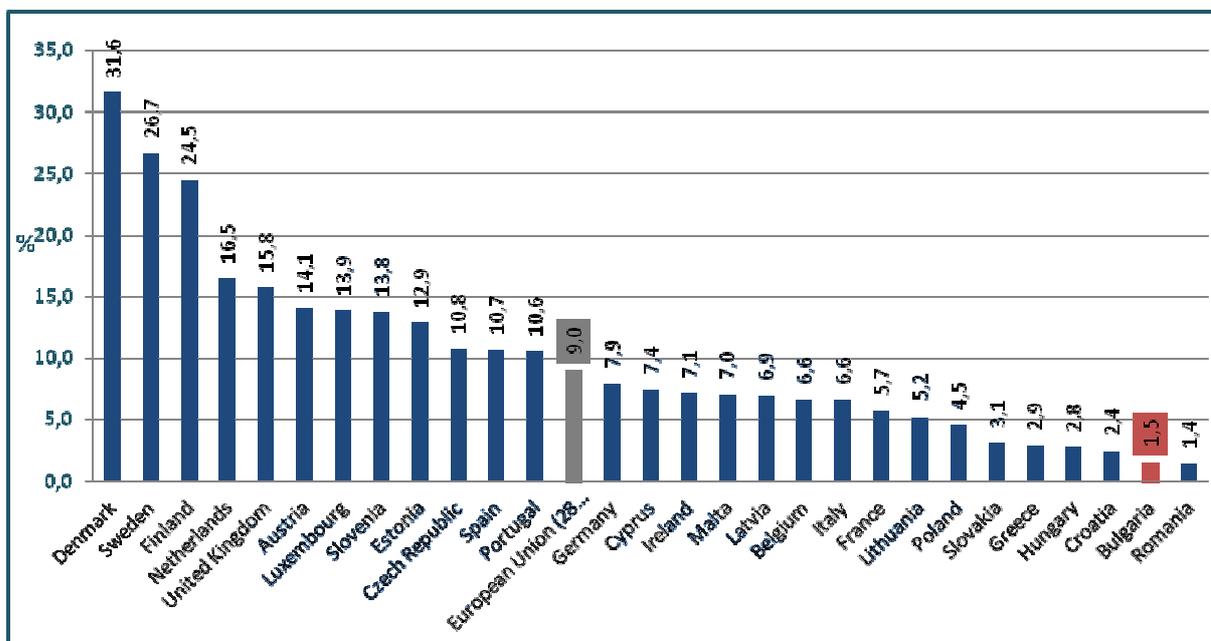
The National Strategy for Lifelong Learning for the period 2008 – 2013 had identified three major objectives as at 2013:

- 5% participation in LLL of the population aged 25-64;
- Share of early leavers from the educational system – 12%;
- Share of persons aged 20-24 completing secondary education – 85%.

The Strategy objective for **5% participation in LLL of the population aged 25-64** would not be achieved by 2013. According to the Labour Force Survey (LFS) carried out by the NSI in 2012 barely **1.5%** of the population aged 25-64 has taken part in formal or non-formal education or training during the four weeks preceding the interview (*Graph 1*). Despite the 0.2 percentage points increase, compared to 2011, the data regarding Bulgaria are not particularly optimistic. There has been no long-term and sustainable trend during the past decade even though the period 2010 – 2012 features 3 consecutive years of increase of participants. The gap between the average EU values and Bulgaria remains relatively big – 6-fold in 2012. One of the lowest levels of participation has been observed in Bulgaria in the course of this survey (together with Romania)¹.

Graph 1. Share of the population aged 25-64, which takes part in lifelong learning in the EU-27 member-states for 2012

¹ EUROSTAT, Database by themes, Participation in education and training, Participation rate in education and training by sex.



Source: EUROSTAT, Labour market, Labour Force Survey²

There are different results coming from the Adult Education Survey (AES), which is a new element of the EU stats concerning education and lifelong learning. According to it, participation of Bulgaria's population aged 25-64 in formal education and training or non-formal learning during 2011 stood at **26.0%**. A drop of 10.4 percentage points was registered compared to the 2007 results.

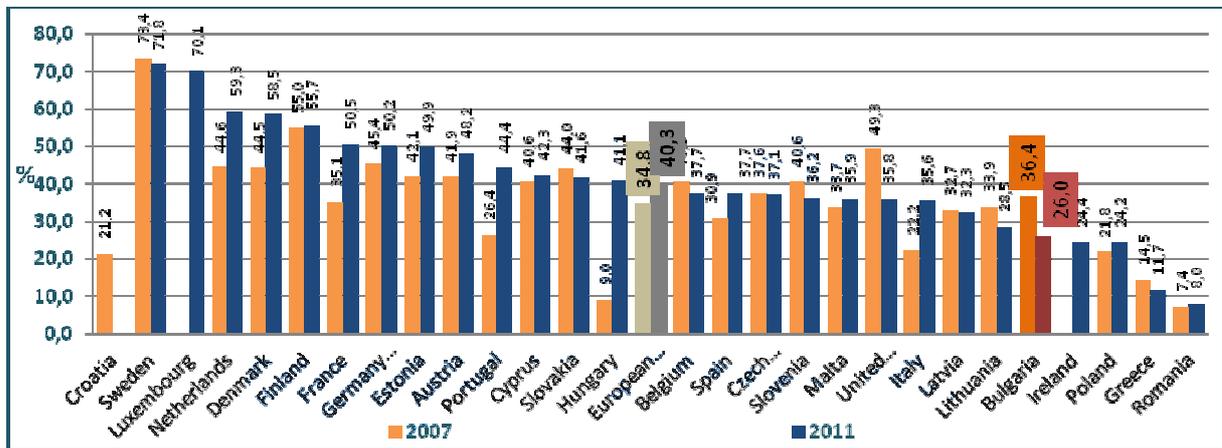
According to the NSI, the factors behind such drop mainly have to do with the overall economic crisis, most of all, the reduction of the number of employed persons by more than 280 000 during 2011 compared to 2007, the employed persons being the main participants in education or training.

Compared to the other EU countries Bulgaria's position has deteriorated significantly since it ranked **second** in terms of biggest drop of the share of persons taking part in LLL – 10.4 p.p. (Graph 2). It is second behind Great Britain – 13.5 p.p., with the next-ranked country's (Lithuania – 5.4 p.p.) population being nearly **twice smaller**.

According to the data from both surveys (2007 and 2011) Bulgaria's position has deteriorated from 14th place in 2007 (out of a total of 25 participating countries) down to 22nd place in 2011 (out of a total of 25 participating countries). Only Greece, Romania and Poland scored worse on this indicator. Whereas in 2007 the levels of participation in LLL for Bulgaria were slightly above the average ones for the EU (27), in 2011 these were considerably below the average levels for the European Union – by 14.2 p.p.

Graph 2: Participation in education and training (AES), absolute values for 2007 and 2011

² Education and training, Lifelong learning, Lifelong learning - LFS data, Main indicators on lifelong learning - LFS data from 1992 onwards, Participation in education and training by sex and age -%



Source: EUROSTAT, Education and training, Lifelong learning, Adult Education Survey (AES)³

Most young people pass through the system of formal education and make a transition to either further education or employment. One in every eight Bulgarian nationals leaves the educational system without acquiring secondary education. In 2012 the share of **early school leavers** (ESL's) aged 18-24 for Bulgaria is **12.5%**⁴. This value is slightly below the average level for the EU countries.

For the last 5 years the share of ESL's in Bulgaria has dropped by 2.3 percentage points (*Graph 3*), with the rate of decline during the past decade being faster than the EU average. During the last year - 2012 a 0.7 p.p. increase of the early school leavers in Bulgaria was registered and despite the decline in the progress rates with each passing year, there are potential opportunities to accomplish the earmarked national goal – reduce the share of ESL's down to 11% as at 2020.

Graph 3. Early school leavers aged 18-24, by years



Source: NSI, „Labour Force Survey”⁵

With women the ESL share is larger than with men, the difference between the two sexes being 0.9 percentage points for 2012, with this ratio persisting for the fifth year running. The gender

³ EUROSTAT, Database by themes, Education and training, „Participation rate in education and training by sex” http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_100&lang=en

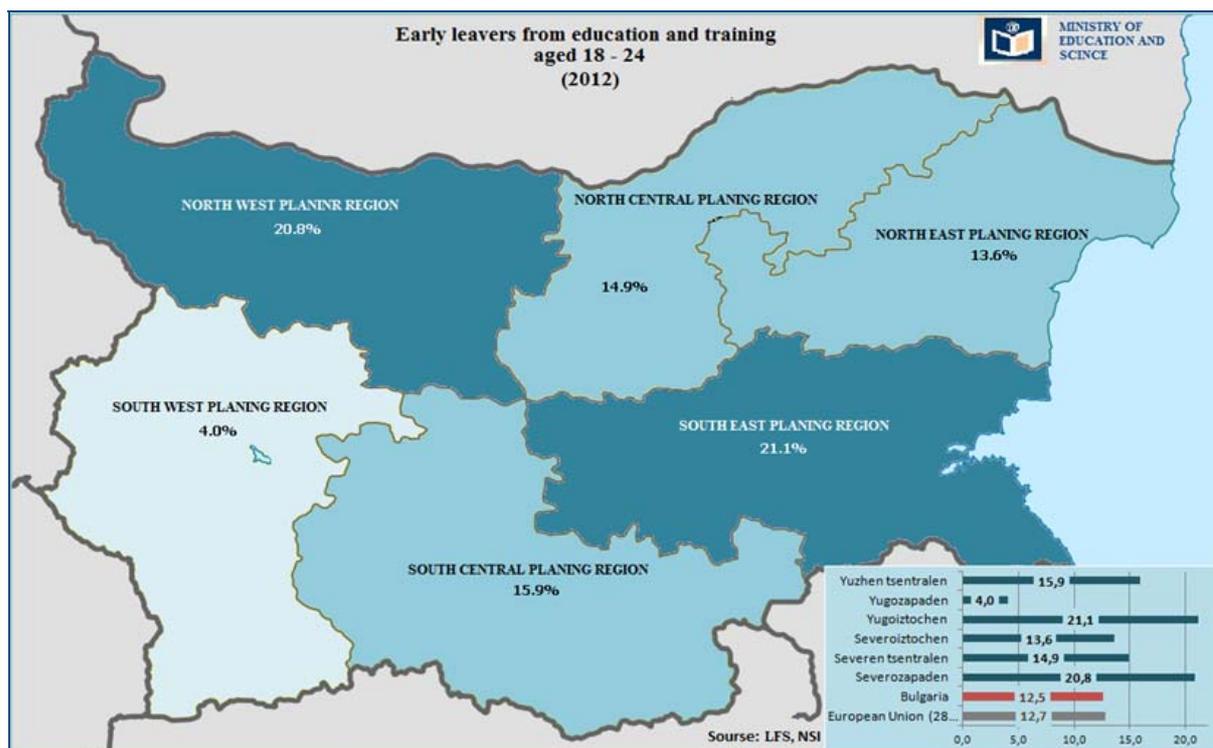
⁴ The data concerning the share of ESL's for the last two years (2011 and 2012) has been revised in accordance with the weighting method applied as of 2012 and the data from the 2011 Population Census.

⁵ NSI, Europe 2020, Share of early school leavers below 10%

differences are of interest also due to the fact that despite the larger share of women drop-out, their relative share among those completing higher education is significantly higher compared to men.⁶

One also has to note the existence of significant inter-regional differences on national level (*Map 1*), which are due less to an increase in the absolute number of ESL's in different regions and more to a migration of people with secondary and higher education to the large urban agglomerations and even out of the country, which increases the relative share of ESL's both in the underdeveloped areas, as well as in areas, where industries affected by seasonal fluctuations are well developed⁷.

Map 1. Early school leavers aged 18-24 in 2012



Source: EUROSTAT, Regional Educational Statistics, Early school leavers (from the educational and training system) (ESL's)⁸

The target value set out in the NSLLL of **having a share of 85% holders of at least secondary education among persons aged 20-24** was achieved 2 years ahead of schedule, reaching 86.7% in 2011 (*Graph 4*). Overall, during the period 2005-2012 6 years of positive changes and one year of negative change of this ratio⁹ have been observed in Bulgaria. In summary, this amounts to an average annual increase of 1.13% during that period.

⁶ EUROSTAT, Population and social conditions, Education and training, Educational attainment, outcomes and returns of education, Early leavers from education and training, by sex and NUTS 2 regions, Early leavers from education and training by sex and employment status.

