



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/CEP/AC.13/2006/5  
31 July 2007

Original: ENGLISH

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**ECONOMIC COMMISSION FOR EUROPE**

**COMMITTEE ON ENVIRONMENTAL POLICY**

UNECE Steering Committee on Education for Sustainable Development

Second meeting

Geneva, 4–5 December 2006

Item 3 of the provisional agenda

**INDICATORS FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT**

**Progress report on the work of the Expert Group**

Prepared by the Chairperson of the Expert Group on Indicators for ESD  
with the assistance of the secretariat

1. This report complements the first progress report on developing indicators for education for sustainable development (ESD), which was submitted to the UNECE Steering Committee on ESD at its first meeting (13–14 December 2005) (for reference see CEP/AC.13/2005/9).
2. Experts from the following countries and organizations participated in the work of the Expert Group: Armenia, Austria, Canada, France, Germany, Greece, Italy, Lithuania, the Netherlands, the Russian Federation, Slovenia, Sweden and the United Kingdom; United Nations Educational, Scientific and Cultural Organization (UNESCO), the Intergovernmental Central Asia Working Group on Environmental Education and Education for Sustainable Development, the Environment and Schools Initiative Network (ENSI) and European ECO-Forum, a coalition of citizens' environmental organizations. The Expert Group was chaired by Mr. Roel van Raaij (Netherlands).
3. The third and fourth meetings of the Expert Group were held on 11–13 March 2006 (Vienna) and on 10–13 May 2006 (The Hague), respectively.

4. Taking into consideration the comments provided by the Steering Committee at its first meeting and after it, the Expert Group at its third and fourth meetings has further developed and finalized the set of indicators.
5. The Expert Group discussed the methodology to be used to aggregate the 80 initial indicators in a consistent manner throughout the whole set. The conclusion was reached that a unified aggregation of underlying questions for the whole set was not feasible due to the complexity of ESD issues and debatable methodology. Thus, the “tailor-made” approach for each indicator was chosen, but at the same time it was decided to structure all 80 initial indicators into revised indicators with sub-indicators.
6. The Expert Group also took into consideration the Steering Committee’s request to reduce the number of indicators in order to permit an effective reporting process. Furthermore, the Expert Group proposed to introduce template tables that would be annexed to the set of indicators. This approach would enable simplification while retaining the substance of the initial set of indicators to the greatest extent possible. It would also provide countries with a user-friendly template requiring them to select predefined boxes as relevant.
7. The issue of properly addressing higher education in the set of indicators was noted. It was suggested that footnotes be used across all objectives to translate some of the currently used school system terminology into terminology appropriate for the higher education system.
8. The Expert Group stressed again that its work on indicators should focus on ESD issues and not on sustainable development (SD) as such. In other words, it should measure the implementation of ESD (as set out in the Strategy) and the effectiveness of this implementation, not the progress of SD (e.g. progress in biodiversity, climate change, etc.). Obviously, indicators are easier to find and track for formal education than for non-formal and informal education. Therefore, following the comments from the Steering Committee on the imbalance between indicators for formal education and those for informal and non-formal education, experts suggested focusing on the former, without, however, diminishing the importance of the latter, in particular its possible negative consequences (e.g. some TV and other advertisements counteract the promotion of SD).
9. The Group prepared a set of indicators, which is presented in two documents: the list of indicators appears in annex 1 of this document, and the complete set is provided in the Reporting Format (Addendum 1). The Expert Group stated that no single indicator or sub-indicator should be seen as indicative of quality in its own right. Rather, it is the combination of answers that will indicate the state of progress in, and the effectiveness of, implementation of the UNECE Strategy for ESD. The experts stressed that the indicators and the reporting mechanism are meant not “to compare” but rather to enable countries of the region to “learn and develop” in the area of ESD, so that the region becomes a “learning region”. Progress over time in implementing ESD could be seen by assessing the progress following the reporting for each of the three implementation phases of the Strategy (2007, 2010 and 2015). The Experts suggested using data for 1 January 2006 as baseline data.
10. The set comprises 18 indicators with 48 sub-indicators structured according to the 6 issues for reporting, which follow the objectives of the Strategy. There are 45 *qualitative* sub-indicators and 8 *quantitative*, of which 5 are of a dual nature. The sub-indicators are of several *types*: 11 sub-indicators

are “checklist”, 29 are “input” (of which 1 is of a dual type), 8 are “output” and 1 is “outcome”. The format of indicators/sub-indicators consists of two parts: a “yes/no<sup>1</sup>” part and a “descriptive” part.

