Preliminary results on progress achieved and challenges encountered in the fourth phase of implementation of the UNECE ESD strategy
(Reporting Phase IV)

Prepared by Dr. Stella Hadjiachilleos, member of the PT of the UNIT of EESD, Cyprus Pedagogical Institute, Cyprus Ministry of Education and Culture
With the contribution of Mrs Thalia Michael and Mrs Simoni Partakidou, members of the PT of the UNIT of EESD, Cyprus Pedagogical Institute, Cyprus Ministry of Education and Culture

14th meeting of the UNECE ESD Steering Committee, 2-3 May Geneva 2019
UNECE Strategy for ESD

Strategy for ESD (Vilnius, March 2005):
To facilitate the introduction and promotion of Education for Sustainable Development (ESD) in the UNECE region to the realization of our common vision.

The Aim of the Strategy:
To encourage UNECE Member States to develop and incorporate ESD into their formal education systems, in all relevant subjects and in non-formal and informal education
Objectives of the UNECE ESD Strategy:

The overall objective of the UNECE Strategy for ESD is to “equip people with knowledge of and skills in sustainable development, making them more competent and confident while at the same time increasing their opportunities for leading healthy and productive lifestyles in harmony with nature and with concern for social values, gender equity and cultural diversity” (CEP/AC.13/2005/3/Rev.1, para. 6).

The 6 objectives of the UNECE ESD Strategy:

A. Ensure that policy, regulatory and operational frameworks support ESD;
B. Promote sustainable development through formal, non-formal and informal learning;
C. Equip educators with the competence to include sustainable development in their teaching;
D. Ensure that adequate tools and materials for ESD are accessible;
E. Promote research on and development of ESD;
F. Strengthen cooperation on ESD at all levels within the UNECE region.
UNECE ESD Strategy Implementation Phases


(b) Phase II (2008–2010) Integration: Findings of the second reporting cycle, presented in a second evaluation report (ECE/CEP/AC.13/2012/3),5 were released in 2011;

(c) Phase III (2011–2015) Implementation: Member States advanced their progress towards full implementation, following a work plan with three priority action areas:

(i) To ensure that there is an ESD school plan in every school by 2015;

(ii) To promote the introduction of ESD into teacher education;

(iii) To reorient technical and vocational education and training (TVET) in support of sustainable development and the transition to a green economy

Reporting Data:

• The evaluation is based on the NIRs submitted by the UNECE Member States

• Number of Member states delivering NIRs:
  • Phase I: 36
  • Phase II: 36
  • Phase III: 38
  • Phase IV:
    • 24 INCLUDED IN PRELIMINARY REPORT
    • 1 RECEIVED BUT NOT INCLUDED IN PRELIMINARY REPORT DUE TO TIME CONSTRAINS- (AZERBAIJAN)
    • 6 PENDING (UKRAINE, TAJKISTAN, CYPRUS, NETHERLANDS, CZECH REPUBLIC, ESTHONIA, ARMENIA)
    • EXPECTED: FROM THE REST OF THE COUNTRIES (Please respond the soonest …)
### UNECE countries included in preliminary report:

| Region 1: Eastern Europe, the Caucasus and Central Asia (EECCA): | Belarus, Georgia, Kyrgyzstan, The Russian Federation |
| Region 2: The European Union, other Western European Countries and North America (EU/Eest/NA): | Austria, Belgium, Bulgaria, Croatia, Finland, Germany, Greece, Hungary, Latvia, Malta, Romania, Slovakia, Slovenia, Andorra, Switzerland. |
| Region 3: South- Eastern Europe (SEE): | Bosnia and Herzegovina, Montenegro, Serbia and Turkey. |
| Region 4: Western Asia (WA): | Israel |
Major findings of Phase IV preliminary reporting

- There are policies in place to support ESD in various countries. The challenge is to coordinate those policies and to expand the number of countries with NIP for ESD.
- Policies expand to the non formal and informal levels and in most countries they encourage synergies and involve various stakeholders in ESD.
- Most countries use key themes and strategies in ESD at formal and non formal education.
- Whole institution approach needs to be reexamined and further implemented in the context of some countries, mainly in relation to incentives and policies.
- In almost all countries, educators report having received training on ESD competencies pre- and in- service. A considerable number of countries do not have established network promoting cooperation's on ESD at the national level.
- Tools/ materials on ESD are widely produced through the encouragement of National Strategies and the investment of public money. What is lacking in terms of tools/materials is the establishment of quality control criteria. Also a lot needs to be done in terms of dissemination and accessibility to tools/materials.
- Many Government Departments responsible for ESD acknowledge the importance of Research and Development and recognize the need to connect research to ESD policy and practice. In terms of promotion of R & D the weakest part is evaluation of Strategy outcomes.
- Knowledge of indigenous people and traditional knowledge on ESD is viewed in a holistic way and extends to indigenous languages, traditional lifestyles, folk art, dancing and nature. Particular emphasis is placed on recognizing indigenous components across the curriculum.
- Countries report challenges in NIP implementation mainly referring to financial and time constrains, dissemination of experience and enforcement of synergies.
**Issue 1: Ensure that policy, regulatory and operational frameworks support the promotion of ESD**