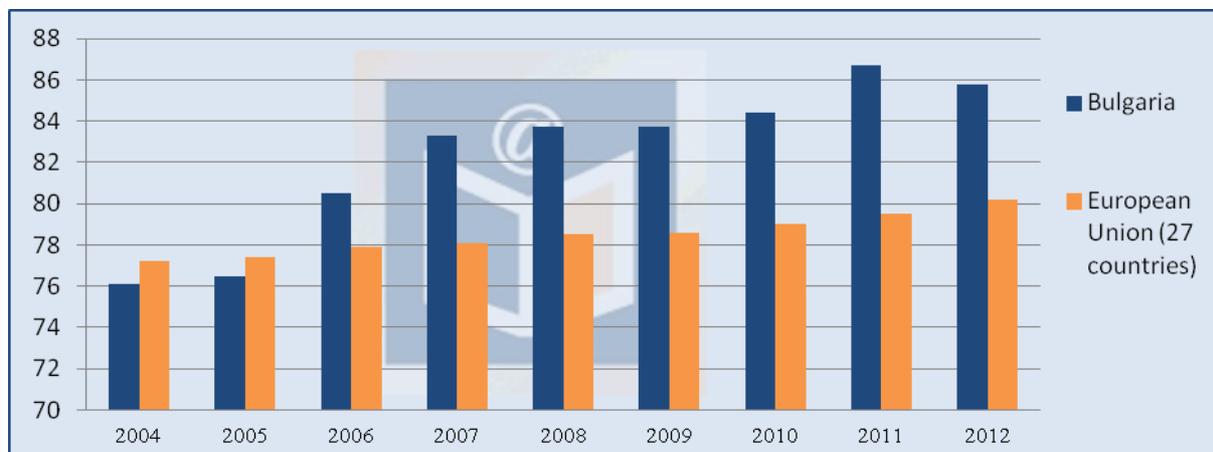
⁷ This means the tourism sector where people with secondary education and a wide range of qualifications but without higher education prevail.

⁸ EUROSTAT, Regions and cities, Regional statistics, Data, Database

⁹ Between 2011 and 2012

On this indicator the rates of annual relative increase for Bulgaria have been twice higher than those of EU-27 for the period 2007-2011 (27), but this trend was reversed in 2012, when a decline of circa 1 p.p was registered.

Graph 4. Holders of at least secondary education among those aged 20-24 for the period 2005 – 2012



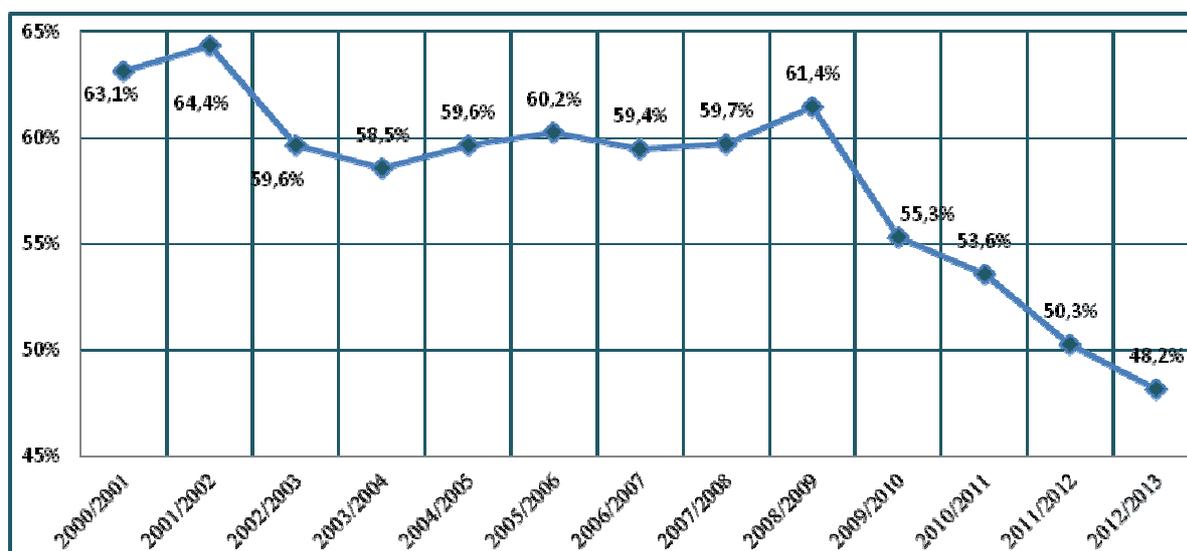
Source: EUROSTAT, Main indicators, Population and social conditions, Education and training, Educational attainment, outcomes and returns on education¹⁰

Despite the increase in the overall share of young people completing secondary education, those completing vocational education or training have for the last few years been approximately 20% less than those completing general education. During the period 2008-2012 there has been a considerable (by 13,2 percentage points) and ongoing decline in the share of young people attaining professional qualification in the following areas of education: Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction (*Graph 5*). According to the employers and their organizations there is a deficit of qualified workers in these areas and the educational system does not train a sufficient number of such specialists. „There are no jobs for the people but there are also no people for the jobs“¹¹ is a clear message, which should be addressed by implementing measures towards increasing the number of enrolled students in these specialties through the government enrolment plan.

Graph 5: Share (%) of those attaining levels I, II, III and IV of professional qualification in the areas of: Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction out of all those attaining any professional qualification.

¹⁰EUROSTAT, Statistics, Tables by themes, Population and social conditions, Education and training, Educational attainment, outcomes and returns of education, „Persons of the age 20 to 24 having completed at least upper secondary education by sex”

¹¹ Bozhidar Danev, Bulgarian Industrial Association



Source: NSI, Heading: Education and lifelong learning, Graduates, Sub-heading: Completed programs for attainment of professional qualification degree in specialized education areas

2.1. Bulgaria's position in regards to the major European objectives and indicators

To measure the progress relating to achievement of the objectives of the Europe 2020 Strategy, the European Commission has set out objectives, which became national objectives for Bulgaria within the 2020 horizon. The strategic framework for European cooperation in the area of education and training („ET 2020“) also sets out other indicators to measure progress in the area of education and training.

Table 1. Bulgaria and the EU in terms of the major objectives and indicators in education and training for 2012 and 2020

Indicators	Best performance in EU-27	Worst performance in EU-27	Average for EU-27	Bulgaria	Bulgaria 2020	EU 2020
Early leavers from education and training, 18-24	4.2%	24.9%	12.8%	12.5%	11%	10%
Completing higher education, 30-34	51.1%	21.7%	35.8%	26.9%	36%	40%
Participation in preschool training of children aged 4 to 1 st grade age	100%*	74%*	93.2%*	87.8%	90%	95%
Participation in lifelong learning, 25-64 - LFS	31.6%	1.4%	9.0%	1.5%	5%	15%
Participation in lifelong learning, 25-64 - AES	71.8%	8.0%	40.8%	26.0%	not stated	not stated
Participation in formal education, 25-64 - AES	13.5%	1.4%	4.9%	2.4%	not stated	not stated
Participation in non-formal training, 25-64 - AES	68.0%	69.0%	38.4%	24.4%	38%	not stated
Share of students (%), whose skills have been assessed as being beneath the critical second level ¹² in the reading cognitive area ¹³ , as per the scale of the Programme for International Assessment of Students	9.1%	39.4%	17.8%	39.4%	30%	15%

aged 15 (PISA).						
Share of students (%), whose skills have been assessed as being beneath the critical second level ¹⁴ in the mathematics cognitive area, as per the scale of the Programme for International Assessment of Students aged 15 (PISA).	1.6%	43.8%	22.1%	43.8%	35%	15%
Share of students (%), whose skills have been assessed as being beneath the critical second level ¹⁵ in the natural sciences cognitive area, as per the scale of the Programme for International Assessment of Students aged 15 (PISA).	5%	38%	16.6%	36.9%	30%	15%

*- the data refer to 2011

Source: EUROSTAT and OECD

For 2012 the values for Bulgaria are above the average European level only in one of the defined European indicators: *early leavers from the educational system* (12.5% compared to 12.8% for the EU).

Although the absolute number of *those completing higher education* has been on the rise for the past 10 years, from 50 599 in 2002 to 64 091 in 2012, their relative share among the persons aged 30-34 is on the decline. In terms of this indicator Bulgaria ranks 20th out of 27 member-states in 2011 (27.3%)¹⁶ and 21st (26.9%)¹⁷ out of 27 member-states in 2012. It is important to note that during the last 4 years the share of persons aged 30-34, who complete higher education, has dropped by 1 p.p., which is the biggest registered drop for this period among the EU countries. This decline is to a large extent influenced by the smaller absolute number and relative share of those completing higher education among the young people during the previous periods (2003 – 2007).¹⁸ One should also not disregard the influence of outbound migration among the young people, who have completed higher education.¹⁹

According to NSI data, a higher relative share of women completing higher education is registered among the persons aged 30-34, the gender ratio being 40:60. For 2012, according to

^{12, 14 and 15} The second level is considered the crucial boundary in the achievements of students within the PISA scale. At levels 2 and above the students exhibit the competences, which enable them to undertake effective action in real-life situations. The students beneath level 2 exhibit competences, which will impede their effective and productive participation on the labour market, in social and private life.

¹³ PISA assesses key competences of the students in three cognitive areas: reading, mathematics, and natural sciences. Each survey stage assesses all three areas but only one of them is assessed in detail and depth.

¹⁶ EUROSTAT, Population and social conditions, Education and training, Educational attainment, outcomes and returns of education, Tertiary educational attainment by sex, age group 30-34.

¹⁷ The data regarding the share of those completing higher education over the last two years (2011 and 2012) have been revised in accordance with the weighting method applied as of 2012 and the data from the 2011 Census.

¹⁸ See NSI data regarding those completing higher education during the period 2000-2012 - <http://www.nsi.bg/otrasal.php?otr=23>

¹⁹ According to data from the 2011 Census, the share of the expatriate Bulgarians with completed higher education over the last 10 years is slightly above 34%.

data from the Labour Force Survey, the women completing higher education are 33.6% of those aged 30-34 (a value close to Bulgaria's target), while for the men this share is a mere 20.5%.

Bulgaria ranks 5th in terms of the gap between the targeted objective of 36% (for 2020) and the actual accomplishment in 2012 (26.9%). If the current negative trend, which commenced in 2008, persists, it will be difficult to reach the targeted objective. Nevertheless, in view of the rising number/share of undergraduate students during recent years, it is possible that during the period 2016-2018 the trend may be reversed from negative to positive.

The employment of young people aged 20 - 34, who have recently completed (1 to 3 years prior to the reference year) higher or secondary education, has declined by 12,3 percentage points between 2008 (79.6%) and 2012 (67,3%). The employment ratio of this age cohort of young people in Bulgaria (67,3%) is considerably lower than the EU-27 average (27) for 2012 (75.7%). The average employment ratio of this age cohort in the EU countries has declined during the last five years by 6.3 percentage points. This means that employment for the young people with higher education in Bulgaria is declining twice faster than it does on average in the EU. At the same time, during the last 3 years a slowdown has been registered in the decline of employment of young people with higher education on average for the EU, and for Bulgaria there has been an increase in employment in 2012 compared to 2011.

After the big drop in the coverage of children participating (enrolled) in „*early childhood training*” (age 4 to enrolment in grade 1 /commencement of the mandatory education), which was registered during the period 2003-2008 from 83.9% down to 78.4%, considerable efforts were made during the last 4 years by the central government and the municipalities to expand/restore the coverage of children in kindergartens mainly through the introduction of compulsory preschool education. Thus, this coverage slowly but steadily rose from 78.5% during 2009, to 79.2% during 2010, and reached 87.8% during 2012, the growth in this indicator during the last 3 years being a significant one - 8.6 percentage points. On the other hand Bulgaria ranks below the average level for the EU countries in this indicator (92.4%) and ranks 15th out of 18 European countries for 2011 and 22nd out of the EU-27 countries for 2010. If the commenced trend of coverage increase is kept, the gap between this indicator's scores for Bulgaria (90.0% for 2020) and the 2020 target set for the EU - 95% will be narrowed.

The outcomes from the PISA survey (2012)²⁰, which determines the level of functional literacy, indicate that in two of the three cognitive areas Bulgaria has the worst performance

²⁰ During 2012 5 280 Bulgarian students, mainly 9th graders, from 188 schools took part in the OECD survey.

(ranking last) in the EU (out of the EU member states Malta did not take part in the 2012 survey)²¹. These are the results of 15-year old students ranked at *level 1A*,²² *1B*²³ and lower in the reading cognitive area (39.4%) and at level 1 and lower in the mathematics cognitive area²⁴ (43.8%)²⁵. At the same time, the share of students with poor mathematics skills has declined by 9.5 p.p. compared to 2006²⁶ The situation is slightly better in the natural sciences cognitive area, where 36.9% of the students achieved level 1 and lower, which ranked our country 25th, in front of Romania and Cyprus (*Graph 6*).

Graph 6: Share of students with results beneath the critical second level according to the 2012 PISA survey in the reading literacy area, by EU member-states, based on changes from 2009(28).