11. The list of indicators (annex 1) includes, in addition to specification of the *type* of indicator, information on “means and sources of verification”, and is meant as guidance to help National Focal Points find the information necessary to complete the indicators. It was stressed that in some countries the information might be available in sources relevant to “environmental education” or “development education”, which might not necessarily be viewed as ESD but which could nevertheless provide relevant information for populating the indicators on ESD.

12. The assessment mechanism behind the indicators is based on the answers to the sub-indicators that would provide input into the indicator’s assessment. The conclusion was reached that it is not feasible to sum up the answers to the sub-indicator in a quantitative way to build sound data for the indicator as such. Therefore, the indicator has to be presented as a qualitative judgment of the sub-indicators. To evaluate the answers provided in the annexed templates-tables, and consequently assess the sub-indicators, the Expert Group has developed an “assessment key”. Following the “tailor-made” approach a variety of rankings is used, expressing numbers, percentage, amounts and state of a process. To ensure consistency across the indicator set, these are expressed as a six-category scale from A (minimum) to F (maximum).

13. The Experts encouraged countries to undertake a so-called self-assessment exercise, following the completion of the reporting format. This would imply for countries on a voluntary basis to self-assess the status of the implementation of the respective indicator on the basis of the answers to the sub-indicators. The self-assessment exercise would be a valuable addition to the information provided in the Reporting Format and would help to minimise, to the extent possible, the subjectivity of the conclusions drawn by an independent expert when preparing a synthesis reports on progress in implementing the Strategy across the region. Moreover, the self-assessment would provide countries with the opportunity to reflect on the national progress in implementing the Strategy.

14. On the basis of the set of indicators and the outline of the reporting format agreed by the Steering Committee in 2005, a detailed template for reporting was developed (see Addendum 1). This template for reporting is for use by the National Focal Points (NFPs) on ESD for preparing the National Implementation Reports (NIRs) for the pilot voluntary reporting in phase I (2007), and for reporting in phase II (2010) and phase III (2015). To facilitate the completion of the template, an informal *guidance for reporting* is prepared. This guidance includes the compilation of available information on the methodology and procedure behind the indicators contained in various documents. The Expert Group stressed the usefulness of a wide dissemination of the NIRs to the relevant bodies at the national level and recommended to the Steering Committee that NIRs would be translated into the ECE official languages.

15. The Expert Group emphasised the need to have a multi-stakeholder participatory process in preparing the NIRs. They strongly recommended that prior to the submission of the report to the UNECE secretariat by the designated NFP on ESD, the preparatory process should involve all concerned authorities, education institutions and other relevant stakeholders at the national level.

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<sup>1</sup> A “no” answer should be selected also in the case of “not applicable”, and explanation provided on why it is not applicable.

16. Although the "yes/no" part of sub-indicators is required to be reported on in Phase I (by 2007) and the "descriptive" part in Phase II (by 2010), the Expert Group proposed to encourage countries to report on the full set of indicators at the end of each phase, to the extent possible, in line with a country's progress in implementing the ESD. Those countries that volunteered to participate in a pilot reporting already in Phase I (by 2007) were advised by the Expert Group to report on the full set to the extent possible. Other countries that are not ready for the pilot reporting were invited to complete only the "yes/no" part and, if feasible, also the "descriptive" part. This exercise would replace the initially foreseen questionnaire and its results will lay down the basis for preparing the first progress report on implementation of the Strategy for the Sixth Ministerial Conference "Environment for Europe" (Belgrade, 10–12 October 2007).