1.1.: Pre-requisite measures

1.1.1. Availability of UNECE ESD Strategy in national language (Yes:18, No:6, N/A:0)
1.1.2. Appointment of National Focal Point(s) (Yes:21, No:3, N/A:0)
1.1.3. Coordinating body for implementation of ESD (Yes:15, No:7, N/A:2)
1.1.4. National implementation plan (Yes:13, No:9, N/A:2)
1.1.5. Synergies at the national level on policy processes related to ESD (Yes:16, No:5, N/A:3)

1.2. Policy, regulatory and operational frameworks support promotion of ESD

1.2.1. National policy documents (Yes:23, No:1, N/A:0)
1.2.2. National curricula/ standards/ ordinances/requirements (aYes:22, No:1, N/A:1 - bYes:23, No:0, N/A:1)
1.2.3. Non-formal and informal national policies/documents (Yes:19, No:3, N/A:2)
1.2.4. Public awareness addressed in national documents (Yes:18, No:4, N/A:2)
1.2.5. Formal structure of interdepartmental cooperation related to ESD (Yes:17, No:3, N/A:4)
1.2.6. Mechanism for multi-stakeholder cooperation on ESD (Yes:17, No:3, N/A:4)
1.2.7. Public budgets (Yes:18, No:3, N/A:3)

1.3. National policy supports synergies between processes related to the SDGs/ SD/ ESD

1.3.1. National, stand alone SD policy (Yes:21, No:2, N/A:1)
1.3.2. ESD is part of SD policies (Yes:19, No:1, N/A:4)

Successful actions

Challenges
Issue 1: Policy, regulatory and operational frameworks

1.1 Pre-requisite measures for the promotion of ESD

- **1.1.1 National languages**: 18 countries (6% Yes, 21% No)
- **1.1.2 National focal points**: 21 countries (3% Yes, 15% No)
- **1.1.3 Coordinating body**: 15 countries (7% Yes, 9% No)
- **1.1.4 National implementation plan**: 13 countries (9% Yes, 5% No)
- **1.1.5 Synergies at the national level**: 16 countries (16% Yes, 5% No)

- N/A

Percentage of countries
Issue 1: Policy, regulatory and operational frameworks

1.2 Policy, regulatory and operational frameworks support the promotion of ESD

- 1.2.1 National policy documents
- 1.2.2a National education legislation
- 1.2.2b Included in national curricula
- 1.2.3 Non formal and informal ESD
- 1.2.4 Public awareness
- 1.2.5 Interdepartmental cooperation
- 1.2.6 Multi-stakeholder cooperation
- 1.2.7 Public budgets/economic protection

Percentage of countries

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

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Issue 1: Policy, regulatory and operational frameworks

1.3 National policy - synergies between processes related to SDGs/SD/ESD

- 1.3.1 National SD policy
  - 21 countries have synergies between processes related to SDGs/SD/ESD.
  - 2 countries have N/A.
  - 1 country has Yes.
  - 1 country has No.

- 1.3.2 ESD part of SD policies
  - 19 countries have synergies between processes related to SDGs/SD/ESD.
  - 4 countries have N/A.
  - 1 country has Yes.
  - No data available for this category.
Findings on Issue 1:

1.1 Pre-requisite measures
- The national focal point(s) appointed by most countries are the Ministries related to Education and/or Environment and/or Science of each member State, but more work needs to be done regarding the coordinating bodies.
- Nearly half of the reporting member States do not have a National implementation plan ready, but are on the preparation process.
- More than half of the reporting member States have sought synergies at the national level between policy processes related to ESD.

1.2 Policy, regulatory and operational frameworks
- Nearly 96% of the reporting member States have ESD reflected in various national policy documents (strategies, plans, programs, etc).
- Addressed and included in national education/legislation documents and national curricula at all levels of education – not adequate information about higher education.
- Importance of non-formal and informal education for children, youth and adults, is acknowledged by most state members.
- Raising public awareness for SD, change of mentality, through national documents, organized seminars, discussions, activities, etc.

1.3 National policies support synergies
- Understanding the importance of education in the implementation of SD, nearly 80% of the reporting member States are taking/have taken actions to make ESD part of their SD policy(ies).
**Successful actions**

- Updating educational programs and improving education management
- Development of national guidelines, public networks and online platforms
- Good cooperation between various stakeholders
- Change of educators’ perspective on ESD
- Integration of ESD into curricula
- Introduction of ESD in Kindergarten (guidebooks, educators training)

**Challenges**

- Lack of national indicators for ESD
- National consensus on the terminology and understanding of ESD
- Secure adequate funding
- Coordination/consistency on how ESD is reflected on various policies
- Management/implementation of national strategies where the education systems are organized federally
- Encourage schools to adopt a whole school approach to ESD
Issue 1 indicative examples:

On 20 June 2017, the National Platform on ESD adopted the National Action Plan. It defines 130 objectives and 349 measures to scale up ESD in all areas and at all levels of the German education system [...]. The adoption of the National Action Plan triggered several federal states and local authorities in Germany to initiate or further develop their own ESD strategies or strategic documents. (Germany, NIR)

