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**Economic Commission for Europe**

## Committee on Environmental Policy

**United Nations Economic Commission for Europe  
Steering Committee on Education  
for Sustainable Development****Seventeenth meeting**

Geneva, 30 and 31 May 2022

Item 2 (a) of the provisional agenda

**Implementation of the United Nations Economic Commission for Europe Strategy for Education  
for Sustainable Development: progress in implementing the Strategy****Proposed topics for reporting on progress in the  
implementation of the United Nations Economic Commission  
for Europe Strategy for Education for Sustainable  
Development (2022 informal country reporting)<sup>1\*</sup>****Note by the secretariat<sup>2\*\*</sup>***Summary*

By its terms of reference, the United Nations Economic Commission for Europe (ECE) Steering Committee for Education for Sustainable Development is charged with monitoring progress in the implementation of the UNECE Strategy for Education for Sustainable Development (CEP/AC.13/2005/4/Rev.1, annex I, para. 4 (b)). The mandate of the Steering Committee as the principal decision-making body for the activities on the Strategy in the ECE region, responsible for giving guidance and strategic directions to the implementation of the Strategy and monitoring progress in its implementation, was extended until 2030 by ministers and heads of delegation at the High-level Meeting of Education and Environment Ministries held on 8 June 2016 in Batumi, Georgia, in the framework of the Eighth Environment for Europe Ministerial Conference (ECE/BATUMI.CONF/2016/2/Add.2, para 10).

<sup>1</sup> \* This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter's control.

<sup>2</sup> \*\* The present document is being issued without formal editing.

In line with its renewed mandate, and according to the established practice, in addition to the mandatory national progress reporting carried out at the end of each implementation phase, countries are asked to submit informal reports to the Steering Committee on the progress achieved and the challenges encountered in implementing the Strategy. The secretariat will subsequently review all the reports submitted and prepare a presentation, which will identify the major themes and interesting developments with regard to the implementation of education for sustainable development in the ECE region.

To facilitate this process, the secretariat, together with the Chair of the Committee and in coordination with the Bureau, has prepared the present document — a brief questionnaire on progress made and challenges encountered in the implementation of the Strategy since the last mandatory reporting exercise undertaken in 2018 and the informal reporting exercise undertaken in 2021. Countries are kindly requested to fill in the questionnaire and submit it to the secretariat before 13 May 2022.

1. National reporting on the progress achieved in the implementation of the United Nations Economic Commission for Europe (ECE) Strategy for Education for Sustainable Development offers a valuable opportunity for countries to learn from each other and to share newly produced resources and materials within and beyond the ECE region.
2. In preparation for the seventeenth meeting of the ECE Steering Committee on Education for Sustainable Development, countries are requested to fill in the questionnaire below, informing on progress made and challenges encountered in working on priority action areas after the fourth mandatory reporting cycle carried out in 2018 and since the sixteenth Steering Committee meeting (Geneva, 10 and 11 May 2021).
3. In the below questionnaire, particular attention is paid to the main priority strands of the Strategy's new implementation framework (2021–2030) (ECE/CEP/AC.13/2022/3), focused on:
  - (a) quality education and ESD;
  - (b) whole institution approach and ESD;
  - (c) digital education, information and communications technology and ESD;
  - (d) entrepreneurship, employability, innovation and ESD; and youth and ESD.
4. Countries are kindly requested to submit this information in writing to the secretariat via e-mail ([nona.iliukhina@un.org](mailto:nona.iliukhina@un.org) and [esd@unece.org](mailto:esd@unece.org)) by **13 May 2022**.
5. The secretariat will review the information submitted and deliver a brief synthesis presentation at the Steering Committee's seventeenth meeting. The presentation will be followed by an interactive discussion.
6. Countries will be invited to complement the secretariat's presentation with interventions on outstanding activities and initiatives implemented since the sixteenth Steering Committee meeting (Geneva, 10 and 11 May 2021), in particular regarding how the implementation of national strategies for ESD contributes to the new developments and challenges for ESD in the region. Given the limited time available, countries will only have up to three minutes each for interventions from the floor.

# Questionnaire for 2022 informal country<sup>3</sup> reporting on the implementation of the priority action areas of the newly drafted framework for the future implementation of the UNECE Strategy for Education for Sustainable Development from 2021 to 2030<sup>4</sup>

## Advances made and challenges encountered since the sixteenth Steering Committee meeting in May 2021

### I. Priority action area (a)

*Encouraging countries to embed ESD into quality standards, frameworks and resources associated with formal quality assessments and institutional reviews*

#### 1. Are there currently any national or subnational quality assessment/enhancement systems that address ESD in your country?