17. The Expert Group considered that the current set of indicators reflects the state of art and it is the best possible result in accordance with the UNECE Strategy itself, the mandate of the Expert Group, the availability of data and methodology, and the common understanding between different countries, educational systems, cultures and languages. They stressed that the current set of indicators would possibly require a revision following the first reporting exercise and the feedback received from the countries on the workability and feasibility of the indicators and requested information for reporting. Therefore, the Expert Group requested the Steering Committee to extend its mandate to allow for a fifth meeting to revise the set of indicators, if needed, in time for preparing the report for the possible next meeting of the Steering Committee, provided its mandate would be extended at the Belgrade Conference.

18. The Expert Group stressed that the indicators developed for the reporting on the implementation of the UNECE Strategy on ESD would provide valuable input into the UN Decade on ESD. Most of the indicators, as well as the methodology used for their development, could be adapted and used by other regions, and therefore could serve to governments and stakeholders as an efficient tool to assess the progress in ESD within the UN Decade on ESD.

**Annex 1**  
**LIST OF INDICATORS**

	Indicators / sub-indicators	Type	Source of verification
<b>OBJECTIVE 1<sup>2</sup>. ENSURE THAT POLICY, REGULATORY AND OPERATIONAL FRAMEWORKS SUPPORT THE PROMOTION OF ESD</b>			
<b>Indicator 1.1</b>	<b>Prerequisite measures are taken to support the promotion of ESD</b>		
Sub-indicator 1.1.1	Is the UNECE Strategy for ESD available in your national <sup>3</sup> language(s)?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.1.2	Have you appointed a national focal point to deal with the UNECE Strategy for ESD?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.1.3	Do you have a coordinating body for implementation of ESD?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.1.4	Do you have a national implementation plan for ESD?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.1.5	Are there any synergies at the national level between UNECE ESD process, the UNESCO global process on the UN Decade of ESD <sup>4</sup> , and other policy processes relevant to ESD?	Qualitative; “Checklist”	Government reports; Reports of relevant Ministries
<b>Indicator 1.2</b>	<b>Policy, regulatory and operational frameworks support the promotion of ESD</b>		
Sub-indicator 1.2.1	Is ESD reflected in any national policy <sup>5</sup> document(s)?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.2.2	Is ESD: (a) addressed in relevant national education legislation/regulatory document(s); and (b) included in your national curricula and/or national standards/ ordinances/ requirements; at all levels of formal education, as understood by your education system in accordance with ISCED <sup>6</sup> ?	Qualitative; “Input”	Reports of relevant Ministries
Sub-indicator 1.2.3	Is non-formal and informal ESD addressed in your relevant national policy and/or regulatory document(s) and operational frameworks?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.2.4	Is public awareness in relation to ESD addressed in relevant national document(s)?	Qualitative; “Checklist”	Government reports
Sub-indicator 1.2.5	Does a formal structure for interdepartmental <sup>7</sup> cooperation relevant to ESD exist in your government?	Qualitative; “Checklist”	Government reports

<sup>2</sup> Subject for evaluation: Objectives of the Strategy in accordance with the UNECE Strategy for Education for Sustainable Development (CEP/AC.13/2005/3/Rev.1)

<sup>3</sup> For countries with a federal governmental structure, all references to “national” apply to “State”, as appropriate. In this context, data at national level means aggregated data received from sub-state entities.

<sup>4</sup> The United Nations General Assembly proclaimed in its resolution 57/254 of 20 December 2002 the-year beginning on 1 January 2005 the United Nations Decade of Education for Sustainable Development.

<sup>5</sup> Policy documents may include national strategies, plans, programmes, guidelines etc..

<sup>6</sup> International Standard Classification of Education (ISCED), UNESCO, 1997 ([http://www.unesco.org/education/information/nfsunesco/doc/isced\\_1997.htm](http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm))

<sup>7</sup> Between State bodies.