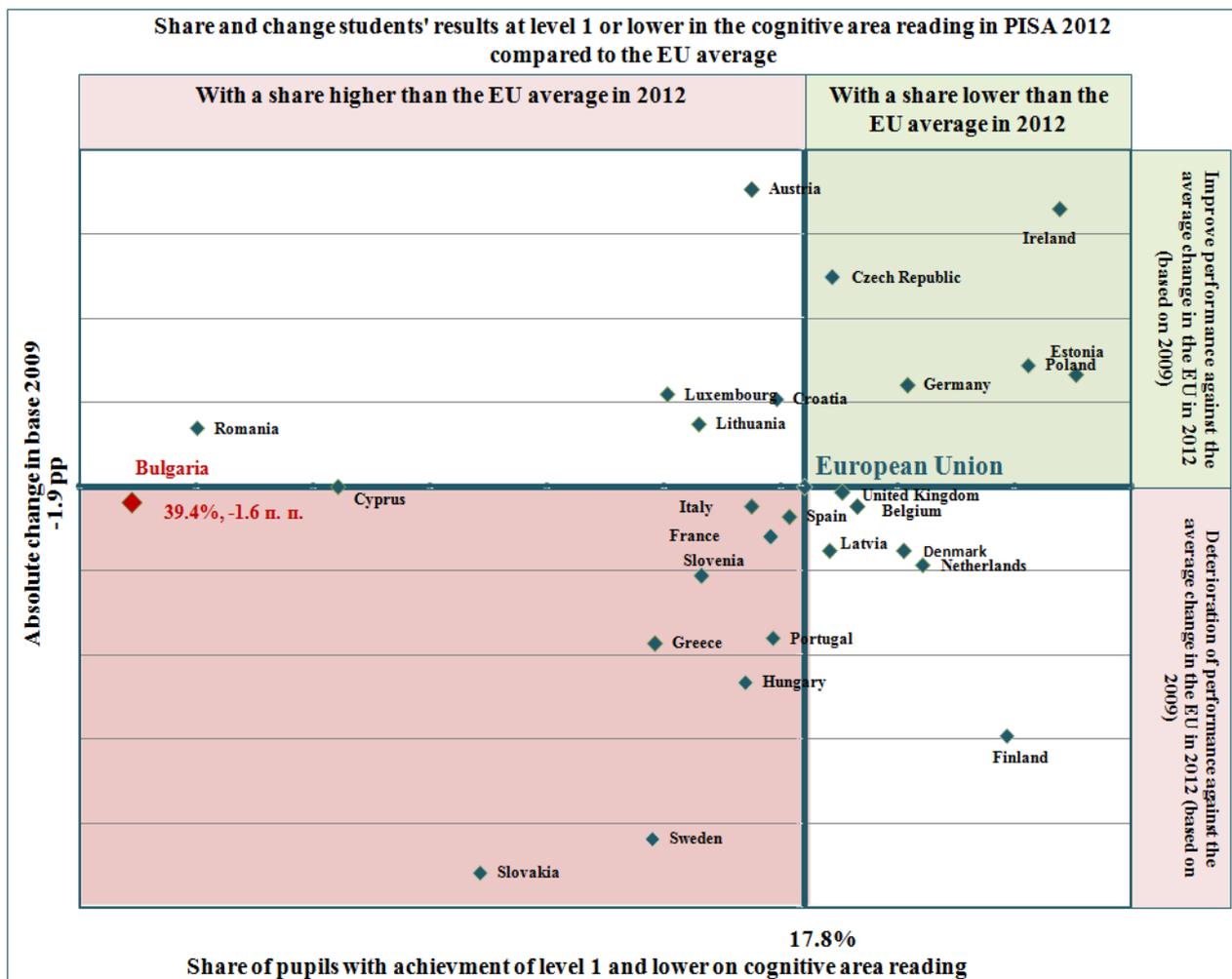
²¹ OECD, PISA 2012 Result in focus, page 5, Tables I.2.1a, I.2.1b, I.2.3a, I.2.3b, I.4.3a, I.4.3b, I.5.3a and I.5.3b „Snapshot of performance in mathematics, reading and science”

²² Level 1A corresponds to assignments, where the students are able to find information clearly presented in a text; determine the main idea of a text on a familiar subject matter, and find a link between information in a text and the day-to-day experience. Usually, in assignments on this level the information is evident and the students are given detailed instructions how to approach the solution of the given assignment.

²³ A level 1 B achievement means application of elementary reading skills, such as discovery of clearly stated information in a short, simple text having familiar style and content. Usually, the formulation of the question, as well as the text itself, contain elements, which make the reader’s task even easier, the required information having been repeated several times or images or known symbols explaining and illustrating the text’s content having been added.

²⁵ The students with level one results can solve relatively simple mathematical problems. These are problems formulated in a familiar context, with the entire required information having been clearly presented in the problem’s setting. They have skills to perform standard procedures and follow concrete directions. They perform operations and actions, which arise directly from the problem’s setting.

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Source: OECD

The OECD analysis underscores that the socio-economic status of students in Bulgaria has significant impact on the levels of achievement²⁷, with the students coming from lower income households being much likelier to display poor basic skills in mathematics, natural sciences, and reading²⁸. Other important factors mainly include the negative effects from early childhood care, as well as gender differences, especially in the reading cognitive area (girls perform much better than boys), „which is a phenomenon observed not only in Bulgaria, but also in all survey countries”²⁹. The reasons for the low scores in the OECD survey (reading, mathematics, and natural sciences) are likely due to „the school system’s capacity to ensure access to quality education for all students”. What is also striking is the significant difference (for Bulgaria) in the scores of students from comprehensive, profiled, and vocational secondary schools.

The considerable difference in 2012 between the share of the Bulgarian students, whose results are beneath the critical second level, and the average³⁰ for the EU countries, being circa

²⁷ OECD, PISA 2012 Result in focus, page 13, Figure II.1.2. – „Performance and equity”

²⁸ OECD, PISA 2012 Result in focus, page 13

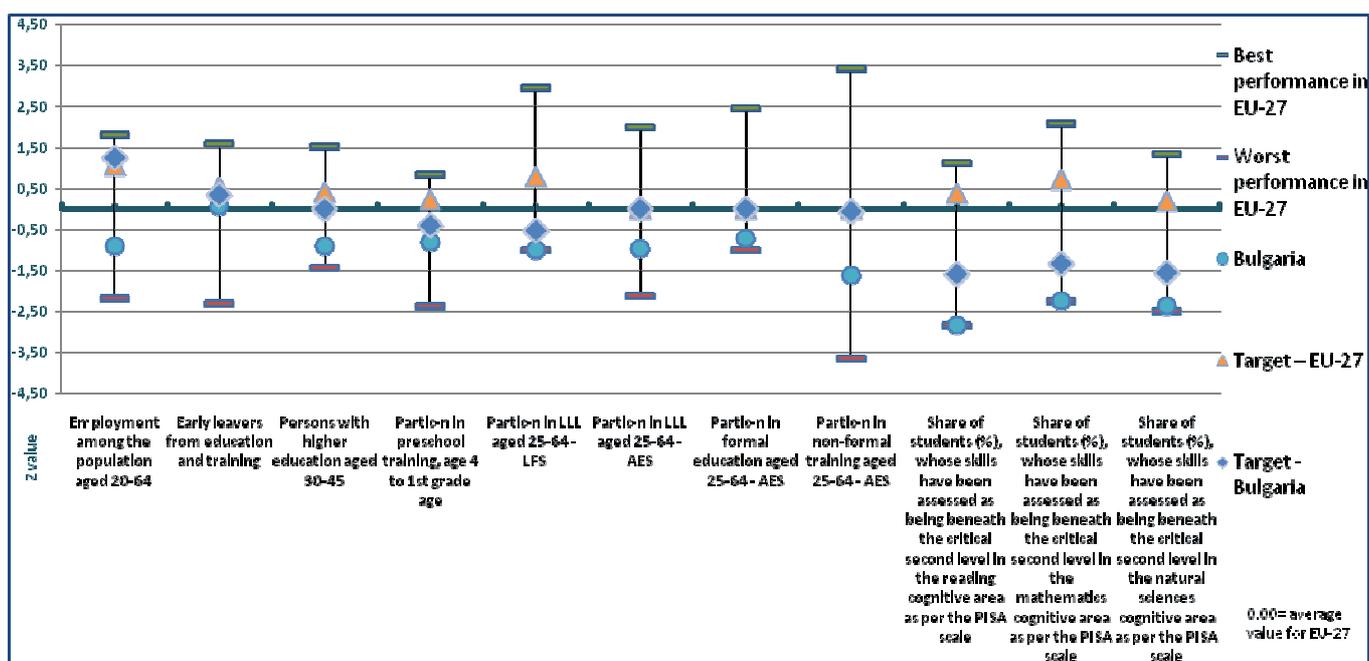
²⁹ A School for Tomorrow, p. 50, CCAQSE, 2010

³⁰ Averaged per country results, i. e., weighted average

21.7 percentage points in mathematics, 21.6 percentage points in reading, and 20.3 percentage points in natural sciences, serves to confirm the persistence of the negative and concerning condition of the quality of education in Bulgaria and the need for changes in the curricula and syllabi.

Bulgaria's unenviable position in terms of the values of most of the internationally comparable indicators places it in a situation where it needs to play catch-up with the average European achievements in the period running up to 2020 (Graph 7). To achieve this, consistent efforts will be required for the overall improvement of the quality and effectiveness of the national education and training system. This goal is a long-term one and its achievement will require the adoption of new legislation in the area of education and training, assurances for such legislation's application, and careful tracing of the extent of its impact.

Graph 7. Bulgaria's positioning and the EU objectives vis-à-vis the average European value for 2012 (key indicators)



According to data of: EUROSTAT and OECD

2. BASIC PRINCIPLES OF THE STRATEGY

The following principles will be applied in the course of implementation of the National Strategy for Lifelong Learning during the period 2014-2020:

- **Quality:** transforming lifelong learning into a factor for the success and competitiveness of the citizenry, the institutions, and organizations by providing the conditions to achieve higher educational objectives;

- **Equality and diversity:** ensuring equal opportunities for all individual and collective stakeholders to exercise their rights and duties arising from their participation in various and multiple forms of lifelong learning, which take place in diverse socio-economic contexts;
- **Decentralization:** transfer of powers and resources from central government bodies and public institutions to the regional administrations, the municipalities, the setups of social partners, the non-governmental organizations, etc., and also to associations of training providers in order to ensure the access to lifelong learning activities for various target groups and specific participants;
- **Cooperation:** conduct of consultation processes at various levels, proactive dialogue and allocation of the rights, duties, and risks among all stakeholders in order to achieve the strategic objectives and priorities of the lifelong learning policy through implementation of the specific measures scheduled for the impact areas;
- **Measurability:** enhancement of the opportunities for monitoring and measuring the education objectives;
- **Flexibility:** preparedness of the stakeholders to respond, upon occurrence/ascertainment of unforeseen social and socio-economic processes, through expansion of the earmarked objectives and actions.

All participants in the processes associated with the lifelong learning policy may further develop the basic principles according to the level of their operations.

3. STRATEGIC LIFELONG LEARNING FRAMEWORK

3.1. 2020 Vision

As at 2020 Bulgaria would be a country, where conditions have been created for full creative and professional success of the person and where the access to various and quality forms of lifelong learning has become a reality for all its citizens.

3.2. Strategic objectives and progress indicators

- Increase the share of the children covered by preschool education and training from age 4 until first grade enrolment age from 87.8% in 2012 to 90% in 2020

- Reduce the share of early leavers from the educational system aged 18-24 from 12.5% in 2012 to less than 11% in 2020;
- Reduce the share of 15-year olds with poor achievements³¹ in:
 - ✓ reading – from 39.4% in 2012 to 30% in 2020;
 - ✓ mathematics – from 43.8% in 2012 to 35% in 2020;
 - ✓ natural sciences – from 36.9% in 2012 to 30.0% in 2020;
- Increase the share of those attaining professional qualification degrees in the broad areas of Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction to at least 60% in 2020;
- Increase the share of those completing higher education aged 30-34 from 26.9% in 2012 to 36% in 2020;
- Increase the employment rates of the population aged 20-64 from 63% in 2012 to 76%³² in 2020;
- Increase the participation of the population aged 25-64 in education and training from 1.5% in 2012 to more than 5% in 2020 (a 4-week reference period);
- Reduce the share of illiterate persons³³:
 - ✓ among persons aged 15-19 from 2.0% in 2011 to 1.5% in 2020;
 - ✓ among persons aged 20-29 – from 2.3% in 2011 to 1.5% in 2020

3.3. Priorities

3.3.1. A step forward to a new educational approach and innovations in education and training

Setting up a coordinated and change-adaptable system of education and training, which covers learning in all its forms – from preschool education and training to higher education and

³¹ Having results below the critical second level of literacy as per the Programme for International Student Assessment (PISA) of the Organization for Economic Cooperation and Development.

³² Updated Employment Strategy 2013 – 2020, p. 20, Table 3, Objective 1. Level of employment of women and men aged 20-64, including through higher participation of young people, senior citizens, and low-skill workers, as well as through better integration of legal migrants – 76%.

³³ Definition of the 2011 Census, in accordance with the UN Recommendations (353)

adult learning in all its aspects - education, formal and non-formal training, and informal learning. Application of an educational approach supporting the development of all learners and contributing towards development of thinking, capable, and proactive individuals able to handle changes and uncertainty.

3.3.2. Increasing the quality of education and training

The main challenge is to organize the education and training and align them towards attainment of the key competences by all learners. To achieve this objective and turn into a fundament of the educational process more focus should be placed on the acquisition of basic skills, which would evolve into permanently attained competences such as competences in the mother tongue to achieve functional literacy, literacy in the area of mathematics and natural sciences, technological and digital literacy, as well as foreign language communication skills. At the same time, higher quality of teaching must be ensured, a crucial prerequisite, which required effective basic qualification and ongoing, continued qualification of teachers and educators. Another important prerequisite is to transform the profession of teacher and educator into an attractive career choice through all expedient means and tools. Governance of the education and training institutions must be improved in order for effective and flexible quality assurance systems to be elaborated. It is essential to upgrade the funding system as a tool to ensure the efficiency of primary and continuing education and training through the shared and balanced responsibility between the government, the employers, and the learners.