Yes  No

· Please specify

*The Strategy of Education and Upbringing in the Republic of Serbia 2030 emphasizes the importance of the public and cultural function of educational institutions and the necessity of reaffirmation and strengthening of their educational role. The activities of developing and strengthening the capacity of employees in education in areas that affirm the values of a modern democratic society, among which are sustainable development and collective well-being, should contribute to the realization of this priority.*

*According to the Rulebook on Standards of Competences for the Profession of Teachers and their Professional Development (Official Gazette of RS - Education Gazette, No. 5/2011), teachers should, among other things, "contribute to sustainable development and promote healthy lifestyles".*

*One of the goals of education prescribed by the Law on the Fundamentals of the Education System, Art. 8. is "developing awareness of the importance of sustainable development, protection and preservation of nature and the environment and environmental ethics, protection and welfare of animals". With the amendments to ZOSOV from 2017, the educational system is focused on the development of key competencies and interdisciplinary competencies, including competencies related to sustainable development (responsible attitude towards the environment, entrepreneurship, responsible participation in a democratic society, etc.). The transition to teaching and learning programs required a greater representation of an integrated approach to teaching, cooperative learning, project learning, all of which opens up the development of students' competencies for sustainable development.*

<sup>3</sup> Countries with a federal structure are free to provide several inputs or questionnaires from different states or entities, if appropriate.

<sup>4</sup> See framework for the implementation of the United Nations Economic Commission for Europe Strategy for Education for Sustainable Development from 2021 to 2030 (ECE/CEP/AC.13/2022/3). Available from [https://unece.org/sites/default/files/2022-03/ece\\_cep\\_ac.13\\_2022\\_3\\_adv\\_edited.pdf](https://unece.org/sites/default/files/2022-03/ece_cep_ac.13_2022_3_adv_edited.pdf)

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*Encouraging countries to embed ESD into quality standards, frameworks and resources associated with formal quality assessments and institutional reviews*

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*Based on international recommendations, sustainable development has become an integral part of the curriculum at all levels of education. The contents of the existing subjects began to be observed and created from the perspective of sustainable development, and new subjects were introduced, the contents of which are narrowly focused on sustainable development. In primary school teaching and learning programs, these are the following subjects: the world around us, nature and society, biology, chemistry, geography, basics of TO and technology. In the curricula of secondary vocational schools, the concept and contents related to sustainable development are found within the subjects of chemistry, biology, ecology, geography, etc. From the school year 2018/19, year high schools offer an elective program Education for Sustainable Development, which with its contents gradually introduces students to the dimension of environmental protection, and then with aspects of the economic and social dimension of sustainable development.*

*Law on the Fundamentals of the Education System ("Official Gazette of RS", No. 88/2017, 27/2018-other law, 10/2019, 27/2018-other law, 6/2020 and 129/2021), as the basic law which regulates pre-university education, the starting bases of pre-school, primary and secondary education and upbringing have been set. The importance of students' ecological literacy can be clearly seen in the very basic settings of the educational system. One of the prescribed basic goals of education and upbringing is to develop awareness of the importance of sustainable development, protection and preservation of nature and the environment and environmental ethics, protection and welfare of animals. Furthermore, this goal is developed through the outcomes of education and upbringing - which determines what students are expected to know, understand and be able to show, or do after completing the appropriate level of education and upbringing. In this sense, the educational system should enable students to effectively and critically use scientific and technological knowledge, while showing responsibility for their lives, the lives of others and the environment. The basic concept of the comprehensive reform of curricula and curricula, which began implementation three years ago, is the orientation towards the learning process and learning outcomes. Achieving the prescribed outcomes leads to the development of identified key competencies for lifelong learning, including scientific and competencies that include understanding the world of nature and the ability to apply knowledge and technology to human needs, as well as developing general interdisciplinary competencies. The Law on the Fundamentals of the Education System, Article 12, prescribes the obligation to develop interdisciplinary competencies in students. Interdisciplinary competencies are important for the issue of climate change and protection of children from violence, especially violence on the Internet: responsible participation in a democratic society, responsible attitude towards the environment, responsible attitude towards health and digital competence. The mentioned competencies are developed through the teaching of all subjects, they are applicable in different situations and contexts in solving various problems and tasks, they are necessary for all*

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*Encouraging countries to embed ESD into quality standards, frameworks and resources associated with formal quality assessments and institutional reviews*

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*students for personal achievement and development, as well as inclusion in social flows.*

*Contents in the field of ecology, which acquire knowledge, develop skills and abilities, form attitudes and enable students to apply them in everyday life, are present in school programs many times, within the program contents of compulsory subjects, project teaching and free teaching activities.*

*In the first cycle of primary education, these subjects and activities are represented within the compulsory subjects World Around Us (first and second grade) and Nature and Society (third and fourth grade), as well as within project teaching, where students, according to their own affinities, project approach and concrete actions in cooperation with representatives from the school environment, deal with selected locally relevant topics, very often in the field of ecology.*

*In the second cycle of primary education, contents in the field of ecology are represented mostly within the compulsory subject Biology, then Geography, and they are also represented within Technique and Technology. One of the free teaching activities is Nature Keepers. Apart from the prescribed - obligatory part of the school program, contents and activities in the field of ecology are also present in various extracurricular activities, among which ecological sections are especially represented, but also projects that the school implements independently or in cooperation with partners from its environment. , relevant local institutions and organizations). These activities can be realized by the school within the program of extracurricular activities, but also within the program of environmental protection, which is defined by the Law on Primary Education and Upbringing "Official Gazette of RS", No. 55 / 2013-3, 101 / 2017-11 , 27 / 2018-3 (other law), 10 / 2019-3, 129 / 2021-8, 129 / 2021-9 (other law), as an integral part of the school curriculum, precisely for the reason of emphasizing the importance topic in the field of environmental protection.*