	Indicators / sub-indicators	Type	Source of verification
Sub-indicator 1.2.6	Does a mechanism for multi-stakeholder cooperation on ESD exist with the involvement of your government <sup>8</sup> ?	Qualitative; "Checklist"	Government reports
Sub-indicator 1.2.7	Are public budgets and/or economic incentives available specifically to support ESD?	Qualitative; "Input"	Government reports
<b>Indicator 1.3</b>	<b>National policies support synergies between processes related to SD and ESD</b>		
Sub-indicator 1.3.1	Is ESD part of SD policy(s) if such exist in your country?	Qualitative; "Checklist"	Government reports; Reports of relevant Ministries
<b>OBJECTIVE 2. PROMOTE SD THROUGH FORMAL, NON-FORMAL AND INFORMAL LEARNING</b>			
<b>Indicator 2.1</b>	<b>SD key themes are addressed in formal education</b>		
Sub-indicator 2.1.1	Are key themes of SD <sup>9</sup> addressed explicitly in the curriculum <sup>10</sup> /programme of study at various levels of formal education?	Qualitative; "Input"	Education institutions and Ministries responsible for Education
Sub-indicator 2.1.2	Are learning outcomes (skills, attitudes and values) that support ESD addressed explicitly in the curriculum <sup>11</sup> /programme of study at various levels of formal education?	Qualitative; "Input"	Education institutions and Ministries responsible for Education
<b>Indicator 2.2</b>	<b>Strategies to implement ESD are clearly identified</b>		
Sub-indicator 2.2.1	Is ESD addressed through <sup>12</sup> : (a) Existing subjects <sup>13</sup> only? ; (b) A cross-curriculum approach? ; (c) The provision of specific subject programmes and courses?; (d) A stand-alone project <sup>14</sup> ?	Qualitative; "Input"	Education institutions and Ministries responsible for Education
<b>Indicator 2.3</b>	<b>A whole institution approach<sup>15</sup> to ESD/SD is promoted</b>		
Sub-indicator 2.3.1	Do educational institutions <sup>16</sup> adopt a "whole institution approach" to SD/ESD?	Qualitative; "Output"	Education institutions, funding agencies

<sup>8</sup> For explanation see paragraph 46 of the Strategy.

<sup>9</sup> For explanation see paragraph 15 of the Strategy.

<sup>10</sup> See footnote 4.

<sup>11</sup> See footnote 4.

<sup>12</sup> For higher education institutions: These distinctions would be equal to: a) **courses and disciplines**, b) **interdisciplinary courses**, c) **separate, specified SD courses or seminars**, and d) **stand alone projects** implemented by the department, faculty or inter-faculty structures.

<sup>13</sup> E.g. geography, biology, etc. For higher education 'subject' means 'course'.

<sup>14</sup> Project is interpreted as a discrete activity with its own time allocation rather than a teaching/learning method.

<sup>15</sup> "A whole institution approach" means that all aspects of an institution's internal operations and external relationships are reviewed and revised in light of SD principles. Within such an approach each institution would decide upon its own actions addressing the three overlapping spheres of Campus (management operations); Curriculum; and Community (external relationships).

<sup>16</sup> For higher education institutions: **Whole university, whole college or whole faculty approach** (including inter-faculty approaches).

	Indicators / sub-indicators	Type	Source of verification
Sub-indicator 2.3.2	Are there any incentives (guidelines, award scheme, funding, technical support) that support "a whole institution approach to SD/ESD"?	Quantitative; "Output"	Education institutions, funding agencies
Sub-indicator 2.3.3	Do institutions/learners develop their own SD indicators for their institution/organisation?	Qualitative; "Output"	Education institutions, funding agencies
<b>Indicator 2.4</b>	<b>ESD is addressed by quality assessment / enhancement systems</b>		
Sub-indicator 2.4.1	Are there any education quality assessment/enhancement systems that include criteria on ESD <sup>17</sup> in: (a) National systems and (b) Other?	Qualitative; "Input"	Education institutions and Ministries responsible for Education
<b>Indicator 2.5</b>	<b>ESD methods and instruments for non-formal and informal learning are in place to assess changes in knowledge, attitude and practice</b>		
Sub-indicator 2.5.1	Are SD issues addressed in informal and public awareness raising activities?	Qualitative; "Input"	Reports by the trade unions and professional associations, relevant Ministries
Sub-indicator 2.5.2	Is there any support for work-based learning (e.g. for small companies, farmers, trade unions, associations, etc.), which addresses SD issues?	Quantitative; "Input"	Reports by the trade unions and professional associations, relevant Ministries
Sub-indicator 2.5.3	Are there any instruments (e.g. research, survey, etc.) in place to assess the outcomes of ESD as a result of non-formal and informal learning?	Qualitative; "Input" / "Outcome"	Reports by the trade unions and professional associations, relevant Ministries
<b>Indicator 2.6</b>	<b>ESD implementation is a multi-stakeholder process<sup>18</sup></b>		
Sub-indicator 2.6.1	Is ESD implementation a multi-stakeholder process?	Qualitative; "Input"	Reports by the trade unions and professional associations, relevant Ministries
<b>OBJECTIVE 3. EQUIP EDUCATORS WITH THE COMPETENCE TO INCLUDE SD IN THEIR TEACHING</b>			
<b>Indicator 3.1</b>	<b>ESD is included in the training<sup>19</sup> of educators</b>		
Sub-indicator 3.1.1	Is ESD a part of the initial educators' training <sup>20</sup> ?	Qualitative; "Input"	Educational institutions, Ministry of Education