The Government of Flanders decided in 2005 to establish a ‘multisectoral public administration working group on sustainable development’ [...]. This working group is presided over by the policy officer from the sustainable development unit [...] is assisted by a day-to-day administration, where the economic, social and environmental components are represented, as is Flemish foreign policy. The working group has to guarantee that comprehensive, coordinated sustainable development policy objectives are formulated, so that a converging policy approach can be applied at public administration level. (Belgium NIR)

The Green Education Fund [...] was established in 2017 by the Ministry of Environment and the Slovak Environment Agency [...] to support the development of environmental upbringing, education and awareness-raising in the territory of the Slovak Republic through supporting the principles of joint responsibility and direct support for selected activities. The fund provides mini-grants ranging between 5 000 and 10 000 euro and it is meant for civil society organizations. (Slovakia NIR)

Introduced changes to preschool education system made by EIEC in 2016 in order to improve access to environmental education. Within the framework of school preparedness programme EIEC developed a guidebook “Preschool Environmental Education" that was introduced in more than 400 kindergartens. Particular trainings were provided for preschool educators. (Georgia NIR)
## Issue 2: Promote SD through formal/non-formal and informal learning

### 2.1. SD Key themes addressed in formal education
- **2.1.1. SD themes** (Yes: 22, No:0, N/A:2)
- **2.1.2. Learning outcomes** (Yes: 22, No:0, N/A:2)
- **2.1.3. Teaching and learning methods** (Yes: 19, No:3, N/A:2)

### 2.2. Strategies to implement ESD are clearly identified
- **2.2.1. a. Existing subjects only** (Yes: 20, No:1, N/A:3)
- **2.2.1.b. Cross curriculum approach** (Yes: 21, No:1, N/A:2)
- **2.2.1.c. Subject programs/ courses** (Yes: 20, No:1, N/A:3)
- **2.2.1.d. Stand-alone project** (Yes: 18, No:2, N/A:4)
- **2.2.1.e. Other approaches** (Yes: 15, No:4, N/A:5)

### 2.3. Whole Institution Approach (WIA)
- **2.3.1. Adopted by institutions** (Yes: 17, No:5, N/A:2)
- **2.3.2. Incentives supporting WIA (including ESD School Plans)** (Yes: 16, No:4, N/A:4)
- **2.3.3. Institutions develop their own SD/ESD indicators** (Yes: 15, No:5, N/A:4)

### 2.4. Quality assessment systems
- **2.4.1. (a-c) Existence/how they address ESD/national system addressing education quality assessment in place**
- **2.4.2. (a-f) Dimensions of learning reinforced by countries in terms of student assessment in the next 5 years**

### 2.5. ESD methods/ instruments for non-formal and informal learning in place to assess changes in knowledge, attitude and practice
- **2.5.1. Public awareness raising activities** (Yes: 21, No:1, N/A:2)
- **2.5.2. Support for work-based learning** (Yes: 20, No:3, N/A:1)
- **2.5.3. Instruments to assess outcomes of ESD as a result of informal and non-formal learning** (Yes: 13, No:8, N/A:3)

### 2.6. ESD implementation is a multi-stakeholder process (Yes: 23, No:0, N/A:1)

#### Successful Actions

#### Challenges
2.1. SD Key themes addressed in formal education

2.2. Strategies to implement ESD are clearly identified
2.3. Whole Institution Approach (WIA)

A whole-institution approach to SD/ESD is promoted

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### 2.4.1. Existence/how they address ESD/national system addressing education quality assessment in place

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### 2.4.2. Dimensions of learning reinforced by countries in terms of student assessment in the next 5 years

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2.5. ESD methods/instruments for non-formal and informal learning in place to assess changes in knowledge, attitude and practice

2.5.1 Public awareness raising activity
2.5.2 Support for work-based learning
2.5.3 Instruments to assess outcomes of ESD

2.6. ESD implementation is a multi-stakeholder process
Main findings in Issue 2

1. Key themes addressed in education mostly refer to SD and learning outcomes and less to teaching and learning methods in ESD

2. Strategies to implement ESD are more clearly identified in existing subjects and as cross curricular approaches for most countries and are less clearly identified as stand alone projects or subject programs/ courses

3. A lot needs to be done in terms of WIA in terms of its adoption by institutions. Incentives supporting it, including ESD school plans, are lacking from a number of countries, whereas in a number of countries institutions develop their own SD/ESD indicators.

4. Although in most countries there are education quality assessment/enhancement systems, yet in many countries these systems do not address ESD and in even more countries there are not education quality assessment/enhancement systems addressing ESD at the national level

5. In terms of dimensions of learning in which countries plan to put more emphasis in exams in the future, these mainly refer to skills/competencies, less to knowledge, values and attitudes and even less to behaviors.
Issue 2 indicative examples:

**Key themes addressed in formal education**

2.1.1 *In VET system*, Local Development Curriculum (*LDC*) is *part of the curriculum adapted to local development needs*. It is *developed by the school in partnership with the companies*, considering the labour market trend and the local needs. *(Romania NIR)*

2.1.1.1 A *special topic in the field of ESD* at all levels of education is (from kindergartens to upper secondary schools) the *development of spatial literacy in terms of sustainable development*, addressing school buildings in the context of sustainable construction and sustainable development. *(Slovenia NIR)*