*The introduction of enriched one-shift work in schools opens additional space for studying and practicing content and activities in the field of ecology, and many schools have defined various programs and activities in these areas.*

*Within MEASURE 1.1.3. Support to educational institutions in strengthening the educational function of the Action Plan for SROVRS2030, indicators of achievement are: Number of accredited trainings for strengthening the capacity of students to carry out activities related to education for sustainable development; Number of trained representatives of OVU to strengthen the capacity of students to carry out activities related to education for sustainable development.*

*Within MEASURE 1.4.2. Encouraging interculturality in education, indicators of achievement are: Number of accredited training programs for schools aimed at intercultural education, which includes education for sustainable development and democratic culture; Number of trained representative of the OVU for intercultural education, which includes education for sustainable development and democracy.*

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*In the Rulebook on the quality standards of the work of educational institutions, one of the indicators of quality is "Healthy lifestyles, children's rights, protection of the human environment and sustainable development are promoted in schools."*

- *The Republic of Serbia is committed to the implementation of the 2030 Sustainable Development Agenda adopted by the United Nations General Assembly. The Ministry of Education, Science and Technological Development is responsible for Objective 4: Quality education - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The Ministry of Education, Science and Technological Development is actively working to improve the quality and accessibility of education for every child, guided by the best interests of children, and taking into account, among other things, the Recommendations of the Committee on the Rights of the Child. Strategy for the development of education and upbringing of the Republic of Serbia 2030, which was adopted on June 3, 2021. defines a special goal 1.4. Improved accessibility, equity and openness of pre-university education, within which Measure 1.4.1. Establishing new and improving existing mechanisms of support to educational institutions in achieving openness, fairness and accessibility, and Measure 1.4.2 Improving and encouraging interculturality in education.*

*With the aim of strengthening the quality and accessibility of education for all vulnerable social groups, at the end of 2019 the Department for Human and Minority Rights in Education was formed, and in 2021 the Sector for Improving Human and Minority Rights in Education which coordinates, plans, develops, implements and monitors activities related to respect for human rights in the field of education, education of persons belonging to national minorities, children and students with disabilities, migrants, asylum seekers, victims of trafficking and returnees under readmission agreements and internally displaced persons and other vulnerable groups, as well as protection from violence and discrimination in educational institutions. The Department for Human and Minority Rights in Education is a narrower internal unit of the Sector.*

*The Institute for Evaluation of the Quality of Education performs professional work in the field of monitoring and evaluating the degree of achievement of education goals, standards of achievement by levels and types of education, through four organizational units (centers): Center for Quality Assurance, Center for Exams, Center for International, National Research and Development and Research and the Center for Educational Technology. Part of the competence of the Center for Exams refers to the final exam at the end of primary education and upbringing is realized from the school year 2010/11. in eight languages of national minorities - Albanian, Bosnian, Bulgarian, Hungarian, Romanian, Rusyn, Slovak and Croatian. The Institute prepares tests in the mother tongue, while it translates the tasks for the test in mathematics and for the combined test into the mentioned languages. Students, members of national minorities, receive all these tests in June and August, as well as for trial testing. In addition, the Institute for the Evaluation of the Quality of Education annually*

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*Encouraging countries to embed ESD into quality standards, frameworks and resources associated with formal quality assessments and institutional reviews*

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*publishes in mother tongues collections of assignments for the preparation of the final exam. At the same time, for adult students, members of national minorities, who attend the program for functional primary education of adults, the Institute creates a test for the final exam in the mother tongue of students. In addition, as part of the preparations for the introduction of the state matriculation exam, by the end of 2021, assignments for the end of secondary education in the mentioned eight mother tongues will be written, while assignments in mathematics, written for the same purposes, will be translated. In the Center for Quality Assurance of Institutions, in the previous period, activities were implemented to increase the availability and quality of teaching in the state language, including when it is taught as a second language, through a balanced approach that includes parallel measures for protection and promotion of minority languages. General standards of achievement for the end of compulsory education for the subject Mother tongue and literature (2016). General standards for the end of general secondary education and secondary vocational education and upbringing for the subject Mother tongue and literature (2018). Manuals in the languages of national minorities have been published: Bosnian; Romanian language; Slovakian; Rusyn language; Hungarian language; Croatian language; Albanian language; Bulgarian language. Trainings for the implementation of standards were held in 2019. General standards of achievement for the mother tongue for the end of the first cycle of primary education (2020). Manuals in the languages of national minorities have been published: Romanian; Hungarian language; Croatian language; Bulgarian language; Bosnian language; Albanian language; Slovakian; Rusyn language. During 2020, 40 trainings were realized, which were attended by 953 teachers: Romanian language (31); Hungarian (403); Croatian language (16); Bulgarian language (41); Bosnian language (285); Albanian (124); Slovak language (39); Rusyn language (14).*