3.3.3. Ensuring the educational environment for equal access to lifelong learning and for active social inclusion and active citizen participation

Set up an educational environment, which ensures an opportunity for all citizens, regardless of their personal, social, or economic status, to attain, enrich, and develop throughout their life both the skills specific to their jobs, as well as key competences necessary for their employability. Promote active citizen participation and intercultural dialogue among the various ethnic groups in order to overcome the issues associated with non-enrolment in or early leaving school, and stimulate enrolment in school by providing early school cares incidental to the successful integration of children, for whom Bulgarian is not the mother tongue. Implement measure for reintegration of school leavers into the educational system.

Set up a harmonious and diverse academic environment for those coming from vulnerable groups, including, inter alia, children, students, and adults with special educational needs and chronic conditions, as well as disadvantaged ones, in view of ensuring equality and access to high-

quality education and training, more complete preparation for the future social life and success on the labour market. Special attention must be paid to training the young people for tolerant interaction with their peers of different ethnic origin and to promoting the democracy values associated with respect for the basic rights and zero tolerance to all forms of discrimination.

3.3.4. Promoting education and training aligned to the needs of the economy and changes on the labour market

Partnership among the business universe and various degrees and sectors of education, training, and research will help direct better the efforts to build suitable knowledge, skills, and competences, as required by the labour market, and promote innovations and enterprise in all forms of learning. This can be accomplished through joint efforts towards development of education and training adaptable to the needs of the labour market, common responsibility for preparation and implementation of curricula, to improve the career guidance policy and practices at all levels of education, training and employment, as well as ensure the equality of formal education and training, non-formal training, and informal learning through introduction of a learning outcomes validation system. One of the foremost challenges is to promote attainment by all citizens of universal key competences, such as learning skills, proactiveness, and enterprise, and cultural awareness, as well as the so-called „soft skills” such as skills for teamwork, decision-making, conflict resolution, etc. Another challenge is to ensure a fully operational knowledge triangle: education — research — innovations.

3.4. Impact areas

All impact areas support attainment and continuous development of nine key lifelong learning competences within a common process:

- competences in Bulgarian language;
- foreign language communication skills;
- mathematics competence and basic competences in the area of natural sciences and technologies;
- digital competence;
- learning skills;
- social and civil competences;
- proactiveness and enterprise;
- cultural awareness and skills for expression through creativeness;
- skills in support of sustainable development and healthy lifestyle.

3.4.1. Ensuring the conditions for transition to a functioning system for lifelong learning

State of play

The reported data about Bulgaria indicate low LLL participation of those aged (25-64) (1.5% in 2012). This circumstance, combined with the negative demographic trends, as well as the underdeveloped continuing training system, do not support achievement of accelerated economic growth. In their part, the businesses and the economy as a whole do not generate sufficient demands to the education and training system.

The data from the 2011 Bulgaria Census indicate that the share of illiterate persons aged over 15 has still not been brought down to the social minimum³⁴. According to the self-evaluation of interviewees, the illiterate persons among those aged 15-19 are 2.0%, and among those aged 20-24 and 25-29 – 2.3%.

Despite the existing institutional network and traditions in the programming of academic content, the national education and training system is evolving through disjointed approaches to structuring, statutory support, governance, and organization. Each separate sector (general education, vocational education and training, higher education, continuing training) tends to plan the learning outcomes on its own, focusing primarily on its own scope, with less consideration for the variety of personal and professional projections arising from the learner's course of life, including missed ones.

The tools contributing to the application of the major lifelong learning instruments are yet to be elaborated. Adoption of the National Qualifications Framework (NQF) is not sufficient to transform into a real instruments for the development of the lifelong learning system. Further efforts are required to bring all legislation concerning the system of secondary and higher education in compliance with the NQF, a broad-ranged process of consultation is necessary to elaborate the sector-specific qualifications frameworks.

Based on these steps, effective preconditions will be created for building up links, including more flexible learning paths, between the NQF and all other instruments (the systems for: validation, quality assurance, introduction of credits, and credits in the vocational education and training), to ensure a suitable overall environment for lifelong learning, which is in line with the real-life dynamic of changes in a person's lifecycle.

³⁴ This means a social minimum inclusive of up to 1% of persons, who have never studied and cannot study due to health-related reasons

Objectives

- Build a coordinated national education and training system, which ensures diverse learning paths;
- Introduce and apply really operating lifelong learning instruments and the integration thereof into a single system;
- Promotion of participation in all forms of learning: formal education and training, non-formal training, and informal learning;
- Reduce the number of illiterate young people aged 15-19 from 2.0% in 2011 to 1.5% in 2020, among those aged 20-24 – from 2.3% in 2011 to 1.5%; and among those aged 25-29 - from 2.3% in 2011 to 1.5% in 2020.

Activities

- Application of the National Qualifications Framework and elaboration of sector-specific qualifications frameworks;
- Introduction of a system for validation of knowledge, skills, and competences attained through non-formal training and informal learning until 2018;
- Introduction of a credits system in vocational education and training until 2016 and ensuring compatibility with the higher education credit accumulation and transfer system;
- Development and expansion of the career guidance system and creation of conditions for formation and development of career planning skills, both in the pupils and university students, as well as in adults;
- Expansion of the use of the European system of identification, assessment, and certification of knowledge, skills, and competences – the Europass CV and the European Skills Passport;
- Implementation of a system with defined characteristics for projecting the labour market's needs for workforce;
- Elaboration and introduction of flexible forms and paths for ensuring mobility within the education and training system, incl. encouragement of persons not covered by the conventional educational system through expansion of the learning opportunities range;
- Elaboration and expansion of the adult literacy system for the purpose of ensuring access to the labour market;
- Creation of tools and platforms for e-training for including new target groups into learning, in particular, those with specific needs and those residing in remote locations;
- Ensuring access to the LLL forms through cultural institutions (libraries, "chitalishte" community centres, museums), athletic organizations, etc. focused on new target groups, in particular, those with specific needs and those residing in remote locations;

- Implementation of measures for identification and removal of the barriers to the learning mobility, expansion of its scope, and implementation of a monitoring system;
- Setting up partnership network among secondary schools and universities, science organizations, the businesses, and the local government, including for the setting up of learning regions;
- Promotion of lifelong learning among all population segments as a factor for personal development, sustainable employment, and social inclusion;
- Setting up funding mechanisms for the continuing training in support of each individual choice.

3.4.2. Ensuring the conditions for expanding the scope and enhancing the quality of preschool education and training

State of play

Over the last several years considerable efforts have been made on the part of the central government and the municipalities to expand the coverage of children in kindergartens. Introduction of compulsory preschool training two years prior to the children's school enrolment (since 2012) has a strong educational effect, which yields long-term benefits in view of the socialization and achievements of each child throughout the training period. However, there are still barriers impeding child access to the kindergartens. These include the insufficient quotas in kindergartens in some of the country's larger cities, as well as lack of architectural environment suitable for the disabled children. Some fundamental problems are both the inadequate content- and organizational link of preschool training to the school education, as well as the lack of legislative preconditions for further training for the children, for whom Bulgarian is not the mother tongue.

Objectives

- Enhance the quality of preschool education and training as a solid basis for further learning and full-scale social inclusion;
- Improve the access to preschool education and training;
- Ensure a smooth transition from preschool training to school education.

Activities

- Elaborate tools to stimulate the inclusion of children in preschool education and training and support cares from earliest childhood, especially for disadvantaged children, children of migrant or Roma descent or children with special educational needs, including disabled children;
- Elaborate curricula and academic content appropriate to child development and beneficial for attainment of both cognitive as well as non-cognitive skills, also taking into account the importance of games;
- Elaborate standards for quality assurance with the involvement of all stakeholders, including families;
- Ensure locomotory activity of children in pre-school aged for the purpose of balanced personal development;
- Ratification and application of standardized diagnostic for school preparedness;
- Promote enhancement of professional qualification of the staff employed in the area of preschool education and training, including assistance tutors;
- Create conditions facilitating young children's transition from the family environment to the educational one, as well as the transition between the different education stages;
- Provide training in Bulgarian for children, for whom Bulgarian is not the mother tongue, including children of migrants;
- Elaborate municipal programs for upgrading the existing kindergartens and construction of new ones.

3.4.3. Applying a comprehensive approach to enhancing the educational achievements and reducing the share of early school leavers

State of play

Setting up a harmonious and diverse educational environment to ensure equality and access to quality education is a major priority in the political programs of a number of governments since 2000. One positive step in this direction was the introduction of a two-year compulsory preschool training, expansion of day-long training, setting up focal schools. An intensive process of integrated training for children and students with special educational needs (SEN) has been implemented. An overall positive trend is observed in the numbers of early leavers from education among the population aged 18 - 24 (excluding 2012). The rate of decline of this share during the past decade has been much faster than the average for the EU countries.

Issues yet unresolved have to do with the significant difficulties for the early assessment of educational needs and early prevention of learning difficulties; the deficit of didactic materials and academic and technical accessories in accordance with the individual needs and abilities of the learners; the deficit of specialists trained to work with learners according to the different types of disabilities and discomforts; the deficit of specialists in the remote and small settlements. The shares of those leaving the primary school stage and the junior secondary school stage have yet to be minimized, in 2011 those shares stood at 2.2% and 3.1% respectively.

The low living standards of the ethnic Roma population are a factor for irregular class attendance and inadequate participation in the academic-training process.

Objectives

- Reduce the number of early leavers from the educational system through increasing the motivation, encouraging and supporting social inclusion;
- Ensure effective integration of children and students from ethnic minorities and from the families of migrants and refugees, toward enhancement of the educational outcomes;
- Enhance the quality and improve the access to education and training for children, students, and adults with special educational needs and chronic diseases;
- Reduce the share of early leavers from the early stage of primary education from 2.2% in 2011 to 1.5% in 2020 and from the pre-secondary school stage of primary education – from 3.1% in 2011 to 2% in 2020.

Activities

- Develop the supporting environment within the preschool education and training system and in the school education system to accomplish inclusive training through: support and motivation for the educators towards qualification upgrade, stimulation of team work; provide flexible forms of training; provide specialized accessories and aids; individual support for personal development;
- Introduce a model for early assessment of educational needs and for prevention of and early intervention in learning difficulties;
- Elaborate and implement an early warning system for potential early drop-out from school;
- Introduce an electronic registry of each student until completion of secondary education;
- Promote best practices and opportunities networking to involve the parents and the local community in measures for prevention of early drop-out from school;

- Create suitable learning paths for reintegration of the early school leavers back into the educational system;
- Support for children, students, and adults with special educational needs and deviant behaviour in order to continue the education or training;
- Expand the opportunities for further training for the children, for whom Bulgarian is not the mother tongue;
- Ensure conditions and resources for expansion of the coverage of children and students involved in day-round organization of the academic process;
- Ensure conditions for effective training of imprisoned persons.
- Establishment of Second Change schools for students, who have left school and for adults with primary or lower education;
- Staged establishment of multipurpose halls for groups of schools to rationalize the leisure time and sports as per place of residence.

3.4.4. Enhancing the quality of school education and training towards attainment of the key competences, improving the learners' achievements and personality development

State of play

Public expectations to quality education are usually associated with the notion of a sustainable system, which provides the knowledge required for the young person's full social integration. In recent years, under the impact of new technologies and due to the deep crisis in social integration in the modern-era societies, the crisis of the entire educational system is ever deepening as well as in the compatibility in the knowledge acquired by successive generations.

„Smart and inclusive growth depends on the actions taken within **lifelong learning system**, which aim at development of key competences and achievement of reliable quality of training outcomes in alignment with the labour market needs.” This notion preordains a more modern concept about the content of school education in our country, which is based on shifting the priority from factual knowledge to competences. In this context the role of knowledge is reconsidered as a stepping stone for changes in Bulgarian education during the 21st century. Nowadays, it is no longer important in itself, what is primarily sought is its universality and real-life application. This fact by itself provides new guidelines towards improvement of the quality of education through modernization of academic content and highlighting contemporary key competences as the main factor for change.

Despite consistent efforts to enhance the quality of Bulgarian education and the positive effects from the implemented policies, which have to do with modernization of the syllabi and curricula in secondary schools, conduct of nationwide external evaluation at the end of grades IV, VII and XII, introduction of day-round organization of the academic process for the students in the primary education stage, etc., a number of challenges still remain. Some of the changes during recent years have been ineffectively implemented – underdeveloped mechanisms, imbalanced authority, lack of connectedness between the changes and participation is not universal by all stakeholders. The tools for education quality management are yet to be applied in the school system, and the same is true also for the tools for inspection of educational institutions.

The „knowledge-based society” concept features the idea that knowledge gradually takes up the place of economy and is beginning to play an ever increasing role in terms of the existing social inequalities. Therefore, knowledge has to be considered not only as a term but also as a potential, whose reflection is on the means, through which it is generated, kept, transmitted, and interpreted, i.e. on the very educational system. In this context, the Bulgarian secondary schools and teachers face problems, whose comprehensive resolution cannot be sought only within the scope of their competences, rather than that, in evolving partnership with other institutions and professions.

Objectives

- Process change towards training, which encourages development and attainment of key competences and aligning it towards stimulation of independent and critical thinking, autonomy, formation of practical skills, and towards personality’s intellectual development;
- Creation of favourable conditions for training and development in the system of school education through establishment of up-to-date educational environment based on contemporary information and communication technologies for education, ensure access to up-to-date school libraries – multimedia libraries;
- Implementation of an effective quality assurance system with the involvement of all stakeholders and efficient allocation of resources in the education and training.