2.1.1 In addition to *extracurricular activities*, students can acquire environmental knowledge through volunteering. In the education institution "*Gomel State Pedagogical College named after Vygotsky*" there is a full-time volunteer environmental group "Ecology", which is engaged in environmental activities to address the environmental problems of Gomel region. *(Belarus NIR)*

2.1.2 Acquiring competences for implementing sustainable development principles is one of the main objectives of pre-school and school education set out in the Pre-school and School Education Act of 2015. *In addition to the eight key competences* set out in the European Reference Framework, *general secondary education includes a ninth one - skills to support sustainable development and skills for a healthy lifestyle and sport*. General education is achieved through the study of general education subjects. *(Bulgaria NIR)*
Issue 2 indicative examples:

**Strategies to implement ESD**

2.2.1 ESD is addressed through the existing subjects, and the Law on Foundations of the Education System lists as one of the cross-curriculum competencies for both primary and secondary education - responsible attitude toward environment. In gymnasiums among elective subjects is Education for sustainable development. There are also different projects supported by the ministries. *(Serbia NIR)*

2.2.1 **SCHOOL4CITY**: The goal of this project is to improve the understanding and application of sustainable cities concept among the teachers and children/students in kindergartens, primary and high-schools in Montenegro, through awareness-raising and capacity building actions. *(Montenegro NIR)*

2.3.1 Education institutions are obliged to fulfil their development strategies, including ESD issues. The ESD issues are included in the education institution working plan for three years period. Every education institution has to describe how to promote ESD issues in their everyday teaching and upbringing process. Altogether, the State Education Quality Service in the accreditation process evaluates education institution quality by using the criteria which include ESD issues. *(Latvia NIR)*

**WIA**

2.3.2 As a service supported by a Swiss-Hungarian co-founded project, 1822 public educational institutions (to-be eco-institutions) received mentoring assistance from a new network of whole-institution experts. This network was led by the Educational Research Institute, members were an educational SME and many regional environmental NGOs. *(Hungary NIR)*

2.3.3 The schools have the local autonomy and the HEI’s are autonomous as such; meaning that schools, other educational institutions and HEI’s can create indicators if they find it useful. *(Finland NIR)*
Issue 2 indicative examples:

**Quality Assessment Systems**
2.4.1 In Higher Education, the Quality Assurance Agency of Higher Education of Andorra (AQUA) is a public law institution which aims to guarantee the quality of higher education offered in Andorra. In 2017 AQUA coordinated the study Guidelines to include sustainability in the HE quality assurance framework in Andorra. (Andorra NIR)

**Assessment of changes in knowledge, attitudes and practice**
2.5.1 Establishment of a modern and innovative Information Educational Center (IEC) Diverterra by Croatian Agency for the Environment and Nature (CAEN) in the field of environmental protection, climate change, nature protection and biodiversity. A part of is a "mobile exhibition" that will bring pre-school and school age children closer to these topics with hologram contents. It is planned to open Diverterra's Facebook page, create a panel, and purchase tablet devices so that children educators can go to kindergartens and schools in the spring 2019. (Croatia NIR)

2.5.2 In secondary vocational education, there is a support for work-based learning and more practical work in companies. There are incentives for small companies and farmers involved in organic production as well. There are small social companies, eco-financing and waste management. The Ministry of the Environment supports various environmental protection projects. (Bosnia-Herzegovina NIR)

2.5.2. The skills training and internships that students make in the real business environment in the enterprises are of great importance for a qualified vocational training. According to the size of the enterprise, the minimum wage paid to the students by the enterprises that are obliged to have skills training and internship in the enterprises is paid to the employers as government contribution to 1/3 or 2/3. (Turkey NIR)
Particularly successful actions and initiatives

- **Organization Earth’s «Centre of the Earth»** was awarded as the best initiative worldwide for connecting people to nature by the International Union for Conservation of Nature. *(Greece NIR)*

- The **World’s Largest Lesson**, an international campaign supported by UNESCO is underway in Latvia for three years, bringing together around 50 education institutions and 3000 children, young people and teachers every time. *(Latvia NIR)*

Challenges / Considerations:

- Vital to use transformative action oriented pedagogy, examples of good practices would help *(Romania NIR)*

- Need for learning settings which allow transdisciplinary approaches, as well as projects of active participation. Synergies on ESD implementation in Switzerland and in other partner countries of international cooperation need to be further explored and exchanged on. *(Switzerland NIR)*
Issue 3: Equip educators with competencies to include SD in their teaching

3.1. Educator training
   3.1.1. Initial (Yes: 21, No: 3)
   3.1.2. In-service (Yes: 22, No:1, N/A:1)
   3.1.3. Training of leaders/administrators of educational institutions (Yes:20, No:4)

3.2. Opportunities for educators to cooperate on ESD
   3.2.1. Networks/ platforms at national level (Yes: 20, No:2, N/A:2)
   3.2.2. Networks/ platforms approved by the Government (Yes:20, No:1, N/A:3)
Issue 3: Equip educators with competencies to include SD in their teaching