*PISA 2022 is planned at the Center for International, National Research and Research and Development in March and April 2022. The center also compiles reports for each school that show the results of students from the final exam and which serve for self-evaluation and improvement of school work. At the national level, two reports are made: the Report on the results of the final exam for students who took the exam in Serbian and the Report on students belonging to national minorities. These reports contribute to taking systematic measures to improve the quality of education for all students in the Republic of Serbia.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**2. Do quality frameworks exist in your country, for integrating ESD/SDGs in teachers' professional development?**

Yes  No

- *Please specify*

*The system of education and upbringing prescribes professional development and professional development of teachers, educators and professional associates, which is regulated by the*



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*Rulebook on Continuing Professional Development and Advancement to the Titles of Teachers, Educators and Professional Associates ("Official Gazette of RS", No. 81 of 31st August 2017, 48 of 22nd June 2018). The Center for Professional Development of Employees in Education, which operates within the Institute for the Advancement of Education and Upbringing, performs professional tasks that include: preparation of standards of competencies for the profession of teacher and educator; improvement and development of the system of continuous professional development and professional development of employees in education; preparation of programs for introduction of trainees and programs for taking exams for work permits for teachers, educators, professional associates and principals and providing professional and pedagogical assistance to employees in education. Among the competencies prescribed for professional development and professional development of teachers, educators and professional associates are the competencies related to the competencies for communication and cooperation. Among the priority areas is the area: Strengthening the educational role of the educational institution through the development of programs for the prevention of violence, discrimination, abuse and neglect. From the areas that are in the Catalogue, we single out: natural sciences - the area contains 8 programs that improve awareness of ecology and environmental protection; vocational subjects in secondary vocational education - the area contains 3 programs that raise awareness of the green agenda; elective and optional subjects - the area contains programs that improve environmental awareness, then the methodology of the subject Civic Education. In the Catalogue of the program of continuous professional development of teachers, educators and professional associates for the school year 2018/2019, 2019/2020, and 2020/2021. There are 35 programs aimed at improving the capacity of teachers and other professional associates to act in the field of protection against discrimination and violence. A total of 315 trainings in this area were realized, which included 8608 participants. The Catalogue also contains 34 training programs in the field of health education, as well as 29 in the field of physical education. 350 teachers and professional associates, educational advisors and educational inspectors were empowered through trainings for the application of the Rulebook on the actions of the institution in case of suspicion or established discriminatory behavior. This training continues for 200 new teachers during 2022. Professional development of teachers who teach in the language of a national minority.*

*More than 2,000 teachers and professional associates from the constitution who work in the language of the national minority were included in the training for professional development. During 2020, MPNTR, in cooperation with the CIP Center, conducted an online training program "Strengthening the language competencies of teachers who teach in eight languages of national minorities" to strengthen the language competencies of teachers who teach in one of the languages of national minorities. The training was accredited and gathered*

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*3116 teachers who teach in one of the 8 languages of national minorities.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*
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## II. Priority action area (b)

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*Promoting the whole institution approach (WIA) (or whole school approach (WSA)) in every institution of formal, non-formal and informal education*

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### **1. Has there been any significant advancement made in your country in the field of governance, curriculum, leadership, teachers' professional development, teaching methods, collaborations, facilities and infrastructure for promoting application of WSA/WIA to ESD in formal education?**

Yes  No

- *Please specify*

*Within formal education, education for sustainable development is applied through the integration of topics for sustainable development, provision of subject programs and courses, e.g. within secondary education, the program has been improved by introducing new elective subjects: Education for Sustainable Development; Applied sciences; Language, media and culture; Individual, group and society, etc.*

*By introducing a new educational paradigm through the launch of educational reform in 2018, a national framework of education and upbringing is being built, which is the basis for developing all teaching and learning programs that include goals, standards, competencies, outcomes, mission and vision of education and upbringing. The curriculum is outcome-oriented and should ensure the development of interdisciplinary competencies, of which we mention Responsible participation in a democratic society - in outcomes related to respect for human rights and freedoms; then Communication, Responsible attitude towards the environment, Responsible attitude towards health. General interdisciplinary competencies are based on key competencies, are developed through the teaching of all subjects, are applicable in different situations and contexts in solving various problems and tasks, are necessary for all students for personal achievement and development, as well as inclusion in social flows and employment. basis for lifelong learning. Within the new programs of the compulsory elective subject Civic Education, the goal of teaching and learning is for students to become aware of their rights and responsibilities by studying the basic principles, values and procedures of civil society, sensitive to the needs of individuals and the community and ready to actively act in the community. Outcomes related to respect for gender equality, diversity and intercultural dialogue are introduced in other subjects. Respect for democratic procedures, responsible, humane and tolerant behavior in society, sensitivity to social injustice, cooperation and teamwork are some of the outcomes related to human rights, which are found in the curriculum. Civic education or education for democracy and civil society was introduced into the education system of the Republic of Serbia in the 2001/2002*