Activities

- Introduction of a systematic approach to quality assurance, incl. setting up a common system for evaluation of students, teachers, and the school environment;
- Refinement of the delegated budgets system in education through introduction of extra factors for assessment of the academic process development – inclusion of a segment in funding, which is based on the school’s contribution towards the students’ development;

- Regular updating of the academic content for the purpose of creating basic skills and key competences in alignment with the labour market and the new public expectations;
- Modernization of the academic process through application of methodical models elaborated based on information and communication technologies, remote training;
- Promotion of trans-border mobility of teachers and the other educators for the purpose of upgrading their qualification and exchange of good pedagogic experience;
- Encourage application of the European instruments designed to support academic-purpose mobility and lifelong learning;
- Elaborate and implement a strategy for promotion and development of literacy;
- Modernization of the school libraries turning them into an attractive multifunctional space within the school environment – a place for reading, social events and contacts;
- Support for the participation of students in national and international competitions and events;
- Expand the training technology with alternative forms and methods of work, including the use of e-content;
- Support for participation of teachers in eTwinning, the electronic European platform for school partnership in its role of infinite source of good pedagogic practices; a factor to increase the teachers' motivation to remain in their profession, and an opportunity to upgrade the professional qualification of teaching staff;
- Update the requirements to the textbooks in alignment with the academic content and the age characteristics of the learners;
- Ensure extra opportunities for support of children and students with distinct talents and of students finding it difficult to master the academic material, including through implementation of a day-round organization of the educational process;
- Ensure conditions for active inclusion of the students in the school life through promotion of access to forms, which increase the attractiveness of the school environment, creative activities, and teamwork of the students;
- Ensure conditions and opportunities for further training of the students, according to their individual interests and needs, for the purpose of developing their creative abilities and stimulating their proactiveness and enterprise;
- Ensure conditions for early career guidance and choice of occupation, including through cooperation with all stakeholders;
- Create sustainable tools and instruments to ensure the security and health of children and students;
- Elaborate and implement up-to-date programs for teacher qualification;

- Encourage participation of schools in all forms and activities of the EU program Erasmus +.

3.4.5. Increasing the attractiveness and improving the quality of vocational education and training to ensure employment and competitiveness

State of play

Vocational education and training (VET) in Bulgaria has a long-standing history and established traditions. Its strengths are the existing legislative basis and established network of institutions. At the same time there are many problems, which require immediate reformation of this system in order to overcome the lack of trust in both employers and learners to its quality and applicability, as well as the inconsistency between the funds invested and the benefits derived.

VET attractiveness depends on its quality and effectiveness – the availability of highly skilled teachers and trainers, its alignment to the needs of the labour market and the opportunities for continuing the education.

The vocational education and training system in Bulgaria still cannot provide the necessary knowledge, skills, and competences, which are demanded on the labour market. A system for predicting the needs for labour force with certain characteristics is in the process of elaboration. This system should provide information for the labour market's future expectations towards knowledge, skills, and competences, which would be accounted for adequately in the processes of planning the vocational education and training.

Objectives

- Turn the VET into an attractive and effective learning opportunity;
- Increase the employability of those completing VET;
- Increase the share of those attaining professional qualification degrees in the broad areas of Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction to at least 60% in 2020.

Activities

- Introduce VET quality assurance system by the end of 2015;
- Elaborate and introduce a national system for monitoring the transition of those completing VET to the labour market and to further education and training;
- Elaborate and implement a credits transfer system in the vocational education and training;

- Elaborate a model for recognition of learning outcomes attained in vocational education and training on the part of the higher education institutions;
- Update the state educational requirements for attainment of qualification by professions by basing them on the learning outcomes and increase their consistency with the professional standards;
- Expansion of the process for elaboration of electronic academic courses for vocational training;
- Development of the career orientation services for the purpose of decision making in regards to education, training, and career development;
- Promote education and training in economy's priority areas and elaborate approaches to implement training in „protected professions”;
- Transition from an academic-subject organization of the academic process to a module-based one;
- Elaborate and implement policies and measures for development of vocational training in a working environment, incl. through arrangement of apprenticeships in business during and after conclusion of the training;
- Combine VET with attainment of key competences to achieve higher employability of the trainees;
- Ensure VET opportunities to employed and unemployed persons, prioritizing the young people, incl. on-the-job trainings, in accordance with the needs of the businesses and the requirements for transition to a resource-efficient, low-carbon and green economy;
- Introduction and development of a system for updating and supplementing the teachers' qualifications in vocational training in their higher education specialty and in support of their career development;
- Introduction and development of a system of ongoing update of the competences of teachers in vocational training through effective cooperation with the businesses and universities to carry out trainings in working conditions provided by the businesses, in relation to the introduction of new techniques and technologies in contemporary manufacturing;
- Develop public-private partnerships in the area of VET as a means for effective cooperation with the businesses;
- Expansion of the activities conducive to the attractiveness of VET, incl. annual holding of a Panorama of vocational education and training;
- Support for the participation of learners in national and international competitions, including entrepreneurship competitions;

- Modernization and development of the educational infrastructure and elaboration of a national educational map.

3.4.6. Modernizing the higher education

State of play

The swift development of science and technologies, the speed of information dissemination create premises for dynamic development of the global economies. Amid conditions of socio-economic difficulties, higher education in Bulgaria, as elsewhere, underlies the efforts to overcome these difficulties. Its modernization is a pressing need since the processes in higher education must follow the development directions in the other member-states of the European Union. In general terms, modernization aims to create a common European Higher Education Area. In this context, Bulgaria is guided by the strategic documents adopted in the framework of the Bologna process, inter alia, the Europe 2020 Strategy and the National Development Programme Bulgaria 2020, which outline several fundamental challenges: wide access to higher education, increasing the relative share of those completing higher education among the young people aged 30-34 to 40% until 2020 (36% for Bulgaria); promotion of undergraduate and academic mobility; promotion of lifelong learning and attainment of extra qualification and retraining of the workforce, which would contribute towards its restructuring in the higher-demand industries. At the same time, what is added to the main parameters for modernization of the higher education is the operation of the knowledge triangle: a link between higher education, research and innovation for excellent achievements and regional development; improving the governance and funding of the higher education system.

The reform of higher education in Bulgaria began with the introduction of the three-tier educational-qualification structure, with the training for attainment of each degree taking place in accordance with the Higher Education Act and the secondary legislation. A system for accumulation and transfer of academic credits modelled on the European ECTS has been introduced. An important element of the European Higher Education Area is the European Qualifications Framework as a tool for transparency and ease of understanding the qualifications and in support of the learners and employed persons. By means of CM Decision No 96 of 02.02.2012 a National Qualifications Framework of the Republic of Bulgaria was adopted. It defines eight qualifications levels, which are based on the learning outcomes **and** cover the entire cycle of qualifications attainment. The higher education degrees are positioned on the Framework's last three levels.

Through the Development of Academic Staff Act, which was adopted in 2010, the system for career advancement of university instructors was also changed in the conditions of expanded academic autonomy. A major objective of the adopted National Strategy for Research Development is the development and creation of a new generation of scientists and transforming the universities into science centres.

To upgrade the quality of education and research some concrete steps have been taken as well. The universities have set up and now operate in-house systems for evaluation and maintenance of the quality of training and the academic staff. The specialized government body for assessment, accreditation and control of the quality in higher education is the National Evaluation and Accreditation Agency at the Council of Ministers. It is a member of the European Association for Quality Assurance in Higher Education (ENQA) and is registered with the European Quality Assurance Registry for Higher Education (EQAR).

An important tool for evaluating the quality in the network of universities is the University Rating System in the Republic of Bulgaria, which was created within a project funded by the Operational Programme Human Resource Development of the European Social Fund. It is based on fair criteria and indicators and provides a real basis for comparability of universities. Furthermore, in view of improving the government policy in higher education, the Ministry of Education and Science maintains a specialized IT system, which contains: a register of the universities, a register of the universities' academic staff, a register of the active and suspended undergraduates and doctoral students, a register of graduated undergraduates and doctoral students, a register of the banks granting loans to undergraduates and doctoral students as per the Lending to Undergraduates and Doctoral Students Act.

Units for ongoing, continuing, or post-graduate training, as well as career development centres operate at the universities. These stimulate the links between the universities and the businesses, between the trainees and the labour market. Good practices have been established for joint elaboration of curricula with representatives of the businesses for the purpose of increasing employability. These practices are yet to be used en masse, therefore, one can see as a problem the inconsistency between the real-life applicability of the knowledge, skills, and competences acquired within the system of higher education and the needs of the labour market. What is observed is lack of flexibility in the creation of diverse opportunities for and forms of lifelong learning and innovation of the curricula in regards to the age characteristics of the trainees. Unsatisfactory pedagogic preparedness of university instructors in the area of andragogy is reported, as well as insufficient awareness of the public for the effective lifelong learning opportunities offered.

Objectives

- Improve the access and increase the number of those completing higher education and the researchers;
- Alignment between the curricula taught by the universities and the qualifications demanded by the labour market;
- Encourage the mobility of undergraduates, doctoral students, and instructors and the trans-border cooperation among universities;
- Strengthen the knowledge triangle between higher education, research, and innovations;
- Establish an up-to-date system and refined forms for lifelong learning within the system of higher education to satisfy individual needs for better adaptability to the changing employment environment and adequately respond to the socio-economic realities to achieve growth.

Activities

- Affirm the role of universities as lifelong learning institutions and stimulate the potential trainees towards further training in the higher education system;
- Perceive lifelong learning as a mission of the universities and a quality assurance indicator;
- Adapt the curricula to the specifics of the individual profile and educational needs of the trainees, refine the academic forms and evaluation methods in order to establish a creative and flexible academic environment;
- Ensure real opportunities for qualification upgrade and career growth of university instructors. Encourage the institutions to invest in the professional development of the scientific-instructing staff;
- Promote application of the European instruments designed to support academic-purpose mobility and lifelong learning;
- Encourage the access of „non-conventional” trainees and adults through alternative forms of lifelong learning at the universities;
- Refine the career guidance and advice services;
- Elaborate a new map „Education-Career Success”;
- Ensure support and suitable architectural environment for disabled undergraduates, post-graduates, and doctoral students;
- Refine the accreditation system through introduction of flexible models and external evaluation of the quality in higher education (incl. through institutionalization of the University Rating System in the Republic of Bulgaria);
- Refine the university enrolment model;

- Refine the university governance system and introduce monitoring and control systems;
- Support the opportunities for application of information & communication technologies for the purposes of lifelong training and expand the access to information and educational services;
- Apply funding models in the higher education system aligned to the training outcome and career success of undergraduates and doctoral students;
- Ensure additional flexible opportunities for financial support of the undergraduates, post-graduates, and doctoral students through development of the loan model, as well as provide scholarships to stimulate training in areas of priority for the economy and to reward special achievements in science, innovations, arts, culture, and sports;
- Strengthen participation of the businesses in the elaboration and implementation of syllabi and curricula;
- Strengthen and develop partnership on a local, regional, national, and European level for the provision of relevant and attractive curricula;
- Encourage the universities to use data about the employment record of graduates and the growth projections when planning the enrolment and academic and training courses and curricula;
- Establish active policies for the labour market, which encourage employment of recent higher education graduates, incl. through funding under European programs;
- Increase the number of young researchers. Encourage postdoctoral training;
- Expand the opportunities for post-graduate specializations and mobility of young scientists. Establish intra-institutional and inter-institutional networks for postdoctoral training;
- Encourage establishment of interdisciplinary doctoral curricula of applied nature;
- Ensure incentives for early completion of the doctoral studies and support for doctoral students suspended due to maternity or disease to continue their training;
- Encourage establishment of regional centres of excellence and specialization;
- Stimulate research in the area of lifelong learning;
- Encourage participation of undergraduates, post-graduates, and doctoral students in various forms of extra training through establishment of science clubs and research schools;
- Support the integration of national universities and science institutes into the European Research Area incl. by ensuring open access to foreign university- and scientific libraries.

3.4.7. Development of opportunities for non-formal and informal learning for personal and professional progress. New opportunities for good quality of life following the working career's end

State of play

During recent years the non-formal training and the informal learning have been getting an ever increasing weight and significance for young people in the country and for those in employment as a way to attain specific competences and skills benefitting their personal and professional development and increasing the motivation for successful social advancement.

Systematic training of workers and employees by the employer is still underdeveloped in Bulgaria and in reality takes place mainly at the large-scale businesses. For a number of reasons small and medium businesses, especially those in smaller settlements and rural areas, rarely commit to enhance their staff's skills. According to the 2011 Adult Education Survey, among the variety of opportunities for non-formal training, the employers prefer on-the-job training – 21% (out of all courses), followed by „attendance in conferences, workshops, (professional) exhibitions, and lectures” – 16% and „workplace rotation, exchanges, repetitions or visits for the purpose of training” – nearly 4%. 7% of the workers and employees enhance their professional qualification through informal learning. More than a third of all employed persons have taken part in non-formal learning to enhance their professional qualifications. With the persons identifying themselves as unemployed and economically inactive, the level of participation is markedly lower – 3.8% and 1.6%, respectively. The opportunities for access to lifelong learning are limited for disadvantaged groups, primarily for older workers and employees, people with low skills, those from the Roma community, and disabled people.