3.1. Educator training

3.1.1. Initial
- Yes: 0
- No: 3
- N/A: 21

3.1.2. In-service
- Yes: 1
- No: 1
- N/A: 22

3.1.3. Training of leaders/administrators of educational institutions
- Yes: 0
- No: 4
- N/A: 20

3.2. OPPORTUNITIES FOR EDUCATORS TO COOPERATE ON ESD

3.2.1. Networks/platforms at national level
- Yes: 2
- No: 2
- N/A: 20

3.2.2. Networks/platforms approved by the Government
- Yes: 3
- No: 1
- N/A: 20
Findings on Issue 3:

**Pre-service training**
- is provided in most of the countries. Legislative changes including certification changes have contributed in this
- is offered mainly by universities/tertiary ed institutions
- in some countries it is offered but not explicitly referred to as ESD

**In-service training/continuous learning:**
- Approaches to introducing ESD through in-service training vary from country to country
- Is often on a voluntary basis, however in some countries it is mandatory for specific education levels
- Is dedicated to increasing the ESD competences such as: how to contribute to the social and natural environment, the implementation of the whole institution approach, inspiration of creativity and innovation, development of soft skills, methodological approaches.

**Governmental support** mainly comes in the form of a) coordination and b) financing

**Challenges:**
- Are offered on voluntary basis. Although number of courses is on the increase, the challenge is to attract teachers to attend
- Funding and time constrains
- ESD is implicitly referred to in many courses. It needs to be a more “visible” topic.
- Structure of Education System provides for different policies within each country (e.g. in districts, cantons etc.)
Issue 3 indicative examples:

The educators and administrators are accompanied by an environmental mentor who assists them in building teaching plans and lessons that implement the ESD values and contents they have internalized during the continuing education programs. This accompaniment by the mentor has been found to be crucial for the success of the implementation, and the educators and administrators benefitted greatly from it. (Israel NIR)

Since 2016, the Kyrgyz Republic has been implementing the UNESCO project —Sustainability Begins with Teachers in Central Asia. Within the framework of this Project, five educational institutions are engaged in the integration of the issues of SDG 2030, in particular, goals 4.7 into the system of training and retraining of teaching staff. (Kyrgyzstan NIR)

Different international organizations help a lot in the teacher education fields. An Example: UNDP in cooperation with the Ministry of Sustainable Development and Tourism accredited four training programs related to climate change (Montenegro NIR)

The Faculty of Education (University of Malta) is the main teacher training institution in the country. CEER (through the Faculty) offers mandatory and optional study units in ESD as part of the undergraduate MTL (Master in Teaching and Learning) for students to become early childhood, primary and secondary school teachers. (Malta NIR)

In the Austrian Eco-Schools-Education for Sustainability program and network ÖKOLOG, about 520 schools and university colleges of teacher education are focusing on social and ecological aspects. Hereby, it is an essential objective to integrate different topics of ESD in education and start some kind of sustainable living in schools (save water and energy, consume [more] organic and regionally produced food etc.). The Allianz Sustainable Universities in Austria is a national association of twelve Austrian universities and two candidates that are committed to sustainability issues. (Austria NIR)
**Issue 4: Tools and materials for ESD**

4.1. Production
   4.1.1. National strategy to encourage development/production of ESD tools/materials (Y:14, N:8, N/A:2)
   4.1.2. Public money invested (Y:18, N:3, N/A:3)

4.2. Quality control for tools/materials
   4.2.1.a. Quality Control Criteria (Y:15, N:5, N/A:4)
   4.2.1.b. Quality Control for Accessibility (Y:13, N:6, N/A:5)
   4.2.2. Availability of material
      a. In national languages (Y: 21, N: 2, N/A:2)
      b. For all levels of education (Y: 16, N: 5, N/A:3)

4.3. Accessibility of materials
   4.3.1. National mechanism for dissemination (Y:12, N:10, N/A:2)
   4.3.2. Public authority money invested (Y:15, N:4, N/A:5)
   4.3.3. Accessibility through the internet (Y:17, N:3, N/A:4)
   4.3.4. Database of ESD teaching tools and materials in national languages
      a. available online (Y:14, N:7, N/A:3)
      b. provided through other channels (Y:14, N:5, N/A:5)
4.1. NATIONAL STRATEGY TO ENCOURAGE DEVELOPMENT/PRODUCTION OF ESD TOOLS/MATERIALS

- **National strategy to encourage development/production of ESD tools/materials:**
  - Yes: 14
  - No: 2
  - N/A: 8

4.2. QUALITY CONTROL

- **Quality Control: Criteria:**
  - Yes: 4
  - No: 1
  - N/A: 15

- **Quality Control: Availability of material:**
  - Yes: 5
  - No: 13
  - N/A: 6

- **Availability: In national languages:**
  - Yes: 21
  - No: 2
  - N/A: 5

- **Availability: For all levels of education:**
  - Yes: 16
  - No: 3
  - N/A: 4
Findings on Issue 4:

**Production of tools/materials:**

1. A wide range of tools/materials were mentioned such as student textbooks, curriculum and learning outcomes guidance materials, training materials etc.
2. Although progress has been made since last report (Phase III), National Strategies in a number of countries (10 out of 24) seem to not have provisions for support of development and production of tools/materials on ESD.