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*Promoting the whole institution approach (WIA) (or whole school approach (WSA)) in every institution of formal, non-formal and informal education*

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*school year. year for the first grade of primary and first grade of secondary school as an optional subject, and after that, 2005/2006. year, civic education is included in all grades of primary and secondary school, as a compulsory elective subject. Civic education encourages the development of children and young people in the spirit of respect for human rights and fundamental freedoms, peace, tolerance, gender equality, understanding and friendship among peoples, ethnic, national and religious groups. The basis for the introduction and further development of Civic Education in Serbia was the Council of Europe's recommendation on education for active participation in a democratic society. In addition to Civic Education, new elective programs for high school have been introduced: Individual, Group and Society, Language, Media and Culture, Health and Sports, Education for Sustainable Development, Art and Design, Applied Sciences, Fundamentals of Geopolitics, Economics and Business, Religions and Civilizations. With the aim of improving the competencies of teachers who teach Civic Education, three manuals have been prepared: - for the first cycle of primary education and upbringing [https://zuov.gov.rs/wp-content/uploads/2020/10/Prirucnik-prvi-ciklus-approved .pdf](https://zuov.gov.rs/wp-content/uploads/2020/10/Prirucnik-prvi-ciklus-approved.pdf); for the second cycle of primary education and upbringing <https://zuov.gov.rs/wp-content/uploads/2020/10/Prirucnik-drugi-ciklus-approved.pdf> and for high school <https://zuov.gov.rs/wp-content/uploads/2020/12/gradjansko-srednja-skola.pdf>. The theme of tolerance, respect for diversity, gender and any other equality is present in these programs for all three cycles of education and are part of the mentioned manuals. Based on this material, teachers are expected to improve their competencies for working with students on this sensitive topic, taking care not to hurt someone's feelings, so drama workshops, role-playing, case studies, activities are recommended as the best work technique.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**2. Does your country face challenges and has particular needs in its implementation of WSA/WIA in formal and non-formal education?**

Yes  No

- *Please specify*
- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**3. Have there been any monitoring processes (for instance, self-assessments) in your country that support formal and non-formal institutions and organizations when assessing their progress regarding application of WSA/WIA to ESD?**

Yes  No

- *Please specify*

*Pre-primary institutions, primary and secondary schools in Serbia apply the self-evaluation process to assess the quality of the institution's work in several areas. This process involves all actors in educational institutions, from parents to administration, and it is practically WSA/WIA to ESD.*

*In the Republic of Serbia, there is the Institute for the Evaluation of the Quality of Education and Upbringing, which is a professional and reference institution that evaluates education and upbringing and provides recommendations for establishing and ensuring the quality of education and*

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*Promoting the whole institution approach (WIA) (or whole school approach (WSA)) in every institution of formal, non-formal and informal education*

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*upbringing system. The key activities of the Institute are: defining standards in education, evaluation of education and training of participants in the education system.*

*The Institute has the following organizational units: 1) Center for Quality Assurance of Institutions, 2) Center for Exams, 3) Center for International, National Research and Research and Development and 4) Center for Educational Technology.*

*In PISA, the emphasis is on functional knowledge, and all the tasks in the tests are related to real situations in which students may find themselves. Literacy is tested in three main domains: mathematics, reading and science. In addition, the tests include questions that assess students' financial literacy and their global competencies. For each country participating in the survey, data on the average achievement (arithmetic mean) of students in each of the surveyed areas are reported. Based on the difficulty of the tasks (complexity of the knowledge being examined), a developmental scale of achievement was formed for each area, divided into levels of functional literacy. Each level of functional literacy is described through the knowledge and skills that the student has mastered. In April 2022, the PISA 2022 test of students' functional knowledge was realized in Serbia. The schools participating in the research were selected by the method of random sampling and testing is performed on a sample of about 7,600 15-year-old students from 193 schools. During the testing, students work on computers in the domains of reading literacy, science, mathematics and creative thinking.*

*The results of PISA 2018 in the table are also available in English*

*According to the results of that research, Serbia is below the average of the member countries of the Organization for Economic Cooperation and Development (OECD), which implements it. Out of 79 ranked countries, it ranks 45th. While the number of functionally illiterate is high, there is a relatively small percentage of students who are at the highest and highest levels of achievement in this research. The results of the test conducted in 190 schools in Serbia show that 38 percent of students do not reach the average reading literacy, 40 percent do not reach the math, and 38 percent the average scientific literacy. According to the results published by the OECD, students in Serbia achieved 439 points in reading literacy, 448 in mathematics and 440 in science. The average of OECD countries is 500. Out of the six passing grades that exist on this test, students from Serbia were rated two for comprehension of the read text. They received the same grade for natural and mathematical knowledge. One of the conclusions of the research is that due to the low level of literacy, students will have difficulties in continuing their education, employment, professional advancement and coping in society. While in the OECD countries the percentage of such students is between 21 and 25, in Serbia it ranges from 38 to 40 percent.*

*· Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

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### III. Priority action area (c)

*Supporting ESD within ICT and digital education*

#### 1. Did COVID-19 significantly change ICT and digital education used for teaching and learning on ESD in your country?