<sup>17</sup> For higher education institutions: Either **national centres for quality assessment in higher education**, or cooperation with general quality assessment agencies such as the European Foundation for Quality Management (EFQM).

<sup>18</sup> For higher education institutions: This covers the issue of **university "outreach"** (meaning wide spectrum from regional integration, business cooperation and transdisciplinarity to eco-procurement and research-education-cooperation).

<sup>19</sup> ESD is addressed by content and/or by methodology.

<sup>20</sup> For higher education institutions: The focus is here on existing **teacher training universities/colleges** regarding SD and ESD for university/college teachers.

	Indicators / sub-indicators	Type	Source of verification
Sub-indicator 3.1.2	Is ESD a part of the educators' in-service training? <sup>21</sup>	Qualitative; "Input"	Educational institutions, Ministry of Education
Sub-indicator 3.1.3	Is ESD a part of training of leaders and administrators of educational institutions?	Qualitative; "Input"	Educational institutions, Ministry of Education
<b>Indicator 3.2</b>	<b>Opportunities exist for educators to cooperate on ESD</b>		
Sub-indicator 3.2.1	Are there any networks / platforms of educators and/or leaders/administrators who are involved in ESD in your country?	Qualitative; "Output"	Educational institutions, relevant Ministries
Sub-indicator 3.2.2	Are ESD networks/platforms supported by the government in any way <sup>22</sup> ?	Qualitative; "Input"	Educational institutions, relevant Ministries
<b>OBJECTIVE 4. ENSURE THAT ADEQUATE TOOLS AND MATERIALS FOR ESD ARE ACCESSIBLE</b>			
<b>Indicator 4.1</b>	<b>Teaching tools and materials for ESD are produced</b>		
Sub-indicator 4.1.1	Does a national strategy/ mechanism for encouragement of development and production of ESD tools and materials exist?	Qualitative "Input"	Relevant ministries / public authorities
Sub-indicator 4.1.2	Is public (national, sub-national, local) authority money invested in this activity?	Qualitative "Input"	Relevant ministries / public authorities
<b>Indicator 4.2</b>	<b>Quality control mechanisms for teaching tools and materials for ESD exist</b>		
Sub-indicator 4.2.1	Do you have quality criteria and/or quality guidelines for ESD-related teaching tools and materials that are: (a) Supported by public authorities?; (b) Approved by public authorities?; (c) Tested and recommended for selection by educational institutions?	Qualitative "Input"	Relevant ministries / public authorities
Sub-indicator 4.2.2	Are ESD teaching tools / materials available: (a) In national languages?; (b) For all levels of education according to ISCED?	Qualitative "Input"	Relevant ministries / public authorities
<b>Indicator 4.3</b>	<b>Teaching tools and materials for ESD are accessible</b>		
Sub-indicator 4.3.1	Does a national strategy/mechanism for dissemination of ESD tools and materials exist?	Qualitative "Input"	Relevant ministries / public authorities
Sub-indicator 4.3.2	Is public authority money invested in this activity?	Qualitative "Input"	Relevant ministries / public authorities
Sub-indicator 4.3.3	Are approved ESD teaching materials available through the Internet?	Qualitative "Input"	Relevant ministries / public authorities
Sub-indicator 4.3.4	Is a register or database of ESD teaching tools and materials in national language(s): (a) accessible through the Internet?; (b) provided through other channels?	Qualitative "Input"	Relevant ministries / public authorities

<sup>21</sup> For higher education institutions: The focus is here on existing **in-service training programmes** regarding SD and ESD for university/college teachers in their own universities/colleges.