**Availability:**

1. Material is plentifully available in national languages but not for all levels of education.

**Quality control:**

1. Quality control mechanisms vary greatly across countries. However, although ESD tools/materials are in demand, a lot still needs to be done in terms of establishing quality control criteria.

**Dissemination through national mechanisms:**

1. Varies across countries, however 12 out of 24 countries do not yet have such mechanisms established. Nevertheless, in general, public money is invested for dissemination in 15 countries
2. Although materials/tools is widely available through the internet (17 out of 24 countries), there is a significant number of countries (10) reporting that there are not yet databases established to make material more easily accessible.
Indicative examples on Issue 4:

Production

• The Cross-Curricular Framework on Global Development Education in the Context of ESD by the Standing Conference of the Ministers of Education and Cultural Affairs and the Federal Ministry of Economic Cooperation and Development provides an orientation for the development of teaching materials and has been substantially updated and extended in 2014/2015. Within the award scheme for ESD good practice, the development of teaching materials is also encouraged. The Federal Ministry for Economic Cooperation and Development funds the development and publishing good practice on the basis of Cross-curricular framework in all states. (Germany NIR)

• Different federal offices and governmental agencies support éducation21 for the development of teaching materials and the criteria based quality control of new or existing ESD teaching tools and material. In addition to that, éducation21 gets contributions from the Swiss conferences of cantonal ministers of education of the three language regions (EDK, CIIP), from cantons and civil society as well as funds generated by éducation21 itself, e.g. through the marketing of learning media. (Switzerland NIR)

Quality control:

There exists a range of quality control mechanisms and instruments within formal school education provided by the Austrian Federal Ministry of Education, Science and Research which reflect key principles of ESD [...] There is a strong need to develop an overlapping set of quality criteria (a) Supported by public authorities: There is no specification between the three areas. (b) Approved by public authorities: In formal education the above mentioned commission could be a “filter” for quality criteria. Tools and material for informal and non-formal education are not controlled by public authorities. (c) Tested and recommended for selection by educational institutions. A general strategy on quality criteria and guidelines in that area does not exist. (Austria NIR)
Dissemination

• One key avenue for the dissemination of ESD materials is the major internet portal on ESD funded by the Federal Ministry of Education and Research. Other ministries at Federal and State level run additional activities, such as the “Portal Global Learning” funded by the Federal Ministry for Economic Cooperation and Development (Germany NIR).

• Dissemination is performed mainly through the funding of environmental education centres. [...] The Hellenic Ministry of Culture and Sports provides accessibility for the cultural educational programs through the internet and special educational kits distributed to school units of primary and secondary education in all prefectures, as well as a website with online applications i.e. interactive games regarding UNESCO monuments throughout the world. (Greece NIR)

• The government does not “approve” the teaching materials, there is no inspection system in Finland. In terms of textbooks, teachers are fully involved in their production. (Finland NIR)

Particularly successful actions/challenges:

• There are rich resources available in Hungarian for implementing ESD especially at ISCED 0-3 levels. Educational programs such as the eco-school complex educational program or the Green Pack educational kit has been reportedly useful and popular with teachers. [...] A complex impact assessment of programs and materials (identifying learning outcomes and possible mechanisms) as well as a curriculum evaluation at all levels of education from ESD aspect would be necessary to better establish quality criteria for teaching and learning materials (Hungary NIR).

• In the future, the formal system of education should be connected to the informal system and the NGO system more than it is now, since the production of the latter two in the field of the ESD is strong, often very innovative and of high quality. An increased cooperation between the two systems would improve the quality of the production of ESD materials and aids and, consequently, high-quality materials would be even more attractive to users in kindergartens and schools (Slovenia NIR).
**Issue 5: Research and development of ESD**

5.1. Promotion of research on ESD
   5.1.1. On contents and method of ESD (Y:14 ,N:7 , N/A:3 )
   5.1.2. On evaluation of Strategy implementation outcomes (Y:5 ,N:12 , N/A:7 )
   5.1.3. Post graduate programs
      5.1.3.1.A. on ESD (a. Masters) (Y: 12,N: 6, N/A: 6)
      5.1.3.1.B. on ESD (b. PhD) (Y: 9,N: 9, N/A: 6)
   5.1.3.2. addressing ESD
      a. Masters (Y: 12,N: 4, N/A: 8)
      b. PhD (Y: 12,N: 5, N/A: 7)
   5.1.4. Scholarships
      a. Masters (Y: 8,N: 10, N/A: 6)
      b. PhD (Y: 10,N: 8, N/A: 6)

5.2. Development of ESD
   5.2.1. Innovation/ capacity building (Y: 16,N: 3, N/A: 5)

5.3. Dissemination of research results
   5.3.1. Public authority for support of dissemination (Y: 14,N: 4, N/A: 6)
   5.3.2. Scientific publications
      5.3.2.a. on ESD (Y: 13, N: 6, N/A: 5)
      5.3.2.b. addressing ESD (Y: 14,N: 5, N/A:5 )
5.1. Promotion of research/ 5.2 Development on ESD