Opportunities for non-formal learning and attainment of skills and competences outside the formal educational environment „by doing” and for more active involvement of disadvantaged young people are provided to the young people through work under projects funded under the National Youth Programme 2011 – 2015, the Lifelong Learning Programme and the Youth in Action Programme, and during the next programming period – by EU Erasmus+ programme. The conclusions of the independent assessment of the effect of EU Youth in Action programme indicate that the non-formal training provided by non-governmental organizations is extremely effective for the building of key competences, as well as „soft” skills, such as communication skills and teamwork skills. EC's Eurobarometer survey indicates that these skills are exactly the ones in demand – 78% of the employers in Bulgaria considered the teamwork skills very important, while the skills specific to the given job as rated as very important by 70% .

Voluntary work in Bulgaria is still very poorly developed – just 5% of the population is engaged in voluntary activities. The above programs, as well as other initiatives of civil society organizations, work towards the building of a voluntary work culture, which is another efficient form of non-formal training and also involves in the learning process not just the participants but also the communities and the target groups, with which volunteers interact.

Bulgaria faces a severe demographic change. The working age populace is declining, while the number of people aged 60+ is increasing with each passing year. The country's labour resources are expected to decline by up to 40% until 2050, with one in every three Bulgarians being older than 65 and just one out of two Bulgarians being in working age. The education and training system must be prepared for this challenge.

Culture institutions in Bulgaria (libraries, "chitalishte" community centres, museums, etc.) are asserting themselves as centre for non-formal training and informal learning. The "chitalishte" community centres are an example of a resilient cultural-educational institution with the specific mission to preserve and develop the nation's traditional values, provide opportunities for informal learning, and be an active factor in the implementation of lifelong learning activities in the local communities. The reading halls have traditionally been the most extensive network of public libraries in the country. Many of the public libraries provide free trainings for attainment of digital skills for various target groups – pensioners, children, people with special needs, etc.

Objectives

- Create conditions for sustainable development of the learning opportunities, establish working links between the education and the competences attained within the formal education system and development of skills in a non-formal context and through informal learning, primarily at the workplace;
- Increase the share of the population aged 25-64, which takes part in non-formal learning from 24.4% in 2011 to 38.0% in 2020;
- Increase the share of the population aged 25-64, which takes part in informal learning from 12.5% in 2011 to 18.0% in 2020;
- Encourage the employers to carry out a targeted policy for adjusting the human resources to the dynamic changes in the technologies and the processes via various forms of non-formal learning towards enhancing the workforce's professional skills and key competences;

- Facilitate the access to high-quality services for special support to the all-round personal, professional, and social development of all people, particularly of that part of the population, which is underrepresented on the labour market and in public life (older workers, pensioners, people with low skills, groups of ethnic minorities, disabled people, etc.);
- Support the young people in the attainment of key competences via non-formal training and ensure conditions for recognition and respect of the outcomes achieved;
- Promote voluntary work among the population of all ages and ensure conditions for its validation and recognition;
- Develop new forms of integration and social mobility through learning and development of the potential of older workers and employees and of the pension-age people;
- Develop the potential of “chitalishte” community centres, public libraries, museums, and other culture institutions and organizations as a proactive factor in the implementation of lifelong learning initiatives to community benefit.

Activities

- Stimulate non-formal training and the informal learning within the Learning Regions initiative;
- Decentralization of the planning, implementation, monitoring, and evaluation of non-formal adult training to the regional and local authorities through the relevant regional and local LLL councils, for the purpose of evaluating the needs and enhance the adequacy of the offered non-formal learning opportunities vis-à-vis the needs of the local labour market, the priorities in the regional and local development plans, the needs of the vulnerable groups in the community;
- Encourage establishment of lifelong learning networks on a local level involving central and local government authorities and setups, companies and enterprises, providers of education and training, culture institutions providing non-formal training, NGO’s and volunteer organizations and others for the purpose of resource sharing (not only financial ones) and ensuring transparency, effectiveness, and efficiency of adult learning projects implemented with public co-financing, in accordance with the partnership principle;
- Support the employers in the on-the-job staff training, with special focus on small and medium enterprises, as well as the enterprises in small settlements and rural areas;

- Implement campaigns for awareness and increased motivation of potential adult learners, including on the job and in their social environment, which are implemented in cooperation with employers, NGO's and volunteer organizations;
- Conduct awareness and motivation campaigns aimed at employers and their organizations as regards the benefits of staff on-the-job training;
- Build the capacity of trainers in the enterprises through by building on the qualification attained in the formal system with on-the-job training, hands-on experience at various positions in the enterprise and others;
- Closely bind the adult training policy to the labour market policy. Introduce various subsidies form of non-formal training of unemployed persons and disadvantaged persons, accounting for their personal motivation and career focus;
 - Encourage the employers to provide continuing training to the workers and employees aged 55+, with a view to enhancing their effectiveness and extending their working lives;
 - Ensure conditions for access to education and training to enhance the qualifications and retrain persons in pre-retirement age in order to improve their labour- and social mobility;
 - Support for the nationwide operation of the European system for validation of knowledge and skills – the Europass CV and the European Skills Passport;
- Promote international recognized means of transparency for participants in youth programme projects among the employers as additional evidence of key competences and „soft” skills when hiring young people with no job experience;
- Promote and encourage participation of adults in initiatives within the new EU Erasmus + programme;
- Encourage volunteer work among the population, with special focus on young people and pension-age people, with a view to their mutual enrichment and transmission of experience and knowledge between generations;
- Recognize volunteer work through a system for validating the knowledge, skills and competences;
 - Support for the non-formal training of labour- and educational mediators for working among disadvantaged groups and mostly among the Roma communities;
 - Improve the learning opportunities in the context of active living by the elderly people through encouragement of innovative forms for learning between generations and initiatives for the use of their knowledge, skills and competences to the benefit of society;

- Ensure elderly people’s access to information and advice on the opportunities for inclusion into lifelong learning and into public-good volunteer activities to overcome the social isolation and achieve active aging;
- Active role of municipalities, culture institutions, schools, universities, athletic and non-governmental organizations for including aged people into various lifelong learning activities;
- Stimulate pedagogy specialists to continue working as tutors after retiring – as advisors, based on the volunteer participation principle;
- Targeted measures to promote networking of public libraries on local and regional level and their assertion as centres of attainment of digital competences;
- Improve conditions at “chitalishte” community centres , museums, and libraries to enhance the population’s cultural awareness, provide opportunities for informal learning and non-formal training to various age groups and target groups;
- Solidify the proactive role of “chitalishte” community centres, museums, and libraries as initiators and drivers of community development and stimulate civil activity on a local level through lifelong learning activities.

3.4.8. Coordinating the interaction among stakeholders in the implementation of the lifelong learning policy

State of play

A major problem facing the efforts to provide the conditions for an operating lifelong learning system is the interaction among all stakeholders. This arises from the intersectoral nature of the lifelong learning policy. Its success in creating the conditions, environment and culture for lifelong learning can be ensured through the real-life relations among all stakeholders in particular contexts. What is required is to link the activities taking place within the national education and training system to the activities offered by other sectors, such as the labour market, the economy, the NGO sector, the social partners, as well as any individual participant in the lifelong learning activities. Another challenge has to do with the need to improve coordination and enhance the administrative capacity for planning, monitoring, and evaluation of the LLL policy on a national, regional, and local level, stimulate research and analyses, as well as intensify the work for collection of sufficient statistics to secure sufficient information for the processes in the education and training policy.

Objectives

- Formulate a coordinated policy on a national level and set up sustainable tools for local and regional initiation and governance of the LLL policies;
- Ensure conditions for sufficient information for the processes in the LLL policy;
- Enhance the administrative capacity for planning, monitoring, and evaluation of the LLL policy on a national, regional, and local level.

Activities

- Legislatively define the rights and responsibilities of the stakeholders for the planning implementation, and monitoring of the lifelong learning policy;
- Elaborate a system for communication among all stakeholders in the process of planning, implementation, monitoring, and evaluation of the lifelong learning policy, incl. setting up a network of institutions and organizations on a national, regional, and local level;
- Set up and apply a monitoring mechanism for the LLL policy.
- Elaborate a legislative framework for synchronized collection, generalization, and analysis of data pertaining to the implementation;
- Create an integrated information system to measure the impact, which may be supplied with data by the responsible institutions ensuring comparability with the indicators from international and European surveys;
- Elaborate research mechanisms in the area of lifelong learning policy, especially in the context of the needs of the economy and the labour market;
- Encourage cooperation in the design of and demand for skills and achieve better consistency between the demand for and supply of learning opportunities, including through arrangement of Skills Panoramas;
- Stimulate research in the area of lifelong learning;
- Apply a flexible mechanism for reporting the outcomes from the implementation of the LLL policy on a national and regional level and prepare annual national progress reports;
- Elaborate innovative forms for setting up contacts, cooperation, and partnership among the providers of education and training and a wide range of stakeholders;
- Support for the networking of providers of education and training for the purpose of promoting new methods for organizing the learning (open educational resources, incl. for on-the-job education and training), for building the capacity and for organizational development;
- Instill a culture for assertion and application of company policies for lifelong training among the businesses, institutions and other organizations;

- Organize trainings to enhance the qualification of stakeholder representatives for planning, monitoring, and evaluation of the lifelong learning policy on a national, regional, and local level.

3.5. Progress framework – indicators for measuring achievement of the objectives within the impact areas

INDICATORS FOR EVALUATING ACHIEVEMENT OF THE STRATEGIC OBJECTIVES						
No.	Impact area	Title	Brief description and manner of calculation	Calculation formula	Data source, regularity and scale	References and further information
1	3.4.1. Ensuring the conditions for transition to an operational lifelong learning system	Participation of the population aged 25-64 in lifelong learning	<ul style="list-style-type: none"> ➤ The data referring to population participation in LLL come from the Labour Force Survey. It is calculated as the ratio of persons aged 25-64, who participate in education or training during a period of 4 weeks prior to the interview (PLL 25-64) to the entire population in the same age group (P25-64) (%); ➤ The data under this indicator are internationally comparable; ➤ EU 2020 target: In 2020 on average at least 15% of adults should take part in LLL; ➤ Bulgaria 2020 target: Increase the share of the population aged 25-64 taking part in non-formal education (during the last 4 weeks prior to the survey) from 1.5% in 2012 to 5%. 	$(PLL25-64)/(P25-64)*100$	Labour Force Survey - NSI; EUROSTAT Annually; Total for the country Total, men, women Total, by NUTS 1 and 2 regions	http://ec.europa.eu/education/lifelong-learning-policy/doc/benchmarks10_en.pdf http://ec.europa.eu/education/lifelong-learning-policy/benchmarks_en.htm http://eacea.ec.europa.eu/llp/projects/events/grundtvig_meeting_2009/documents/6_aes_overview_maria_pia_sorvillo.pdf (tables containing data about the EU countries)
		Relative share of public expenditure for education in the Gross Domestic Product (%)	<ul style="list-style-type: none"> ➤ Share of public expenditure for education (Exp-pu) from the Gross Domestic Product by current rates (GDP %). Education expenditure is calculated according to the common methodology of EUROSTAT, UNESCO, and OECD; ➤ The indicator is internationally comparable; ➤ Bulgaria 2020 target: Increase the relative share public expenditure for education from 3.4% in 2010 to 4.0% in 2020 	$(Exp-pu)/GDP*100$	NSI – Education Statistics and National Accounts Annually Total for the country	http://www.nsi.bg/otrasal.php?otr=23&a1=811&a2=812#cont http://www.nsi.bg/EPDOCS/GDP2011_NAO6EOX.pdf

3	3.4.2. Ensuring the conditions for expanding the scope and enhancing the quality of preschool education and training	Participation in the preschool education and training	<ul style="list-style-type: none"> ➤ The indicator presents the share %/ of children aged 4-6 enrolled at a fixed reference date in preschool education and training (ERL4-6) out of the population of the same age (P4-6). According to the EUROSTAT methodology, in view of achieving international comparability of the data, this also covers the children covered by the mandatory preschool training and those enrolled in the early stage of primary education (ISCED 1), who are aged 5 and 6 years at the end of the reference year; ➤ The data under this indicator are internationally comparable; ➤ EU 2020 target: In 2020 the share of children covered by preschool education and training (including those aged 4 to the year of commencement of mandatory education) must be at least 95%; ➤ Bulgaria 2020 target: In 2020 the share of children covered by preschool education and training (including those aged 4 to the year of commencement of mandatory education) must be 90%. 	$(ERL4-6)/(P4-6) * 100$	Education Statistics and Demographic Statistics –NSI; EUROSTAT; Annually; Total for the country	http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00179&plugin=1
4	3.4.3. Applying a comprehensive approach to enhancing the educational achievements and reducing the share of early school leavers	Early leavers from education and training	<ul style="list-style-type: none"> ➤ This indicator measures the degree of achievement of one of the major objectives of the Europe 2020 Strategy. The indicator of early leavers from education and training is calculated according to data from the Labour Force Survey as a share of persons aged 18-24 with completed primary education or lower, who are taking no part in education or training during the 4-week period prior to the interview (Lv18-24) out of the population in the same age group (P18-24) (%); ➤ The data under this indicator are internationally comparable; ➤ EU 2020 target: In 2020 the share of early leavers from education and training must be lower than 10%; ➤ Bulgaria 2020 target: In 2020 the share of early leavers from education and training must be lower than 11%. 	$(Lv18-24)/(P18-24) * 100$	Labour Force Survey - NSI; EUROSTAT; Annually; Total, men, women Total, total for the country, by NUTS 1 and 2 regions	http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators

5		Share of leavers from the early and pre-secondary school stages of primary education (%)	<ul style="list-style-type: none"> ➤ The indicator presents the share of students leaving the early and pre-secondary school stages of primary education during the reference academic year; ➤ The share of leavers is calculated as a ratio of the number of those leaving school during the academic year t (ERLnt) to those enrolled at the start of the academic year t (ERLt) separately for the early stage (ISCED 1) and the pre-secondary school (ISCED 2) (%); ➤ Those transferred to and enrolled at another school are not considered leavers; ➤ This indicator IS NOT internationally comparable; ➤ The Bulgaria 2020 target is to reduce the share of leavers from: <ul style="list-style-type: none"> ▪ the early stage of primary education - from 2.3% in 2011 to 1.5%; ▪ the pre-secondary school stage of primary education – from 3.1% in 2011 to 2%. 	$ERLn1t/(ERL1t)*100$ $ERLn2t/(ERL2t)*100$	NSI – Education Statistics; Annually Total for the country ISCED- 2011 degrees 1 and 2	http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf http://www.nsi.bg/otrasal.php?otr=23&a1=42&a2=687&a3=688#cont
6		Educational level of the population aged 25-64	<ul style="list-style-type: none"> ➤ The indicator presents the distribution of the population aged 25-64 (P25-64) by highest degree of completed education according to the International Standard Classification of Education (ISCED-2011) (%); ➤ This indicator is calculated as a relative share in % of the persons among the population aged 25-64, who have completed the following educational degrees; ➤ ISCED 0 +1 +2 – primary education or lower (ISC012); ➤ ISCED 3 +4 – secondary education or vocational education following secondary education (degree IV of professional qualification) (ISC34); ➤ ISCED 5 +6 +7 +8 – higher education (ISC5678); ➤ The data under this indicator are internationally comparable. 	$ISC012/(P(25-64)*100$ $ISC34/(P(25-64)*100$ $ISC5678/(P(25-64)*100$ Not stated/ $P(25-64)*100$	Labour Force Survey - NSI; EUROSTAT Annually; Total for the country Total, men, women Total, by degrees, according to ISCED - 2011 (combination of degrees 1 to 8)	http://ec.europa.eu/education/lifelong-learning-policy/doc/report09/report_en.pdf (p.63-64) OECD (2012), Education at a Glance 2012: OECD Indicators, OECD Publishing. Indicator A1 http://dx.doi.org/10.1787/eag-2012-en

7		Population literacy – share of literates among those aged 15+ age groups -%	<ul style="list-style-type: none"> ➤ The indicator presents the share of the literates among the population aged 15+ (L) by age groups as a % of the population in the same age group (Pg); ➤ This indicator may also be used as estimate of the illiteracy in the population aged 15+ (100- minus the share of literates in %); ➤ The data under this indicator are internationally comparable; ➤ Bulgaria 2020 target, reduce the share of illiterates: <ul style="list-style-type: none"> • among persons aged 15-19 from 2.0% in 2011 to 1.5%; • among persons aged 20-29 from 2.3% in 2011 to 1.5%. 	$L(15+)/P(15+)*100$ $L(15-19)/(P(15-19)*100$ $L(20-24)/(P(20-24)*100$ $L(25-29)/(P(25-29)*100$ $L(30-34)/P(30-34)*100$ $L(35-54)/P(35-54)*100$ $L(55-59)/P(55-59)*100$ $L(60+)/P(60+)*100$ $Unknown/P(15+)*100$	NSI – 2011 Census; Approximately every 10 years; Total, men, women Total, by age groups Total, by administrative regions and settlements	http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=210 http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf Education Indicators, Technical guidelines, UNESCO 2009, p. 3
8	3.4.4. Enhancing the quality of school education and training towards attainment of the key competences, improving the learners' achievements and personality development	Students, whose achievements are below the critical second level as per the PISA scale in the area of reading, mathematics, and natural sciences ³⁵	<ul style="list-style-type: none"> ➤ Share of the 15-year old students, whose achievements are on level 1 and lower on the PISA scale in the area of reading, mathematics, and natural sciences (LA15) (STU15) (%); ➤ The Indicators characterize the skills of the students, whose achievements are on level 1 and lower on the PISA scale in the area of reading, mathematics, and natural sciences. ➤ The Indicators are internationally comparable; ➤ EU 2020 target: In 2020 the share of students, whose achievements are below the critical second level in the area of reading, mathematics, and natural sciences must be less than 15%; 	$(LA15)/(STU15)*100$ (reading, mathematics, and natural sciences)	PISA, OECD survey; Every 3 years; Total, men, women	http://ec.europa.eu/education/lifelong-learning-policy/benchmarks_en.htm http://www.oecd.org/pisa/pisaproducts/39712449.pdf http://www.erc.ie/?p=62

³⁵ **PISA** – The Programme for International Student Assessment enables assessment of the achievements of 15-year old students in reading, natural sciences, and mathematics. Student achievement is measured by levels of skill. Students reaching the highest level of skills are able to solve PISA toughest assignments, while the students reaching the lowest levels are able to solve the basic assignments. The types of knowledge and skills, which the students are able to display at each level, provide

		(OECD Programme for International Student Assessment - PISA)	<ul style="list-style-type: none"> ➤ Bulgaria 2020 target: the share of students, whose achievements are below the critical second level in the area of reading and natural sciences, must be less than 30%, and less than 35% in mathematics. 			
9	3.4.5. Increasing the attractiveness and improving the quality of the vocational education and training to ensure employment and competitiveness	Share (%) of those acquiring professional qualification degrees in the areas of Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction out of the total number of those acquiring a degree in the regular educational system	<ul style="list-style-type: none"> ➤ This indicator presents the relative share (%) of the students in formal vocational education, professional qualification degrees (I, II, III and IV) in the areas of Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction (GvetT) out of the total number of those acquiring any professional qualification during the reference year. The broad areas and the professions therein have been defined in the List of professions for vocational education and training, which is annually ratified by the Ministry of Education and Science; ➤ The data under this indicator are internationally comparable; ➤ Bulgaria 2020 target: In 2020 the share of those acquiring professional qualification degrees in the broad areas of Informatics, Technical Equipment, Manufacturing and Processing, and Architecture and Construction must be at least 60%. 	$(GvetT)/(Gvet)*100$	NSI – Education Statistics; Annually Total for the country	http://www.nsi.bg/otrasal.php?otr=23&a1=42&a2=756&a3=760#cont http://www.nsi.bg/otrasal.php?otr=23&a1=42&a2=756&a3=761#cont http://www.nsi.bg/otrasal.php?otr=23&a1=42&a2=756&a3=762#cont
10	3.4.6. Modernizing the higher education	Those completing higher education among those aged 30-34	<ul style="list-style-type: none"> ➤ This indicator the degree of achievement of one of the major objectives of the Europe 2020 Strategy. The indicator of early /premature/ leavers from education and training is calculated according to data from the Labour Force Survey as a % ratio of the persons; ➤ The data under this indicator are internationally comparable. ➤ EU 2020 target: In 2020 the share of persons having higher education among the population aged 30-34 must be at least 	$(PHe30-34)/(P30-34)*100$	Labour Force Survey - NSI; EUROSTAT; Annually; Total, men, women; total for the	http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators http://eur-lex.europa.eu/LexUriServ/LexUriServ.do

useful explanatory information to interpret the levels. The data are provided by the Programme for International Student Assessment (PISA), which provides an internationally standardized score developed by the Organization for Economic Cooperation and Development (OECD) and focuses on 15-year old school students.

			<p>40%;</p> <ul style="list-style-type: none"> ➤ Bulgaria 2020 target: In 2020 the share of persons having higher education among the population aged 30-34 must be at least 36%. 		country, NUTS 1 and 2 regions	?uri=COM:2010:2020:FIN:EN:PDF_p.5
11	3.4.7. Developing the opportunities for non-formal and informal learning	Participation of the population aged 25-64 in non-formal training (for a period of 1 year)	<ul style="list-style-type: none"> ➤ The indicator of participation of working age population in non-formal training for a period of 1 year is based on the European Adult Education Survey - AES; ➤ It presents the share of persons, who took part in non-formal training. It is calculated as a ratio of the number of persons aged 25-64, who took part in non-formal education for a period of 1 year prior to the survey (AL3) to the total population in the same age group (P25-64), (%); ➤ The data under this indicator are internationally comparable; ➤ Bulgaria 2020 target: Increase the share of the population aged 25-64 taking part in non-formal training from 24.4% in 2011 to 38.0%. 	AL3/P(25-64)*100	HCI, Adult Education Survey Every 5 years; Total for the country Total, by NUTS 1 and 2 regions Total, by age groups Total, by economic activity	http://eacea.ec.europa.eu/llp/projects/events/grundtvig_meeting_2009/documents/6_aes_overview_maria_pia_sorvillo.pdf http://www.nsi.bg/otrasal.php?otr=23&a1=806&a2=807&a3=808#cont (the data refer to total participation in formal education/training or non-formal learning)
12		Participation of the population aged 25-64 in informal learning ³⁶ (for a period of 1 year)	<ul style="list-style-type: none"> ➤ The indicator of participation of working age population in informal learning for a period of 1 year is based on the European Adult Education Survey - AES; ➤ It presents the share of persons, who took part in informal learning. It is calculated as a ratio of the number of persons aged 25-64, who took part in informal learning for a period of 1 year prior to the survey (AL4) to the total population in the same age group (P25-64), (%); ➤ The data under this indicator are internationally comparable; ➤ Bulgaria 2020 target: Increase the share of the population aged 25-64 taking part in informal learning from 12.5% in 2011 to 18.0%. 	AL4/P(25-64)*100	NSI, Adult Education Survey Every 5 years; Total for the country Total, by NUTS 1 and 2 regions Total, by age groups Total, by economic activity	http://www.nsi.bg/otrasal.php?otr=23&a1=806&a2=807&a3=809#cont

³⁶ **Informal learning** does not fall within the scope of the International Standard Classification of Education /ISCED-2011/ measuring education participation, even though recognized qualifications attained through informal learning are taken into account when educational achievements by degrees are determined."(ISCED 2011, clause 43)

13	3.4.8. Coordinating the interaction among stakeholders in the implementation of the lifelong learning policy	Employment among the persons aged 20-34, recent higher or secondary education graduates, 1-3 years prior to the reference year	<ul style="list-style-type: none"> ➤ This indicator measures the employment ratio of the young people aged 20 to 34, who have completed higher or secondary education and have taken up a job 1-3 years prior to the survey year, and who do not take part in education or training at the time of the survey (ERS20-34). Their relative share in % is calculated vis-à-vis the entire population in the same age group (P20-34). ➤ The indicator is based on data from the Labour Force Survey. ➤ The survey covers ordinary households and excludes people in collective households, such as boarding rooms, dormitories, and hospitals. ➤ The employed population consists of the persons, who had performed, during the reference week, some work against payment or profit in the course of at least an hour, or had not worked but did have a job, from which they were temporarily absent. ➤ EU 2020 target: In 2020 the share of employed persons aged 20-34, who have recently completed secondary or higher education, must be at least 82%; ➤ Bulgaria 2020 target: Increase the level of employment among persons aged 20-34, who have recently completed secondary or higher education, from 67.3% in 2012 to 77%. 	$(ERS20-34)/(P20-34) * 100$	Labour Force Survey - NSI; EUROSTAT; Annually; Total for the country	http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_social_policy_equality/education_training/indicators
14		Employment among the population aged 20-64 years	<ul style="list-style-type: none"> ➤ This indicator measures the employment ratio of persons 20 to 64, as a share of those employed (ER20-64) out for the total population in the same age group (P20-64) -%. ➤ The indicator is based on data from the Labour Force Survey. ➤ The survey covers ordinary households and excludes people in collective households, such as boarding rooms, dormitories, and hospitals. ➤ The employed population consists of the persons, who had performed, during the reference week, some work against payment or profit in the course of at least an hour, or had not worked but did have a job, from which they were temporarily absent. ➤ EU 2020 target: In 2020 the share of employed persons aged 20-64 years must be at least 75%; ➤ Bulgaria 2020 target: Increase the level of employment from 63% in 2012 to 76%. 	$(ER20-64)/(P20-64) * 100$	Labour Force Survey - NSI; EUROSTAT; Annually; Total, men, women; Total for the country Total, by age groups	http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=t2020_10&tableSelection=1

4. COORDINATION, MONITORING, REPORTING AND FUNDING

Implementation of the National Strategy for Lifelong Learning is based on the following implementation entities and instruments:

- National Lifelong Learning Council at the Council of Ministers as a strategic group to coordinate implementation;
- Action Plans for implementation of the Strategy;
- Multi-tier level of coordination and monitoring of the process through the National Lifelong Learning Platform 2020;
- Annual monitoring to determine the degree of implementation and monitor effectiveness;
- Annual report to the Council of Ministers on:
 - a) the implementation's status;
 - b) any problems found;
 - c) newly arisen needs to adapt or expand in terms of the objectives and measures;
 - d) cooperation among various participants as part of the governance approach.
- Final report to the Council of Ministers in December 2020
- Communication plan for interaction among the stakeholders;
- Funding for the Strategy.