Yes  No

- Please specify how

*At the beginning of the pandemic COVID - 19, in the second semester of the 2019/2020 school year, students were involved in watching TV lessons and using online learning platforms, as well as through the use of alternative forms of distance learning. In primary schools, all these forms of learning included 99% of students. About 95% of primary school students watched classes through television channels, while 84.7% of primary school students joined classes through online platforms or interacted with teachers with the help of digital tools.*

*Primary school students who were not included in online classes cited as the most common reasons for this that they do not have access to the Internet and / or do not have appropriate devices. When it comes to students from vulnerable groups (including Roma students, students with disabilities, students from low socioeconomic status families), it was found that 40% of students who did not watch TV classes and online classes had no access internet, and in 25% of cases the reason is that they do not have an adequate device.*

- Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic

#### 2. Are there any programs in your country that support educational actors (teachers, mentors, inspectors etc) to integrate ICT and digital education in ESD?

Yes  No

- Please specify

*Digital competencies are increasingly becoming competencies that are essential for all employees and citizens. Basic digital competencies, in the long run, are acquired primarily in the education system that provides access to systematized scientific knowledge, and the level of possession of digital competencies of students, among other things, depends largely on the level of digital competencies of teachers. Therefore, teachers are expected to have the appropriate level of information, digital and media literacy, as well as to know modern concepts, methods and tools in the areas in which they teach, which presuppose meaningful use of digital technologies, including those aimed at achieving educational goals for sustainable development.*

*The Ministry of Education, Science and Technological Development has prepared the Framework of Digital Competences for Teachers - Teacher for the Digital Age 2019, which includes digital competencies specific to the teaching profession and presents them through 24 competencies organized into six categories. The aim of the existing national framework is to provide a common understanding of digital competencies of teachers in our education system, but also to carefully integrate certain characteristics of current education policy and measures taken in the field of digital education*

development. Based on the Framework, the Institute for Improving the Quality of Education and Upbringing has prepared trainings for reaching the primary and secondary level of digital competencies of primary and secondary school teachers.

Already in preschool education, there are certain activities that enable children to interact with digital technology in a responsible way. It is a matter of solving problem situations, age-appropriate, with the help of the "Bee" robot. Equipping preschool institutions with this didactic tool is carried out within the three-year project 'Support for the application of ICT in preschool institutions through the use of the didactic tool "Bee-bot"'. Over 116,000 students of the first and second grade of primary school are currently studying the contents of the new subject Digital World, and the development of teaching and learning programs for this subject for the third and fourth grade is in progress. Classes for students with special abilities in informatics have been formed in high schools. Other high school students have the opportunity to choose between six multidisciplinary subjects aimed at functionalizing knowledge and strengthening digital competencies.

- Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic

**3. Is there any assistance on the national level for embedding ICT and digital education on ESD/SDGs?**

Yes  No

- Please specify

The project "Bridging the digital divide in Serbia for the most vulnerable children" was created in response to the current KOVID-19 epidemic crisis based on monitoring the participation in distance learning of children from the most vulnerable groups. It is designed to support the most vulnerable students in gaining access to education in a pandemic, strengthening the resilience of the education system and in case of any other type of disruption to school work. The project is implemented by UNICEF in cooperation with the Ministry of Education, Science and Technological Development with the support of the European Union for 30 months (2021-2023). The ultimate goal is greater resilience of the education system in crisis situations, with a special focus on the ability of the system to respond to the demands of students belonging to the Roma national minority who need additional educational support. The project includes support for students from vulnerable groups through the establishment of digital libraries and learning clubs in 30 primary schools in Serbia. Digital libraries will provide access to tablets on a rental basis to students and thus facilitate their work in the context of distance learning. In the regular teaching regime, the equipment will be used to improve the quality of teaching and will be used by all teachers and children in these schools. For that purpose, 2,200 digital devices were provided for 30 schools and all pedagogical assistants in the school system.

In addition, more than 5,000 pieces of IT equipment for distance learning was provided for students from vulnerable social groups, uninterrupted Internet access, and support of

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*Supporting ESD within ICT and digital education*

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*pedagogical assistants. For students who do not have internet access or have a poor connection, the school has provided printed assignments that are picked up at school and returned to school.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

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## **IV. Priority action area (d)**

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*Enhancing entrepreneurship and employment within ESD*

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### **1. Are there changes in curricula focused on developing (new) skills, aimed at increasing levels of entrepreneurship and the greening of economies (e.g. in TVET and higher education programs)?**

Yes  No

- *Please specify*

*Based on the Law on Dual Education in Secondary Vocational Education, numerous dual educational profiles have been created, which are becoming increasingly popular among high school students, because they increase their chances of getting a job after completing formal education.*