- 5.1.1. On contents and method of ESD
  - 5.1.2. On evaluation of ESD implementation outcomes
  - 5.1.3.1a. Post graduate programs on ESD (Masters)
  - 5.1.3.1b. Post graduate programs on ESD (PhD)
  - 5.1.3.2a. Post graduate programs addressing ESD (Masters)
  - 5.1.3.2b. Post graduate programs addressing ESD (PhD)
  - 5.1.4a. Scholarships for Masters
  - 5.1.4b. Scholarships for PhD
  - 5.2.1. Innovation/capacity building

[Bar chart with percentages for each category]
5.3. Dissemination

- 5.3.1. Dissemination (Public authority for support)
- 5.3.2.a. Publication of research results on ESD
- 5.3.2.b. Publication of research results addressing ESD
Issue 5 findings:

- Many Government Departments responsible for ESD acknowledge the importance of Research and Development and recognize the need to connect research to ESD policy and practice.
- Governments widely recognize the need for more research on ESD, especially addressing monitoring, assessment and evaluation of ESD actions and learning outcomes.
- Emerging networks of researchers are gaining recognition.
- In terms of promotion of R & D the weakest part is evaluation of Strategy outcomes. A number of countries report weaknesses in available scholarships on and addressing ESD, especially at the Master’s Level. Research on ESD is mostly focused on the methods and contents of ESD.
- Many governments demonstrated a strong interest in the field of innovation and capacity building on ESD.
- Dissemination of research results is widely supported by public authorities, equally on and addressing ESD.
Issue 5 indicative examples:

**Government support:** The Ministry of Education, Science and Technological Development supported the project SEEDLING - "Meeting the New Millennium: Presenting the UN Objectives for SD in Schools in Southeast Europe" of the REC. Its publication “ESD-Knowledge, attitudes and habits of pupils at the end of the secondary education” (2017) gives insight into the ESD themes in Serbia. (Serbia NIR)

**Challenges:** The major challenge is to introduce R&I policy as a horizontal activity in other national sectoral policies (f.e. energy, transport, agriculture, forestry) to reach broader understanding of the added value of the research as well to attract more public and private funding for developing research capacity. [...] One of the challenges is to bridge theoretical and academic knowledge with practice and to make theoretical knowledge more accessible and understandable for the broader implementation of the ESD concepts in education. [...] As particularly successful can be considered activities related to implementation of ESD through environmental education perspective and activities related to ESD at school and pre-school education levels. (Latvia NIR)

**Cooperations:** Recently number of joint international educational programs with participation of Georgian universities has significantly increased. Starting with the first students in 2015, San Diego State University (SDSU) is offering internationally accredited Bachelor of Science programs in Georgia. These programs enable Georgian students to receive a high quality STEM education and earn American degrees. The degrees will be offered in partnership with three leading Georgian Universities. Since 2013 cooperation with following research and educational centres: CERN, DUBNA, JULICHLIC CENTER, CNR, CNRS, STCU, ISTC, CRDF-Global, ELSEVIER BV is being implemented. (Georgia NIR)
Innovation/ capacity building

Td-net (Network for Transdisciplinary Research) / Swiss academies of arts and sciences: “U Change”. The support programme ‘U-Change’ (2017-2020) fosters students’ initiatives and projects for sustainable development. [...] A series of currently 21 students’ projects (as of June 2018) are allocated into two categories: a) student’s development and action-based projects (14), and b) web-based support-platforms for students’ projects (7); the support platforms are used for student’s exchange, thematic information and communication, organisation with involved project stakeholders as well as for coaching and mentorship. The list and short descriptions of promoted U Change projects and platforms can be consulted at the website of td-net: http://www.u-change.ch/en/sd-universities/U-Change-2017-20/Projekte.html (Swiss NIR)

Scholarships: In accordance with Decree No. 367 of the President of the Republic of Belarus as of 11 August 2005, open national competition for scholarships of the President of the Republic of Belarus for talented young researchers is announced annually. In 2018, scholarships of the President of the Republic of Belarus were awarded to 100 talented young researchers. (Belarus NIR)
6.1. International cooperation

6.1.1. Public authority support for international networks on ESD
(referred to by 20 countries)

6.1.2. Education institutions’ participation in international networks
(referred to by 22 countries)

6.1.3. Cooperation mechanisms with ESD component
(referred to by 13 countries)

6.1.4. Government actions promoting ESD forums outside ECE region
(referred to by 15 countries)
6.1.1. Public authority support for international networks on ESD:
Indicatively:
• Specific mechanisms for organization and support of international networks by public authorities are described (e.g. established quality assurance mechanisms, funding provided by Ministries (e.g. Ministry of Foreign Affairs in Finland).
• In Greece there is a specific mechanism for overseeing and coordinating cooperation's and there is a link with the Ministry of Education.
• International cooperation actions mentioned in NIRs include UNESCO ASP (e.g. Malta, Germany, Andorra, Latvia), GENE- Global Education Network Europe (e.g. Slovakia, Germany, Slovenia), ENSI (E.g. Austria, Croatia).
• The example of Bosnia- Herzegovina for cooperation in the Adriatic region.

6.1.2. Education institutions’ participation in international networks
• Countries mostly refer to NGOs and university networks.
• International cooperation is highly promoted through university partnerships.
6.1.3. Cooperation mechanisms with ESD component

Lack of data in the field for some countries.