<sup>22</sup> Including assistance through direct funding, help in-kind, political and institutional support.



<b>OBJECTIVE 5. PROMOTE RESEARCH ON AND DEVELOPMENT OF ESD</b>			
<b>Indicator 5.1</b>	<b>Research<sup>23</sup> on ESD is promoted</b>		
Sub-indicator 5.1.1	Is research that addresses content and methods for ESD <sup>24</sup> supported?	Qualitative; “Input”	Relevant Ministries
Sub-indicator 5.1.2	Does any research evaluate the outcome of the implementation of the UNECE Strategy for ESD?	Qualitative/ Quantitative; “Input”	Relevant Ministries
Sub-indicator 5.1.3	Are post-graduate programmes available: (1) on ESD <sup>25</sup> : (a) for Masters level?; (b) for Doctorate level? (2) addressing ESD: (a) for Masters level?; (b) for Doctorate level?	Qualitative; “Input”	Ministry of Education; Institutions of Higher Education
Sub-indicator 5.1.4	Are there any scholarships supported by public authorities for post-graduate research in ESD: (a) for Masters level; (b) for Doctorate level?	Qualitative; “Input”	Ministry of Education; Institutions of Higher Education
<b>Indicator 5.2</b>	<b>Development of ESD is promoted</b>		
Sub-indicator 5.2.1	Is there any support for innovation and capacity building in ESD practice <sup>26</sup> ?	Qualitative; “Input”	Ministry of Education; Institutions of Education
<b>Indicator 5.3</b>	<b>Dissemination of research results on ESD is promoted</b>		
Sub-indicator 5.3.1	Is there any public authority support for mechanisms <sup>27</sup> to share the results of research and examples of good practices in ESD <sup>28</sup> among authorities and stakeholders?	Qualitative/ Quantitative; “Input”	Ministry of Education; Governmental agencies outside education system; Institutions of Higher Education, NGOs
Sub-indicator 5.3.2	Are there any scientific publications: (a) specifically on ESD?; (b) addressing ESD?	Quantitative; “Output”	Education and research institutions; relevant Ministries; NGOs; publishers

<sup>23</sup> These include support from various sources, such as state, local authorities, business and non-governmental sources.

<sup>24</sup> e.g. concepts; formation of attitudes and values; development of competencies, teaching and learning; school development; implementation of ICT; means of evaluation including socio-economic impacts.

<sup>25</sup> ESD is addressed by substance and/or by approach.

<sup>26</sup> Activities may include pilot projects, action research, social learning, multi-stakeholder teams

<sup>27</sup> e.g. conferences, summer schools, journals, periodicals, networks

<sup>28</sup> e.g. ‘participatory approach’; links to local, regional and global problems; integrative approach to environmental, economic and social issues; orientation to understanding, preventing and solving problems.

<b>OBJECTIVE 6. STRENGTHEN COOPERATION ON ESD AT ALL LEVELS WITHIN THE UNECE REGION</b>			
<b>Indicator 6.1</b>	<b>International cooperation on ESD is strengthened within the UNECE region and beyond</b>		
Sub-indicator 6.1.1	Do your public authorities cooperate in/support international <sup>29</sup> networks on ESD?	Qualitative / Quantitative; "Input"	Report of relevant authorities
Sub-indicator 6.1.2	Do educational institutions/organisations (formal and non-formal) in your country participate in international networks related to ESD?	Qualitative / Quantitative; "Output"	Report of relevant authorities
Sub-indicator 6.1.3	Are there any state, bilateral and/or multilateral cooperation mechanisms/agreements that include an explicit ESD component?	Qualitative / Quantitative; "Output"	Report of relevant authorities
Sub-indicator 6.1.4	Does your Government take any steps to promote ESD in international forums outside the UNECE region?	Qualitative; "Output"	Report of relevant authorities

<sup>29</sup> In this context, "international associations, working groups, programmes, partnerships etc. covers "global", "regional" and "subregional"