*The dual education system provides a more efficient response of the education system to the needs of the economy and the labour market, technological change and the need for new competencies - knowledge, skills, abilities and attitudes. This model of teaching implies direct involvement of employers in organizing and implementing learning through work in a real work environment. The system of dual education at the level of secondary and higher education, which is regulated by the Law on Dual Education and the Law on Dual Model of Studies in Higher Education, contributes to the improvement of human capital, which will further ensure easier and faster integration of high school and university students. The development of dual education is also regulated by the Master Plan for the Implementation of the Law on Dual Education. This type of education raises the quality of acquired knowledge and skills and creates a system where qualifications really represent the expression of acquired competencies, which ultimately leads to increased employability of young people. Therefore, the economy, by investing in education, invests in its future employees and solves the problem in terms of personnel in the long run.*

*From 2020, competitions for Master 4.0 programs remain formatted in a public-private partnership, but now they merge faculties in the field of art and technical, i.e. mathematical sciences. The establishment of such a study program, in accordance with the needs of creative industries, introduces new disciplines in higher education in the Republic of Serbia, and at the same time opens the possibility of educating competitive staff at the global level. This approach aims to*

*promote multi-disciplinary in higher education institutions, promote cooperation between higher education institutions and employers in developing study programs that meet the needs of the creative industries market, but also increase the number and quality of domestic staff to create conditions for growth and offer more competitive education. programs relevant to the fourth industrial revolution. The mission of this approach is also guided by the principles of the Smart Specialization Strategy.*

*The dual model of education provides a more efficient response of the education system to the needs of the economy and the labour market, technological change and the need for new competencies (knowledge, skills, abilities and attitudes). This model of teaching implies direct involvement of employers in organizing and implementing learning through work in a real work environment. The Law on the Dual Model of Studies in Higher Education came into force in October 2021. The number of accredited study programs according to the dual model is 28 in the field of IT, textile industry, mechanical engineering and aviation. The College of Vocational Studies of the Aviation Academy was also established, where young people have the opportunity to study in three study programs according to the dual model - Aviation Engineering, Air Traffic and Flight Control. In order to improve dual education and lifelong learning, the Government of the Republic of Serbia will form 12 training centers in the next period, which will be located within the education system and will have the most modern equipment for various industries in line with the accelerated economic development of the Serbian economy. The concept of establishing the training center of the Aviation Academy has completely improved the way of educating young people in Serbia by uniting high school, vocational school and training in non-formal education in one place as support and adult education. In addition to the training center in Vršac, in the near future 4 more training centers will be established at high schools in Subotica, Valjevo, Šabac and Vlasotince for those areas of work for which the economy of these regions has shown need and interest (mechanical engineering and metalworking, electrical engineering, construction and geodesy and traffic, medicine, cosmetics, dentistry, pharmacy and physical medicine).*

*The number of dual educational profiles increases every new school year in accordance with the expressed needs of the economy and businessmen. The number of dual educational profiles implemented in 150 schools has grown to 54. The new dual educational profiles in the current school year are carpenter, shoemaker, trade technician, press technician, operational forensics technician, furniture and interior design technician and postal traffic technician and telecommunications services.*

*In 2021, with the support of the IPA 14 project MPNTR, the Register of NOKS was established - an electronic platform that provides insight into all qualifications that can be acquired in Serbia. In the next period, it is expected that the NOKS Register will be connected to the European portal for qualifications, which will make the system of qualifications of Serbia visible to the international public. As part of the process of establishing*



*the NOCS Register, the List of Qualifications of the Republic of Serbia was prepared with about 4622 qualifications for all levels of NOCS, which is an organized list of qualifications, classified according to certain criteria. During 2020 and 2021, 50 qualification standards were adopted.*

*From 2020, competitions for Master 4.0 programs remain formatted in a public-private partnership, but now they merge faculties in the field of art and technical, ie mathematical sciences. The establishment of such a study program, in accordance with the needs of creative industries, introduces new disciplines in higher education in the Republic of Serbia, and at the same time opens the possibility of educating competitive staff at the global level. This approach aims to promote multi-disciplinary in higher education institutions, promote cooperation between higher education institutions and employers in developing study programs that meet the needs of the creative industries market, but also increase the number and quality of domestic staff to create conditions for growth and offer more competitive education. programs relevant to the fourth industrial revolution. The mission of this approach is also guided by the principles of the Smart Specialization Strategy.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**2. Are there any mechanisms on the national level that strengthen students/youth entrepreneurship competences related to ESD?**

Yes  No

- *Please specify*

*The ability of students for lifelong learning is based on the development of general interdisciplinary or, as it is often said, key competencies. Teaching work is aimed at developing general interdisciplinary competencies of students and requires cooperation and close connection of teaching different subjects on a daily basis. Competences for lifelong learning within the education system at the national level are outcome-based and play an important role in the educational process. One of the key competencies is certainly entrepreneurship, which includes a passive and active component, the ability and willingness to accept others or create their own innovations, take responsibility for actions, develop a strategic vision and, set and meet goals and motivation for success.*

*In 2022, as in every year, the Ministry of Education has allocated funds to encourage programs of public interest important for pre-university education implemented by associations. Among the priority areas were education for sustainable development, violence prevention and improving education for children from vulnerable social groups. Out of a total of 49 programs supported, 18 relate to sustainable development, prevention of discrimination and all forms of violence, including digital violence. These programs make up 40% of funded programs. During the previous years (2017 and 2018), MoESTD has strengthened entrepreneurship and*