Nevertheless, some Indicative examples the mentioned:

• Bilateral agreements between Greece and other countries
• Pestalozzi program (Croatia, Bosnia-Herzegovina)
• Switzerland: The Swiss Agency for Development and Cooperation (SDC) has co-funded the project Education for Sustainable Development (ESD) from 2013-2018 in bilateral agreement with the government of Mongolia
• Kyrgyzstan: CA WG ESD, CAREC, CAI, IACSD, EECCA, IBE

6.1.4. Government actions promoting ESD forums outside ECE region

Lack of data in the field for some countries.

• Extensive reference to the work of UNESCO (e.g. Finland, Germany, Switzerland, Belarus, Russian Federation) and Education 2030 Agenda
• Reference to Mediterranean Action Plan on ESD (e.g. Greece)
Issue 7: Foster conservation, use and promotion of knowledge of indigenous peoples, as well as local and traditional knowledge, in ESD (open-ended item)

- This issue is not applicable for all countries. **13 countries** made some reference to this item.
- However, knowledge of indigenous people and traditional knowledge on ESD is viewed in a holistic way and extends to indigenous languages, traditional lifestyles, folk art, dancing and nature. Particular emphasis is placed on recognizing indigenous components across the curriculum.

**Indicative examples:**
- **Hungary:** ESD programs building on integrating the traditional knowledge of indigenous people (e.g. an *ethnobotany program also involving intergenerational learning of plant use*).
- **Belarus:** State policy in the field of education is based on both national and cultural education principles endorsing the environment where the education is acquired with a due consideration for national traditions.
- **Kyrgyz Republic** conducts the World Nomad Games (WNG) since 2014 (every two years - 2016, 2018) The basis of the competition was the folk games of the historically nomadic people of Central Asia.
- **Russian Federation:** In order to create conditions for the preservation and study of the native languages of the people of the Russian Federation, which are national wealth and the historical and cultural heritage of the Russian state, the Fund for the Preservation and Study of the Native Languages of the People of the Russian Federation was created in 2018 (Decree of the President of the Russian Federation of October 26, 2018 No. 611).
Issue 8: Challenges and obstacles encountered in the implementation of the Strategy (open-ended item)

- Coordination between stakeholders
- Evaluation mechanisms
- Funding
- Expertise/advising/exchange of practice/personnel deficits
- Lack of research
- Time constrains
Issue 8 indicative examples:

Channeling the biggest part of resources available for ESD through one institution, challenges other initiatives on ESD, developed by other educational institutions and organisations. The variety of topics and actors on ESD, as well as decision-making processes on the cantonal levels lead to:

a) higher coordination costs of ESD implementation  
b) cantonal differences in implementing the ESD strategy 
c) institutional uncertainties whether and how to promote or implement ESD.

(Switzerland NIR)

Challenges:

a) to improve the cooperation between stakeholders, since ESD is not just an educational content (even more so since the adoption of the Agenda for SD 2030, which puts education as one of the key tools for realizing SDGs, not only as one of the content objectives),  
b) to focus on both formal and informal education and to strengthen cooperation between the two,  
c) to update curricular documents for ESD and recommendations for the implementation of the curriculum,  
d) to strengthen the monitoring and evaluation of the implementation of ESD (with a sensible and clear/explicit/visible enough placing of the ESD in the National Framework for the Quality Assessment and Assurance in the Field of Education),  
e) financial and personnel deficits.  

(Slovenia NIR)
Issue 9: Assistance needed in implementing the Strategy (open-ended item)

7 countries reported on this item.

Main parameters of assistance needed were:

- Capacity building for government institutions
- Mobilizing financial and human resources
- Research to document outcomes of Strategy implementation
- Dissemination of experience and materials
- Enforcement of synergies
- Exchange of good practices
**Indicative examples on Issue 9:**

To promote ESD more effectively, as well as to achieve SD goals, it is necessary to apply new approaches at the global and regional levels (UN and UNECE), as well as to implement target financing of the ESD initiatives and activities in Kyrgyzstan.

(Kyrgyzstan NIR)

Although ESD is gaining momentum in Malta, other priorities result in ESD having to compete for scarce human and financial resources. The primary challenge in the implementation of the Strategy lies in the setting up of the NCESD that will provide the adequate coordination infrastructure needed to support and develop the multiple efforts currently undertaken at a national level in the various sectors. The target of full commitment by schools/educational institutions necessitates further development. The official recognition and provision of ESD in the NCF (2012) and the compilation of specific ESD learning outcomes now needs to experience an increase in consideration by schools in the design of schools’ educational action plans. [...] ESD cross curricular outcomes within VET areas still needs to be enhanced. Currently SD/ESD outcomes are still sporadic.

(Malta NIR)

We would appreciate assistance with the dissemination of best practices in ESD worldwide, in order to showcase them and have them serve as an inspiration for educators and managers of education. A dissemination of educational materials would also be of great help (books, portals, videos that could be translated for example). One of the biggest obstacles remains the establishment and long-term maintenance of a multi-stakeholder group a cooperating body that would serve more than just a formal role. We would appreciate to learn from the models of other countries on this matter.

(Slovakia NIR)
Thank you!

Questions
Comments