4.1. National Lifelong Learning Council

The National Lifelong Learning Council carries out coordination and consultation among the central government bodies, local government bodies, trade unions on a national level, and employer organizations on a national level for implementation of the national lifelong learning policy. It is presided by the Minister of Education and Science. The Council includes representatives of the Ministry of Labour and Social Policy, the Ministry of the Economy and Energy, the Ministry of Culture, the Ministry of Youth and Sports, the Ministry of Agriculture and Foods, the Ministry of Justice, the Ministry of Regional Development, the Ministry of Health; the National Statistical Institute, the National Agency for Vocational Education and Training, the Employment Agency, The Centre for Human Resource Development, representative organizations of the employers on a national level; trade unions on a national level, and representatives of the National Association of Municipalities in the Republic of Bulgaria.

The Council's objectives are:

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- 1 Coordination, monitoring, and evaluation of the NSLLL's implementation;
 2. Workshops during spring and fall to prepare the annual monitoring for determining the degree of implementation and tracking the effectiveness;
 3. Prepare the annual action plans submitted to the Council of Ministers for adoption;
 4. Prepare annual reports on the implementation and submit it to the Council of Ministers;
 5. Prepare a final report to the Council of Ministers in December 2020

4.2. Action Plans for implementation of the Strategy

On an operational level the National Strategy for Lifelong Learning (2014-2020) is carried out through annual action plans for implementation of the Strategy. Except for the first one, all follow-up plans are prepared until November of the preceding year and are submitted to the CM in December of the preceding year at the latest.

4.3. Multi-tier level of coordination and monitoring of the process through the National Lifelong Learning Platform 2020

The National Lifelong Learning Platform 2020 represents the linking of all those involved in Strategy's implementation and enables coordinated implementation of the action plans. An electronic tool for coordinating and reporting the implementation of the National LLL Strategy will be set up to enable total transparency of the fulfilment of the commitments undertaken by the various government institutions, social partners and non-governmental organizations, as well as provide an opportunity to monitor process and revise any of the measures when non-implementation is threatened. An e-platform for stakeholder coordination and for reporting is maintained by the Ministry of Education and Science.

4.4. Annual monitoring for determining the degree of implementation and tracking the effectiveness

Implementation of the National Strategy for Lifelong Learning for the period 2014-2020 is based on the action plans adopted by the Council of Ministers, the fixed operational objectives and main stages, which are subject to annual monitoring for purposes of timely detection of difficulties relating to the implementation and taking into account any changes in the challenges.

Elaboration of the monitoring report is coordinated by the National Lifelong

Learning Council and is carried out in cooperation with the National Lifelong Learning Platform 2020 on an annual basis until June 30 of the following year.

4.5. Annual report to the Council of Ministers

Until June 30 of each year the NSLLL submits to the CM a monitoring report, which includes:

- a) status of the implementation, accounting for the indicators of the Progress Framework;
- b) the divergences ascertained and analysis of the original cause;
- c) newly arisen needs to adapt or expand in terms of objectives and measures.

Every reporting period refers to the preceding calendar year.

4.6. Final report to the Council of Ministers

In December 2020 the NSLLL shall submit to the CM a final report on the implementation of NSLLL.

The report must contain:

- a) information about the objectives reached;
- b) SWOT analysis of the LLL process in 2020 and of the relevant governance structures;
- c) conclusions and recommendations for further development of the lifelong learning.

4.7. Communication Plan for interaction among stakeholders

Establishment of a Communication Plan is an attempt at a coordinated governance approach to open the communication channels between the stakeholders to cooperate and set up a sustainable information environment for purposes of encouraging the skills for growth, competitiveness, and employment. Implementation of a communication policy, which provides timely, comprehensible, and thorough information, will mobilize the stakeholders for progress in the implementation of NSLLL and will motivate persons of all ages to take part in education and training. The Plan will define the major objectives and priorities of communications on a national level for the purpose of achieving optimal publicity and information synergy on all levels. The responsibilities and duties of all stakeholders for

implementing a successful LLL policy will be detailed, as well as the appropriate channels for the information to reach the correct target group.

The plan will be prepared within the first six months of the Strategy coming into effect by the participants in National Lifelong Learning Platform 2020.

4.8. Funding of the Strategy

Funding of this Strategy's implementation takes place with funds from the national budget, funds from the European funds and the EC program Erasmus+, as well as through donations, sponsorship, and other sources. The budget and the sources will be incorporated in the action plans for implementation of the Strategy.

5. GLOSSARY OF KEY TERMS

TERM	DEFINITION
Barriers to training/Impediments to learning	Situational (from daily life), institutional (regulations and procedures), dispositional (referring to the stance to learning) and/or financial factors, which impede, dissuade, or prevent participation in learning programs or activities.
Validation	A process of confirmation by an authorized body that a certain person has achieved learning outcomes measured vis-à-vis the educational and professional standards and the assessment standards.
Adult learner	A person aged 16+, who takes part in a selected form of training, except for the day-round one.
Literacy³⁷	Literacy is the skill to read and write. A person is considered literate when able to read, understanding the sense of what is written, as well as when write a short presentation of their day-to-day activities. A person is considered illiterate when unable to read, understanding the sense of what is written, as well as write a short presentation of their day-to-day activities. A person only able to read and write numbers and their own name is considered illiterate. Also considered illiterate is a person able to read but not write, as well as a person able to read and write several stock phrases.
European Qualifications Framework for lifelong learning (EQF)	A reference instrument describing and comparing qualification degrees in the qualifications system elaborated on a national, international, or industry level, to encourage both lifelong learning, equal opportunities in a knowledge-based society, as well as further integration on the European labour market, recognizing the large variety of national educational systems.
European credit system for vocational education and training (ECVET)	A technical framework for transfer, recognition, and — where expedient – accumulation of individual learning outcomes for the purpose of attainment of qualification. The ECVET instruments and methodology include description of the qualifications, as expressed in units of learning outcomes with the relevant points, and transfer and accumulation process, as well as additional documents, such as learning agreements, academic transcripts, and manuals for the ECVET users.

³⁷ NSI definition in accordance with UN Recommendation (353)

European Reference Framework for Quality Assurance in Vocational Education and Training (EQAVET)	Includes a cycle for VET quality assurance and improvement (planning, application, evaluation, and revision) based on selected quality criteria, descriptors, and indicators applicable to quality management, both on the level of VET systems, as well as on the level of VET-providing institutions, providing a set of instruments, from which various users may choose the descriptors and indicators, which they believe fit best the requirements of their particular quality assurance system.
Units of learning outcomes	A qualification component consisting of a coordinated package of knowledge, skills, and competences, which may be assessed and validated with the aid of a certain number of credit points associated with them.
Stakeholders	Organizations, institutions, individuals, or groups of individuals, which may influence or be influenced by the outcomes and expected effects resulting from implementation of purposeful activities.
Indicators	Measurable statistical indicators, which characterize separate phenomena or processes taking place in society, as defined in time and space.
Career guidance	Provides information, consultation, and advice to students and other persons about career development.
Competence	A proven ability to use knowledge, skills and personal, social and/or methodological facts in working or academic situations and in the professional and personal development. Within the context of the European Qualifications Framework the abilities are described in terms of the extent of responsibility assumption and autonomy.
Key competences	A set of interdependent knowledge, skills, and stances, or relations required for an individual's personal development throughout life, to build up an active citizen's position and participate in social life, as well as the fitness for a career in the labour market, which competences are defined on a national level, in accordance with the European Reference Framework for Lifelong Learning.
Mathematical literacy³⁸	The student's ability to formulate, use, and interpret mathematical knowledge in a variety of situations. It includes mathematical thinking and use of mathematical concepts, procedures, facts, and means to describe, explains, and state hypotheses about processes and phenomena. Enables the student to rationalize the role of mathematics in the modern world, formulate justified assertions, and use mathematical knowledge in a way that meets the needs of a contemporary constructive and active citizen.
Monitoring	A systematic and continuous observation of a given process to find out consistency with a desired or presumed result.

³⁸ PISA (Programme for International Student Assessment), OECD (Organisation for Economic Co-operation and Development)

Labour Force Survey	A survey regularly conducted by the NSI, which provides statistics about the most significant employment and unemployment characteristics. The survey also ascertains the participation of the persons aged 25-64 in education and training. It is carried out according to a EUROSTAT methodology in order to ensure international comparability of the data collected.
National Qualifications Framework (NQF)	An instrument for categorization of the qualifications according to a set of criteria concerning attained specific levels during the training process, whose aim is to merge and harmonize the national qualifications subsystems and improve the transparency, comparability, and transferability of the qualifications attained.
Non-formal training	Training carried out as an organized activity outside the system of preschool education and training, school- and university education, and does not result in the completion of any grade, stage, and educational or attainment of a degree of professional qualification or qualification in a part of a given profession.
On-the-job training	Staff training as part of the continuing professional development.
Early school leaver³⁹	A person aged 18-24, who has at best completed primary education and is not involved in any form of education or training.
Professional standards	Professional standards define measurable results from the performance expected by a person occupying a certain position. These identify and group the job tasks and describe the knowledge, skills, competences, and behaviours required for their successful implementation. Professional standards are a tool for defining the job roles and for evaluating work performance in the particular job. These are a basic component in the elaboration of educational standards and qualifications plans and programs. Professional standards serve as a link between the qualifications and the labour market requirements.
Learning outcomes	Indicators for what the learner knows, understands, and is able to do upon completion of the academic process; these are determined in terms of knowledge, skills, and competences.
Informal learning	A non-institutionalized, non-organized, and non-systematic accumulation of knowledge, skills, and competences during a person's life, which are naturally acquired in real-life situations, from day-to-day experience, on the job, and in other similar ways,

³⁹ Official Journal of the European Union (2011 / C 191/01) COUNCIL RECOMMENDATION from June 28, 2011 on policies to reduce early school leaving, Official Journal of the European Union (2011 / C 191/01) COUNCIL RECOMMENDATION of June 28, 2011 on policies to reduce early school leaving

	whether or not these result from a premeditated decision or are due to conjecture – spontaneous and accidental.
Sectoral qualifications framework	Reflect the dynamics in the development of knowledge, skills, and competences in the sector (trade), as dictated by the labour market's actual needs. The sectoral qualifications framework identifies the “core” of specific competences (learning outcomes) and supports supply of training and qualifications aligned to the specific needs of the sector (trade). The framework assists in the identification of needs for new qualifications and new knowledge, skills, and competences to incorporate into the profile of the relevant professions/specialties. Sectoral qualifications frameworks aim to achieve clearer reference of the sector-specific qualifications to the National Qualifications Framework, respectively, to the EQF.
Credit transfer system	<p>A system for measuring and comparing the units of learning outcomes (within a training course, module and other forms) and their transfer from one training institution to another, as well as their mutual recognition.</p> <p>The credit transfer system supports the transparency and comparability of qualifications and training systems, syllabi, and education and training systems – both in higher education, as well as in vocational education and training.</p> <p>This system ascribes certain value to each learning unit, which the learner must successfully assimilate during their training, in order to pass through the entire curriculum, which includes passing exams or other forms of evaluation.</p>
Social inclusion⁴⁰	Integration of individuals or groups into society as citizens or members of various social networks in the public life. Social inclusion is a fundamental part of the labour market and economic integration.
Social exclusion³⁷	A process whereby certain people are marginalized from the society and are prevented from fully participating in it due to their poverty or lack of basic competences and lifelong learning opportunities, or as a result of discrimination. This pushes them away from job, income, and education opportunities, as well as from social and public networks and activities. Such people have limited access to power and to the decision-makers, and thus often feel powerless and incapable of exercising control over the decisions impacting on their daily life.
Lifelong learning⁴¹	Any learning activity undertaken throughout life in order to improve the knowledge, skills, and competences.

⁴⁰ *Joint Report on Social Inclusion, 2004*

http://ec.europa.eu/employment_social/social_inclusion/docs/final_joint_inclusion_report_2003_en.pdf

Learners	Children, students, undergraduates, doctoral students, post-graduates, and adult trainees, who are engaged in learning in the area of education, formal and non-formal training, and informal learning.
Reading literacy⁴²	Understanding, use, and assimilation of written texts to achieve objectives and satisfy needs; deepen knowledge and develop one's intellectual potential and actively participate in the society.
Formal education and training	Takes place in an organized and structured environment, which is specifically intended for learning, and usually results in the award of a qualification, mostly in the shape of a certificate or diploma; it includes general education, primary, vocational, secondary and higher education systems.

⁴¹ Lifelong Learning Memorandum, 30.10.2000

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0678:FIN:EN:PDF>

⁴² PISA (Programme for International Student Assessment), OECD (The Organisation for Economic Co-operation and Development),.

6. LIST OF ABBREVIATIONS

EUROSTAT	Statistical Office of the European Union
NSLLL	National Strategy for Lifelong Learning
LLL	Lifelong learning
EC	the European Commission
ET 2020	Education and Training 2020
LFS	Labour Force Survey
NSI	National Statistical Institute
EC	the European Union
AES	Adult Education Survey
PISA	Programme for International Student Assessment
ESL's	Early school leavers
ICT	Information & communication technologies
ISCED	International Standard Classification of Education (ISCED)
NQF	National Qualifications Framework
OECD	Organization for Economic Cooperation and Development
SEN	Special educational needs
VET	Vocational education and training
YIAC	Youth information and advice centres
CM	Council of Ministers
CCAQSE	Centre for Control and Assessment of the Quality of School Education



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