*entrepreneurial competencies among students as a part of its priorities for public competitions.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**3. Are there any incentives for ESD on the national level which prepare students/youth for sustainable entrepreneurship and green jobs?**

Yes  No

- *Please specify*

*In the Republic of Serbia, special organizational units have been formed in one part of the public administration, which are engaged in the circular economy. Thus, in the Ministry of Environmental Protection, in 2018, the Group for Circular and Green Economy was formed, and a center for circular economy was formed in the Chamber of Commerce. The Serbian Chamber of Commerce has initiated appropriate education on this topic, through the Academy of Circular Economy, whose first cycle was realized at the end of 2018, and the second cycle of the Academy of Circular Economy is currently underway. The participants of the Academy are mostly representatives of the economy.*

*In 2016, the government made a decision to establish a Green Fund. The program for encouraging the development of entrepreneurship through financial support for beginners in business is implemented by the Development Fund of the Republic of Serbia in cooperation with the Ministry of Economy. The use of new technologies is in its infancy and is difficult to implement due to the small or certainly limited capacity of the economy to bear the burden of change. At the same time, there is interest in improving business and openness to change in this area.*

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## V. COVID-19 and ESD

**1. Has COVID-19 impacted the implementation of the UNECE Strategy for ESD in your country?**

Yes  No

- *Please specify how and what challenges occurred*

*The Covid-19 pandemic did not affect the implementation of the Strategy in the Republic of Serbia, but the teaching was adjusted to the conditions of the pandemic.*

*The Ministry of Education, Science and Technological Development has adopted an operational plan that includes a large number of different programs and alternative digital ways of teaching and learning in preschool institutions, in all*

*grades of primary and secondary school, and the focus is on organized distance learning. program contents of general education subjects and professional subjects with the largest fund of classes. During the pandemic, in order to ensure continuous learning with the support of children and students with disabilities, distance learning was organized in the languages of national minorities, and support was provided to migrant students-asylum seekers involved in the teaching process in the same way as domicile students.*

- *Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic*

**2. Are there any lessons learnt in your country from COVID-19, which, in your opinion, would strengthen the role of ESD in the national context as a vehicle for empowering youth and citizens to be more resilient in future emergencies?**

Yes  No

- *Please specify*

*The experience gained during the Kovid-19 pandemic and the way of organizing distance learning established by the state in the short term, can be applied in various challenging circumstances when children and students are not able to attend classes according to the usual, direct model. During this period, teachers developed new approaches and used new sources of digital tools that enable work with students at a distance, over the Internet; students experienced new ways of watching classes - watching television classes, watching lectures and performing tasks in the digital environment, which improved their own digital competencies. Parents of children and students saw the new opportunities that the education system provides for their children, and recognized ways of learning that can be a useful substitute for direct school practice in other crisis situations. Although the situation caused by the Kovid-19 virus was difficult, all parts of the system have learned lessons and benefits from it, and the institutions of the system, and teachers, and students and their parents.*

*The Ministry of Education, Science and Technological Development has adopted an operational plan that includes a large number of different programs and alternative digital ways of teaching and learning in preschool institutions, in all grades of primary and secondary school, and the focus is on organized distance learning. program contents of general education subjects and professional subjects with the largest fund of classes. The effects of organizing distance learning classes are undoubtedly improved digital competencies of teachers and students, greater cooperation among employees in education and focus on distance learning coverage and providing conditions for no one to be excluded, especially students from vulnerable groups. As an example of good practice, we cite a research conducted during the state of emergency entitled "Monitoring the participation and learning process of students from vulnerable groups during the implementation of educational work by distance learning" (June 2020) <http://www.mpn.gov.rs/report-on-the-involvement-of-students-from-sensitive-groups-in-educational-educational-work-during-distance-teaching/>. According to data collected from 95% of all schools in Serbia in primary schools, some type of teaching (teaching on TV channels, online platforms or*

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*alternative forms of teaching) covered 99.28% of students. A total of 96% of students with disabilities are covered by distance learning. In this group of students, 76% of students watch TV and online classes, and 20% are included in alternative forms of teaching, while 4% of students remain excluded. Communication with students and / or their families is realized through several channels of communication: virtual classrooms (43% of primary, 21% of special and 53% of secondary schools), e-mail (55% of primary schools, 84% of special schools, 68% of secondary schools) , via social networks (40% of primary schools, 72% of special schools, 43% of secondary schools), by phone (89% of primary schools, 98% of special schools, 81% of secondary schools, SMS) (66% of primary schools, 88% of special schools, 50% of secondary schools) and via Viber and WatshApp (90% of primary schools, 100% of special schools, 87% of secondary schools) More information at: <http://www.mpn.gov.rs/izvestaj-o-involvement-of-students-from-sensitive-groups-in-educational-work-during-distance-teaching/>. Please indicate if you wish to make a presentation on this topic or if there is an outstanding initiative in your country on this topic.*

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